

**Niicugnissuun/Tuu'awinpi:  
Tribal Radio as a Unique Community Medium and a Source of Health Information for  
Rural Indigenous Communities**

by

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## DEDICATION

Dedicated to Indigenous media practitioners around the world.

In grateful memory of John “Aqumgaciq” Active, a true trailblazer of Indigenous broadcasting.

*And the funny thing is, when the missionaries first came to our area, they were telling us all about “Love one another, care for one another” and stuff like that, but that’s what we were doing long before they came. So we tell them “Oh, we know how to do that already.” And we tell them about the Yup’ik way of doing things.*

John Active (Oct. 6, 1948 - June 4, 2018)

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study, and the review and approval of all resulting materials, for which they have provided valuable comments and suggestions that I have taken to heart. Receiving such positive feedback on my dissertation draft in particular, letting me know that the participating communities feel fairly represented truly means a lot to me, as I have tried my best to do justice to the tremendous trust placed in me by the study participants, who did not have much reason to trust a non-Indigenous researcher from outside their community.

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## **PREFACE**

The title contains two Indigenous language words for ‘radio,’ in reference to and recognition of the two Indigenous peoples represented in this study: Niicugnissuun (Central Yup’ik) and Tuu’awinpi (Hopilavayi).

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## **ABSTRACT**

Indigenous peoples in the United States experience some of the most severe health inequities out of any racial/ethnic group, and are simultaneously affected by significant barriers to accessing information. This dissertation presents a community-based participatory research project on the role of tribal radio as a unique community medium and a source of health information for rural Indigenous communities. In addition to learning about tribal radio as a health information resource, this study also characterizes tribal radio in detail, a severely understudied medium that remains vital for its audience. The very small body of research that exists on tribal radio has focused on its role in revitalizing Indigenous languages. While this is an important contribution that is also discussed here, this study revealed a multitude of other functions and characteristics of tribal radio that set it apart from other community media.

The project was conducted in partnership with two prominent tribal radio stations: KYUK in Bethel, Alaska, the oldest continuously operating tribal station in the U.S., serving a rural population of predominantly Yup'ik subsistence hunters and fishermen in the Yukon-Kuskokwim Delta, and KUYI, located on the Hopi Reservation and serving the Hopi and Tewa people living in the 12 rural villages on the reservation. This is a qualitative study comprised of 12 individual, in-depth interviews (5 with KUYI staff and 7 with KYUK staff) and 7 focus groups (4 with KUYI listeners and 3 with KYUK listeners), totaling 66 participants overall.

Using interview data, I first consider the historical ties of tribal radio with the Indigenous activism of the 1970s and the relevance of these historical origins for its functioning today, how station managers and employees aim to realize their missions, how they share health information on their station, as well as the self-concept of Indigenous media practitioners. Findings reveal that tribal radio practitioners view themselves as more than journalists; they have a tremendous sense of accountability to the communities they serve, and see themselves as protectors and an

advocates. They act as translators of language, reading levels, and differing cultural norms to try to lower psychological and information-related barriers of healthcare access for their listeners, while raising awareness of common health issues and prevention strategies. Tribal stations also collect and house valuable audio archives of the tribes' history and culture, and face difficult decisions about which materials are culturally appropriate to be shared publicly or not.

The focus group data provides a rare insight into the audience perspective of tribal radio. To the best of my knowledge, no prior research has presented audience data on U.S. tribal radio. For listeners of all age groups, tribal stations are a community gathering space where everyone can speak and participate, and which is an appropriate forum to discuss even difficult or usually taboo health topics together as a community. The audience has tremendous trust in the information shared on their tribal station, and is highly receptive to health information from tribal radio. Even monolingual English speakers strongly support and value Indigenous language programming on tribal radio. Listeners feel empowered in their interactions with healthcare providers and develop a greater sense of a shared Indigenous identity.

Tribal radio is a testament to Indigenous resilience, creativity, cultural strength, and reaffirms tribal sovereignty through its existence and programming.

## **CHAPTER 1**

### **Introduction**

This dissertation, the result of a community-based, participatory research (CBPR) project conducted in close partnership with two Indigenous radio stations over the span of 4 years, presents a thorough view of tribal radio, a severely understudied medium even though it is of great relevance to rural Indigenous communities — in the United States and elsewhere. This study presents and contrasts both the radio practitioner and the audience views, each at two locations, Bethel and surrounding villages in rural Western Alaska, and the Hopi Reservation in Arizona. A particular focus of this project was on health information, though the study also aims to gain a more general understanding of tribal radio, the stations' missions and functioning, and the audiences' uses, suggestions, and the role tribal radio plays in rural Indigenous communities in the 21st century. In discussing radio and its paramount importance to these communities, of course the state of ICT infrastructure, and related policies, also need to be addressed. Every aspect of this study is severely understudied in the context of Indigenous populations, and every existing study on any of these topics has called for further research.

Research in any rural context is particularly challenging, and in the context of sovereign Indigenous nations with additional requirements regarding research, and an environment where Internet access remains scarce, even more so. Attempting to conduct CBPR work in the proper way, including establishing long-term relationships, giving back to the participating communities, and committing to a mutual learning process, is especially difficult as a graduate student, with significant financial constraints and time constraints due to coursework, teaching obligations, and so on. I have invested in not only this project, but my relationship with each community ever since this research began, and my commitment does not end with completing the dissertation. The study was conducted and written about with the utmost respect for tribal sovereignty, the Indigenous point of view, and Indigenous resilience, innovation, and problem-

solving that does not need any sort of outside, “Western” “support.” What is highlighted, however, are the ways in which Indigenous people continue to be structurally excluded and erased, and the implications of this for policy, economics, population health, and so on.

Indigenous nations, at the very least, deserve the resources and support they were promised, as well as a seat at each table where important policy decisions are being made that affect their people, but they do not need outside “solutions.” Indigenous nations are sovereign and know best what is needed, how this should be accomplished, how their organizations should be run, how to maintain their cultures and languages in the ways that are most appropriate and useful, and how to move into the future they imagine for themselves.

Especially as a non-Indigenous person from Northern Europe, I am incredibly fortunate to have had the chance to do this work and express my deepest gratitude for the Hopi and Yup’ik tribal authorities, community members, and community radio stations KUYI and KYUK for collaborating on these projects and building lasting relationships. My interest in the questions addressed in this dissertation stems primarily from an understanding of access to information as a human right, an interest in ties between infrastructure inequality and population health, and Indigenous radio as a unique and severely understudied community medium.

The chapters address my study design, methods, and ethical considerations (Chapter 1), the current state of information and communication infrastructures (ICTs) on tribal lands in the U.S. and health inequities affecting Indigenous communities (Chapter 2), which also highlights the necessity and importance of community media in this context. The historical origins of Indigenous radio are discussed in Chapter 3 in the context of Indigenous activist movements which led to the founding of the first tribal radio station. This chapter also draws on interview data from my project to assess the current relevance of tribal radio’s historic origins in the current functioning of these stations, as well as ways in which tribal radio stations aim to inform their audiences about health topics. Chapter 4 turns to the audience and uses focus group data collected at both project sites to examine the contributions of tribal radio. This includes contributions to population health for rural reservation residents, as well as cultural contributions, such as strengthening a shared sense of identity, supporting Indigenous language revitalization, and creating extensive audio archives documenting the sounds, songs, stories, and

events of the community. The conclusion (Chapter 5) offers perspectives on the future potential of tribal radio and suggests further research on Indigenous radio.

My hope is that this work will further our understanding of the role of information infrastructures in health equity, as well as Indigenous media, particularly radio, as a unique instance of community media that merits further study and recognition among scholars. I further hope that the reports already provided to the radio stations and our ongoing conversations will prove useful to the incredibly important work they do under difficult circumstances in order to serve and fairly represent their communities.

### **General Background and Significance**

In the United States, Indigenous peoples, particularly the majority who lives in rural areas and on Indian reservations, experience some of the worst information, economic, and health inequities out of any racial/ethnic group in the nation (Friedman & Hoffman-Goetz, 2006; Geana et al., 2012; Indian Health Service, 2019; Sequist, 2017; Tran, Mouttapa, Ichinose, Pang, Ueda, & Tanjasiri, 2010).

There are 567 federally recognized tribes and a number of small, presently unrecognized Indigenous communities in the United States today, who may refer to themselves as tribes, bands, pueblos, rancherias, villages, or communities, and be federally recognized as such (National Congress of American Indians, 2020; Centers for Medicare & Medicaid Services, 2017). The majority of federally recognized Indigenous communities, about 230, are located in the state of Alaska (National Congress of American Indians, 2020). Only those tribes recognized at the federal level and listed on the United States' Federal Register are eligible to receive services from the United States Bureau of Indian Affairs (National Congress of American Indians, 2020).

According to the most recent available U.S. Census data, 2.9 million Americans (about 0.9 percent of the U.S. population) identified as only American Indian or Alaska Native, and an additional 2.3 million Americans identified as American Indian or Alaska Native in combination with one or more other races. The latter group experienced rapid population growth between 2000 and 2010, with a population increase of 39 percent (U.S. Census, 2010). Both groups

combined total 5.2 million American Indian or Alaska Native individuals, or 1.7 percent of the U.S. population (U.S. Census, 2010).

Many federally recognized tribal governments have rights to certain lands (here referred to as ‘tribal lands’), however, no tribe in the U.S. fully owns or controls land they have been granted, as the United States federal government is holding these lands “in trust” for tribal governments (Russell, 2004). The 275 individual land areas designated as tribal lands across the United States total 55 million surface acres and 57 million acres of subsurface minerals estates, which are administered and managed by the Bureau of Indian Affairs (BIA) (United States Department of the Interior Bureau of Indian Affairs, 2020).

Many Indigenous population groups in the U.S. have been forcibly removed from their ancestral homelands as a result of policies like the 1830 Indian Removal Act, which extinguished Indigenous tribal land rights east of the Mississippi River and ordered relocation of tribal members in the region to areas further west, referred to as ‘Indian Country,’ the 1854 Indian Appropriation Act, which led to the establishment of Indian reservations that residents needed a permit to leave, the 1890 Indian Dawes Allotment Act, which further shrank many tribal lands to small, individual allotments, and others, so that the tribal lands and Indian reservations many U.S. Indigenous peoples occupy today are not located in the region, or even the state, they originate from (Russell, 2004).

Indigenous residents of rural Indian reservations in the U.S. are disproportionately affected by health disparities (Friedman & Hoffman-Goetz, 2006; Geana et al., 2012; Indian Health Service, 2019; Sequist, 2017; Tran et al., 2010). For example, rates of hospitalization and mortality due to cancer are above national average for Indigenous individuals, and five-year cancer survival rates are lower than for any other ethnic group (Weaver, 2010). Indian reservation residents in particular also have the shortest life expectancies, highest malnutrition rates, and highest infant death rates (Miller, 2012). Additionally, existing research also underscores the inadequacy of culturally-relevant health information resources available for this population (Friedman & Hoffman-Goetz, 2006; Geana et al., 2012). The Indian Health Service currently states on their website that: “American Indians and Alaska Natives born today have a life expectancy that is 5.5 years less than the U.S. all races population (73.0 years to 78.5 years,



respectively). American Indians and Alaska Natives continue to die at higher rates than other Americans in many categories, including chronic liver disease and cirrhosis, diabetes mellitus, unintentional injuries, assault/homicide, intentional self-harm/suicide, and chronic lower respiratory diseases” (Indian Health Service, 2019, n.p.).

Aside from severe health disparities, Indigenous peoples in the U.S., particularly those residing in rural areas, lack access to basic infrastructure, such as a 9-1-1 emergency operator service, door-to-door mail service, paved roads, public transportation, sufficient landline and cellular service coverage, broadband Internet, and sometimes even electricity and running water (Bissell, 2004; Hudson, 2011; Hudson, 2013; Kemper, 2013; Morris & Meinrath, 2009, National Congress of American Indians, 2020). The average unemployment rate across all Indian reservations is 50 percent (Miller, 2012), and Indigenous individuals across the U.S., whether they reside on or off reservation, are more likely than white people to have a family income below the poverty level. From 2011 to 2015, the poverty rate for American Indian or Alaska Native (AI/AN) individuals in urban areas was 26.9%, as compared to 13% for white, non-Hispanic individuals, and as high as 30.6% among AI/AN compared to 11.8% among white, non-Hispanic individuals in rural areas (Bishaw & Posey, 2016).

This leaves rural Indigenous communities doubly disadvantaged in that greater access to infrastructure and information could make an important contribution to alleviating the existing health, civic, and economic disadvantages (Federal Communications Commission, 2016; LaRose, Gregg, Stover, Straubhaar, & Carpenter, 2007; Warren, 2007).

Given the extremely limited access to infrastructure and technology affecting most rural Indigenous communities, a traditional medium with a long history is more relevant than ever for this population: radio. In this environment, radio is far more than a source of music and entertainment; it is a crucial conduit for information about local news and events, weather reports, educational and professional opportunities, and health. Even the number of radio stations in rural Indigenous communities is extremely limited, however, many tribal nations operate radio stations, or benefit from small-scale, community-based stations serving a primarily Indigenous audience with mostly Indigenous leadership and staff, even if not licensed to a tribe (Browne,

1996; Keith, 1995; Native Public Media, 2020). In my research, I refer to both types of stations as ‘tribal radio.’

Tribal radio does critical work under challenging circumstances to bridge information gaps by providing health and safety information, weather warnings, access to new economic and educational opportunities, language revitalization, and cultural preservation. Very little is known about tribal radio in the U.S., or Native audiences’ experiences and uses of this particular medium (Keith, 1995). Most studies previously published about tribal radio have focused on Canada, and very little has been written about tribal radio in the U.S. (Smith & Brigham, 1992). In the U.S., 57 registered tribal radio stations (Native Public Media, 2020) serve approximately 2.9 million American Indian/Alaska Native residents (U.S. Census, 2010). In Canada, over 60 radio stations operate under a Native Type B Canadian Radio-Television and Telecommunications Commission (CRTC) license and primarily serve the approximately 1.6 million First Nations citizens (Szwarc, 2018).

In the U.S. tribal radio stations are licensed and regulated by the Office of Native Affairs and Policy (ONAP) at the FCC, established in 2010, at least in part as a result of advocacy by the Indigenous NGO Native Public Media. ONAP is responsible for corresponding and consulting with all 567 federally recognized tribes in the U.S. on media licensing and ICT infrastructure buildout (FCC ONAP, 2020). Before ONAP was created, the FCC used to allocate radio licenses for cubes of airwaves over squares of land. However, tribal lands are not in the shape of squares and often smaller than the FCC’s designated land areas, so that many tribes found that radio stations broadcasting nearby, off tribal land, had blocked the entire square, also including the entirety of their tribal land, thus prohibiting them from starting a radio station to share local news and speak their language (Duarte, 2017). With the creation of ONAP and advice from Native Public Media, this changed to a process where licenses for tribal lands are handled separately.

No prior studies have focused on the audience’s experience and satisfaction with tribal radio as an entertainment medium and information resource (Browne, 1996; Smith & Brigham, 1992; Smith, 2004). Instead, most of the work on tribal radio in the U.S. has examined its role in Indigenous language preservation and revitalization (Browne, 1998; Moore & Tlen, 2007). Even though this is undoubtedly a key contribution tribal radio can make to its respective

communities, it is evident that more research is needed to understand the many other ways in which tribal radio benefits its respective communities, particularly in the health context, one area where need and potential are the greatest.

My dissertation addresses four main interrelated topics: The current state of infrastructure and health outcomes in Indigenous communities, particularly among Indian Reservation residents (Chapter 2), the history of tribal radio and its roots in Indigenous activism and its current role from the station leaders' and employees' perspectives (Chapter 3), how tribal radio functions as a source of health information for rural Indigenous communities and what other functions it serves from the audience perspective (Chapter 4), and finally, a comparison between the practitioner and audience perspectives, consideration of the study findings overall, and a brief outlook on the future of Indigenous broadcasting in the U.S. and recommendations for further research (Chapter 5).

### **Theoretical Framework**

As this study is quite multi-faceted and touches on several different areas from community media to health to ICT infrastructure and policy, multiple theoretical approaches have informed my project design and interpretation of findings.

Health disparities and the role of information in reducing them are central to this project. Thus, one important theoretical foundation is Link and Phelan's Theory of Fundamental Causes (1995), which aims to explain the persistence of health disparities and the links between socioeconomic status and mortality and stresses the importance of a community's access to resources and information in avoiding health risks and alleviating negative health outcomes long-term.

The relatively new and growing field of infrastructure studies can also offer a framework for this work, as it connects material and political aspects of communication, information, and media infrastructures with their social and cultural dimensions (Edwards, Bowker, Jackson, Steven, & Williams, 2009; Parks & Starosielski, 2015; Plantin, Lagoze, Edwards, & Sandvig, 2018). Infrastructure studies builds on science and technology studies and information science and analyzes essential features of

infrastructure, like ubiquity, reliability, invisibility, breakdown, and others, (Plantin, Lagoze, Edwards, & Sandvig, 2018), and their sociocultural implications. The Internet, given how foundational it has become for modern life, can therein be considered the “ur-infrastructure” (Sandvig, 2013, p. 86). Infrastructure studies is interested in the structural aspects of the Internet — how it actually works and how Internet and society co-evolve. Therein, considering the details of Internet infrastructure itself is considered not merely the object of study, but an analytic and a research method (Sandvig, 2013).

Particularly interesting in this context are studies focusing on the direct social impacts of infrastructure, such as educational opportunity and learning, or changing work practices and social structures due to increased or changed infrastructure (Graham & Marvin, 2001; Ribes & Finholt, 2009), and the ways in which certain populations are structurally excluded from key infrastructures we have come to understand as universal services in the United States — especially, of course, high-speed Internet (Lee, Dourish, & Mark, 2006; Ribes & Bowker, 2009; Ribes & Finholt, 2009).

Also important is Communication Infrastructure Theory (CIT), which was originally used to study civic engagement, but has recently also been applied in research on community-level health disparities (Ball-Rokeach, Kim, & Matei, 2001; Wilkin, Moran, Ball-Rokeach, Gonzalez, & Kim, 2010). According to CIT, a community’s communication system consists of the information or “storytelling” system and the communication action context (CAC). The former includes macro-level storytellers like cultural and societal institutions, governmental health programs, and mainstream media, meso-level storytellers like schools, community organizations, and community/ethnic media, and micro-level storytellers like family, friends, colleagues, and neighbors (Wilkin, 2013). The CAC refers to features in the residential environment, including available infrastructure, cultural communication norms, societal hierarchies, and the local economy, that can constrain or facilitate a community’s storytelling system (Wilkin, 2013), which is of particular interest in this project. Health-focused studies using a CIT framework have found that a strong local information system led to priming of community members to receiving health information, which they became more likely to seek out on their own (Viswanath, Steele, & Finnegan, 2006), and also resulted in higher levels of health literacy (Rudd, Kirsch, &

Yamamoto, 2004). One recent study proposed a hybrid model between CIT and entertainment education with the goal of improving reach of at-risk communities with critical health messages (Literat & Chen, 2014). In the hybrid model, analysis and strategic use of the communication channels across macro-, meso-, and micro-levels of influence can increase both reach and effectiveness of entertainment education campaigns that disseminate persuasive health messages (Literat & Chen, 2014).

In this dissertation, I also aim to position tribal radio within the existing literature on community media, examine how tribal radio fits within the prominent definitions of community or alternative media (e.g. Howley, 2005) and to what extent it can or cannot be considered counter-hegemonic in its organizational structure, approaches, and content.

## **Terminology**

As prior studies have, I call “tribal radio” both public radio stations that serve a predominantly Indigenous audience and are guided by an at least majority Indigenous oversight board, and stations directly licensed to an American Indian/Alaska Native tribe. “Indigenous radio” and “Indigenous media” refer to the global context; all Indigenous media worldwide, while this study focuses on the U.S. context in particular. “Tribal radio” was also an agreeable term to station managers, employees, and audience members who were part of this study, and is also used by other researchers and by Indigenous media organizations like Native Public Media.

When referring to a collective of Indigenous individuals, I generally prefer to use the term Indigenous, as the least contentious, and the particular name of the Indigenous people or nation that they use for themselves when referring to this group specifically, such as the Yup’ik or the Hopi people. However, “Indigenous” is an extremely broad term, and usually understood to encompass all Indigenous people worldwide. Different countries commonly use different terms to collectively refer to Indigenous people within their current borders, which are often used by those Indigenous peoples as collective, but nationally focused terms as well. Examples include “Aboriginal” in Australia, “First Nations” in Canada, and “Native American” or “American Indian” in the United States. In fact, “American Indian/Alaska Native” — or AI/AN for short — is most commonly used in the Public Health and Education literature, among others,

including by Indigenous authors. Thus, when citing statistics or referring to such articles here, I have also used the expression “American Indian/Alaska Native.” “Alaska Native” is common to refer to all Indigenous nations originating from the lands that are now part of the state of Alaska. The term American Indian in particular is also most commonly used in U.S. law and policy documents.

Only federally recognized tribes have a recognized nation-to-nation relationship with the United States in the legal sense, thus the term “nation” has a slightly more specific and narrow legal meaning than the term “tribe,” which can refer also to tribes in the U.S. that the federal government has not yet officially recognized as an autonomous Indigenous group with particular rights. A times, the very broad term “community” is used here to refer to residents of an area predominantly populated by Indigenous people, but where not everyone may be an enrolled member of the local tribe, and where — as is the case in Alaska — there may not be Indian reservations, so that the term “reservation” would be incorrect, and the term “nation” or “tribe” would exclude anyone living there, but not enrolled in said Indigenous nation or tribe.

Many of these terms are contentious and some have a strong preference for one or the other, often also depending on field of study and context. Indigenous people refer to themselves in many different ways and by different collective terms, and when referring to a particular Indigenous group, the terminology in which they refer to themselves should always be used.

## **Research Design & Methods**

I first visited the KUYI station during a 2014 research visit to the Hopi Reservation. Not only did I have a chance to speak with station leaders and DJs then, and was even interviewed on KUYI, but immediately noticed how ubiquitous KUYI is on the reservation, and how beloved by its audience. During the same visit, I also learned about local health-focused programs, such as a diabetes prevention program, and ways they have engaged with the radio station for outreach and health education. I immediately became interested in learning more about tribal radio, especially after quickly discovering how little research exists on the topic, and how important it is to rural reservation residents. About a year later, I began to plan this study with the General Managers of KUYI and KYUK in Alaska, a planning phase that lasted 12 months before trusting relationships

were established, funding and ethics permissions acquired, and travel plans made to begin data collection in summer 2016.

### ***Scope***

The dissertation is the result of a *community-based participatory research (CBPR)* project, an approach which will be explained in greater detail below. Two community partners were involved in this work, and data was collected in person at each of their locations. The first community partner is KYUK, the oldest continuously operating tribal station in the U.S., located in Bethel, Alaska, and serving an audience of about 22,000 predominantly Yup'ik Alaska Native individuals, and the second KUYI, located on the Hopi Reservation in rural Arizona, serving the approximately 7,500 reservation residents, who are mostly Hopi and Tewa tribal members. Both stations serve as excellent case studies of tribal radio as an important health information resource for remote, rural Indigenous communities, and for the other significant contributions that tribal radio stations make to the communities they serve. The project entailed individual in-depth interviews with all station managers and employees working at each station at the time of the fieldwork, as well as focus groups with community members who frequently listen to the station at each project site, with a total of 66 participants.

### ***Project Sites***

I visited both project sites, located in Arizona and Alaska, respectively, during the summer 2016, spending three to four weeks at each location, conducting interviews and focus groups, and meeting with community leaders and healthcare providers to learn more about availability of healthcare services and community initiatives focusing on health education and access to information/ICTs in the area. The tribal radio stations KUYI Hopi Radio in Keams Canyon, Arizona and KYUK in Bethel, Alaska — both the only radio stations available for most of the population in their respective areas — are my community partners for this project.

These two radio stations were selected because they serve communities similar in structure, rurality, and social circumstances, but different in culture and history, so that they represent interesting case studies allowing for comparative analysis. Further, KUYI was selected

because I have a pre-existing relationship with the Hopi community. KYUK was selected as the oldest continuously operating tribal radio station in the U.S., which served as an example to other tribal stations, and in many cases was directly involved in their founding with both advice and on-location technical support.

### ***Hopi Reservation, Arizona***

From mid-July to early August 2016, I collected data on the Hopi reservation in Arizona. The Hopi Tribe is a federally recognized American Indian tribe with over 10,000 enrolled members, of whom about 7,500 reside on the 1.6 million-acre Hopi reservation in northeastern Arizona, according to Hopi tribal enrollment records. The rural Hopi reservation consists of 12 distinct village communities, and is entirely surrounded by the Navajo Nation reservation, the largest Indian reservation in the United States (Russell, 2004).

Unlike many Indigenous tribes in the U.S. who were forcibly relocated from their aboriginal homelands, the Hopi continue to reside on their homeland in northeastern Arizona. The Hopi community actively practices traditions and continues to follow the ceremonial calendar and traditional subsistence practices such as high desert dry farming (of corn, primarily) and elk, deer, and small game hunting.

### ***KUYI***

The local radio station, KUYI 88.1 FM Hopi Radio, located in Keams Canyon on the Hopi Reservation, is deeply committed to its mission “to have a positive effect on the lives of the people living on the Hopi reservation and in surrounding communities through the public discussion of issues and events that will enlighten the community” (KUYI Hopi Radio, 2020). On air since 2000, KUYI’s 69,000 watt tower’s signal range covers the entire Hopi reservation and some parts of the surrounding Navajo Nation reservation. KUYI is a tribal non-profit organization, licensed through the Hopi Foundation and governed by the Hopi Foundation’s Board of Directors and KUYI’s own Community Advisory Board. KUYI’s operations are funded by donations and underwriting. The station does not receive any direct funding from the Hopi tribal government or the state of Arizona. The Community Advisory Board ensures that the



funding the station receives does not compromise its mission. For example, the board has previously turned down advertisement and donation offers from tobacco companies, feeling that they sought a way to enter the Hopi community in order to advertise and distribute products that could further endanger the health of the Hopi people.

At the time of project planning and data collection, Richard Alun Davis, a non-Indigenous person who is a long-time Hopi Reservation resident and speaks the Hopi language, was General Station Manager of KUYI and had been since it began operations. We first met during one of my prior visits to the Hopi Reservation in 2014 when I gave a radio interview about my research at the time. We collaborated closely throughout the design and implementation of this project from 2015 to 2016. KUYI changed leadership to Bonnie Secakuku, a Hopi woman, as General Manager for a little over a year and I had the chance to meet with her in 2018 to discuss the study findings. Since then, Richard Davis has returned to KUYI as General Manager, a role in which he is well respected by community members.

Most of the voices that can be heard on KUYI are male, with a majority of show hosts and DJs having at least some knowledge of the Hopi language. Several are fluent, including the non-Indigenous General Manager, who is very well integrated into Hopi society and was described to me by Hopi KUYI listeners as “family.” Otherwise, all employees and volunteers at the time of my research stay were Hopi tribal members.

### ***Bethel, Alaska***

In August 2016, I traveled to Bethel, Alaska to conduct interviews and focus groups with KYUK producers and audience members. Bethel is a rural community in Southwest Alaska with just over 6,000 residents (Data USA, 2018). It is located about 400 miles west of Anchorage, can only be reached by airplane or boat, but has a single paved road, about 10 miles in length, connecting local infrastructure, like the airport, hospital, schools, a small number of restaurants, and the one grocery store in the area. Over 60% of Bethel’s residents identify as Native American or Alaska Native, predominantly as enrolled members of the Yup’ik tribe (Data USA, 2018). The 58 Yup’ik communities of the Yukon-Kuskokwim Delta are federally recognized as distinct tribes, and residents live in 50 villages in the region, which are often very small with

only a few hundred residents. Many Yup'ik people, especially the men, in the Yukon-Kuskokwim Delta are subsistence hunters and/or fishermen, and regularly travel to Bethel in order to buy and sell fish, meat, agricultural and other products, and to purchase other groceries, supplies, and tools. As the main port on the Kuskokwim River, and with a small airport offering one or two daily flights to Anchorage, Bethel also serves as the central transportation hub for residents of the surrounding villages. Bethel and all other villages in the Yukon-Kuskokwim Delta are members of the Association of Village Council Presidents, one of the thirteen Alaska Native Regional Corporations, established in lieu of Indian reservations in the state of Alaska, as dictated by the Alaska Native Claims Settlement Act of 1971.

It is perhaps also worth noting here that Alaska has the highest rate for violent crime out of any state in the U.S. Rates for murder and assault were about twice the national average and rates of sexual assault were four times the national average in 2019 (FBI Uniform Crime Reporting, 2019). In Bethel, the overall crime rate was 2.4 times the national average in 2018, higher than 98.2% of all U.S. cities and towns (City Data Crime Index, 2019).

### ***KYUK***

KYUK went on air in 1971, as one of the first two tribal radio stations in the U.S. (WYRU-AM in Red Springs, NC, licensed to the Lumbee tribe, was the first commercial tribal radio station; KYUK the first non-commercial one), and is now the oldest continuously operating tribal radio station in the country. KYUK AM & FM serves a rural population of approximately 22,000, predominantly Yup'ik tribal members, and provides critical information about weather warnings, health, search and rescue missions, fishing and hunting, education, and politics.

KYUK AM is licensed for 10,000 watts on 640 kHz since 1971. In December 2009, KYUK 90.3 FM came on air with a 1,000 watt low power analog transmitter, providing an alternative program stream reaching Bethel and a few of the surrounding villages. KYUK AM features more talk programs, interviews, and call-in shows (in addition to music), compared to KYUK FM, which plays more music.

KYUK's mission is twofold: "We are dedicated to serving the rural Alaska and Alaska Native population of our region and responding to issues that affect the people of the Yukon-

Kuskokwim Delta” and further: “Our mission is to educate, stimulate, and inform, as well as to provide cultural enrichment, entertainment, and opportunity for public access and language maintenance for cultural survival” (KYUK, 2020). KYUK is a public radio station owned by Bethel Broadcasting, Inc., an Alaska Native owned and operated 501c(3) non-profit organization and public broadcasting licensee. KYUK is a member station of Alaska Public Media.

At KYUK, I worked most closely with General Manager Shane Iverson on study design and implementation, and have also been in conversation with the board of directors of Bethel Broadcasting, Inc., which consists of predominantly Yup’ik members.

Most of the voices that can be heard on air are male, with local accents, and about half of the reporters and show hosts are fluent in Yup’ik. Women and non-Yup’ik individuals also work at KYUK, but their voices are more rare on air. KYUK’s General Manager is also non-Indigenous, but a long-time, well-integrated and well-respected community resident with Yup’ik family.

### **CBPR Approach and Ethical Considerations**

For any research study either taking place on tribal lands, involving tribal members, or both, obtaining official tribal approval is critical not only to respect the tribe’s sovereignty, but can be legally required of the researcher in some cases, depending on the tribe (Morton et al., 2010). In addition to the University of Michigan Institutional Review Board (IRB), two additional review boards, representing each partnering community, reviewed my study (including all study materials such as consent forms, interview/focus group guides, and survey drafts) well in advance of any data collection.

At the research site in Arizona, the project was reviewed by the Human Subjects and Research Board of the Hopi Cultural Preservation Office, as was suggested by the Hopi Tribal Council (the tribal government). At the research site in Alaska, the project was reviewed by the Human Studies Committee of the Yukon-Kuskokwim Health Corporation (YKHC), a board elected by representatives of the 56 Alaska Native villages in the area which frequently reviews health-related research studies aiming to collect data in the Yukon-Kuskokwim Delta for cultural appropriateness and factual correctness. While required at Hopi, tribal review is voluntary but

recommended for research projects involving Alaska Native peoples, and I opted for this additional review, offered for a fee, after discussing this option with my Alaskan community partner and Dr. Joseph Klejka, Director of the YKHC. We agreed that the additional level of community oversight supports our goal of equalizing power relationships between academic and community partners in community-based research, and that this local board is a better choice for review of a small-scale study exclusively taking place in this area than a larger Alaskan review board, which also offers study reviews for a fee. Every project approved by these tribal review boards also needs to submit a proposal for any resulting publications and presentations, which need to be approved by the same board prior to the anticipated publication or presentation date.

To ensure equity in the research process and applicability of results in work with Indigenous peoples, regardless of whether a tribal review process is required or available at all, I consider it important to reflect on what power dynamics are inherent in the project with regards to data ownership, control, access, and possession — also referred to as the OCAP principles in the emerging field of Indigenous Methodology (Schnarch, 2004), which have been adopted by the Canadian National Aboriginal Health Organization in 2006 as the main project aspects researchers working with First Nations communities need to define. The Hopi Tribe, for example, legally owns all data I have collected on the reservation and with tribal members, whereas data ownership legally remains with the researcher working with Alaskan Native communities.

In her seminal book on CBPR, *Methods for Community-Based Participatory Research for Health*, Professor Barbara A. Israel, whose graduate seminar on CBPR I took in preparation for my project, and her colleagues identified the nine guiding principles of CBPR which define this approach, after conducting an extensive literature review (Israel et al., 2013). The authors caution that “no one set of principles is applicable to all partnerships. Rather, the members of each research partnership need to jointly decide on the core values and guiding principles that reflect their collective vision and basis for decision making” (Israel et al., 2013, p. 8). The nine principles identified by Israel et al. (2013) are listed below, with an additional explanation of how they were realized in my dissertation project:

1. “CBPR acknowledges community as a unit of identity.” (Israel et al., 2013, p. 8)

This principle was integral to the project as two Indigenous communities were involved who had significant cultural and social differences, and are both from a different culture than the researcher, so that a high degree of cultural self-reflection and humility was required to communicate effectively across differences and in culturally appropriate ways. Both communities are tight-knit and membership in the community is an integral part of community partner’s and participant’s identities. It was very much understood and respected in this project that each community shares a strong sense of identity, but that multiple other social identities, beyond culture, were also represented within the project.

2. “CBPR builds on strengths and resources within the community.” (Israel et al., 2013, p. 9)

In this project, I have purposefully partnered with established Indigenous media organizations located in rural Native communities, and aimed to strengthen their work and existing, pre-defined organizational missions. The goal was to strengthen the existing resources and collaborate closely with practitioners ‘on the ground’ rather than suggesting new structures or immediately testing new interventions, prior to developing a thorough understanding of the communities’ goals and the initiatives that already exist. I would like to expand on this principle put forth by Israel et al. by also including that focusing on building strengths and resources locally also aids in avoiding a deficit framing, as in, it helps the researcher focus on what the community is already doing and how these efforts may be supported, rather than focusing on what the community is not doing or what an outside researcher may perceive to be lacking in some way.

3. “CBPR facilitates a collaborative, equitable partnership in all phases of research, involving an empowering and power-sharing process that attends to social inequalities.” (Israel et al., 2013, p. 9)

This principle was realized in this project through continuous involvement of the community partners, shared decision-making, including on timing, research questions, questions for participants, how the budget was used, and so forth. There was a genuine power-sharing process in involving official tribal review boards who approved the study and any resulting presentation and publications, and had veto power in each review process, or could request edits, corrections, and clarifications. Tribal review and the resulting conversations and suggestions have been tremendously helpful to advance the project and to represent the participating Indigenous communities accurately and fairly. Further, the Hopi Tribe legally owns any data collected from their tribal members through a research project taking place on their land, thus the review also serves as a request to use the data for a publication or presentation. The process was similar in Alaska, though data ownership is not explicitly regulated in this way. In addition, the community advisory boards of each radio station (which function as non-profit organizations) were also continuously kept informed about the project and were involved in the decision-making at the community partners' discretion. Thus, efforts to equalize power dynamics were made on multiple levels in both partnering communities.

4. "CBPR fosters co-learning and capacity building among all partners." (Israel et al., 2013, p. 10)

There was continuous co-learning between me as the researcher and the community partners. The community partners and many research participants were interested in learning about the academic research process itself, as well as what I had learned from the other partnering station and their audience members, and about tribal radio in general. I also held an open workshop about health communication, based on health communication theory and current research in the field, on the Hopi Reservation because the community expressed interest in such an event. At both locations, I gave one or more radio interviews at the partnering radio stations about the project, what the aims are and what we have learned so far, in order to share this information with the wider community in the way that is most accessible to them. Capacity building was also supported in hiring a local college student as a research assistant in Alaska

rather than bringing an assistant with me from Michigan, even though that meant coordinating remotely and collaborating before we had a chance to meet in person (there was no assistant hired in Arizona). After the focus groups were fully analyzed, a detailed written report with the recommendations given during the focus groups that could help the station further align their programming with audience needs, was provided to the station's General Managers. I also had an in-person follow-up meeting one year post-data collection with KUYI station leadership on the Hopi Reservation, who then had a new General Manager and had moved to a new location. Unfortunately, it was not possible for me to travel back to Alaska for an in-person follow-up due to financial restrictions.

5. "CBPR integrates and achieves a balance between knowledge generation and intervention for the mutual benefit of all partners." (Israel et al., 2013, p. 10)

While Israel et al.'s (2013) book focuses explicitly on CBPR in the context of public health research where it is often used, my project was not focused on an intervention in the way that most public health research is. The point of my project was not to test an intervention, but rather to characterize tribal radio as a source of health information for local residents and as a unique instance of a community medium which might further our understanding of community and alternative media in general. There is also far too little prior research on tribal radio in general and as a source of health information for intervention testing. In my opinion, the more fundamental research presented in this dissertation, on the functioning of this medium, the role it plays for this unique audience, and how it communicates health information and to what effect, is necessary before interventions can be designed and tested effectively. So, while Israel et al.'s (2013) book was written for public health and thus assumes interventions to be central, this does not apply to my project. However, the latter aspect of this principle, aiming to create a mutual benefit of all partners, very much applies. As outlined in the prior section, every possible step was taken to maximize the benefit of the project to the community partners.

6. “CBPR focuses on the local relevance of public health problems and on ecological perspectives that attend to the multiple determinants of health.” (Israel et al., 2013, p. 10)

This project was extremely locally focused and because there was not much prior research, and the point was not only to find what radio stations are already addressing in terms of health, but also what the audience might suggest they address in the future, many questions were open-ended to allow participants to bring up any health issue that they felt was important to discuss, or that they remember learning about on the radio. Participants brought up a great number of different health issues, both mental and physical, that were important to them and prevalent in their community. Unfortunately, a large number of health issues are affecting Indigenous communities to a much greater degree than the average U.S. population, so this made sense. It was important to me not to pre-determine specific health issues that could be discussed by participants in order to avoid limiting the scope of the project to a health topic that may not actually be the priority to the community members. Thus, local relevance was central, as well as ecological perspectives, which of course varied greatly between my project sites, given their cultural and environmental differences.

7. “CBPR involves systems development using a cyclical and iterative process.” (Israel et al., 2013, p. 10)

Due to the CBPR approach and the partnership with Indigenous communities, this project was arguably more cyclical and iterative in nature than most research projects and processes. Frequent exchange was necessary for the tribal approval process, and continuously throughout the project between the researcher and the community partners, as well as between the community partners and their advisory boards. This project had a long planning stage, about one calendar year, which was also a cyclical process of logistical planning, revision of documents, IRB and tribal review processes, etc. The project continued to be iterative in nature during the data collection stage, where insights and recommendations from the individual in-depth interviews with radio station employees, which took place first, informed the focus group



questions for the audience members, which followed the individual interviews. Results from the focus groups were then communicated back to the station employees who had participated in the interviews.

8. “CBPR disseminates results to all partners and involves them in the wider dissemination of results.” (Israel et al., 2013, p. 11)

Preliminary results were shared with members of the advisory board during a meeting and with the wider community through radio interviews at both stations, and more detailed, final results from the audience focus groups were shared with each partnering station in a form of a written report with the results pertaining to their station and audience. At KUYI in Arizona, I held an in-person follow-up meeting to discuss the findings one year later, and I am also in ongoing contact with station leadership today.

9. “CBPR involves a long-term process and commitment to sustainability.” (Israel et al., 2013, p. 11)

This project was designed to be as sustainable as possible, with recommendations provided to the radio stations which they can apply as they see fit in order to further develop and improve programming. I am further committed to these communities as a researcher and as a person. I intend to support the radio stations financially whenever I am able to, and also currently serve my second 3-year volunteer term on the Board of Directors of a Hopi tribal non-profit organization benefitting Hopi students. I also plan to remain involved with the partnering radio stations and the wider communities and continue to visit in-person whenever I am able to in the future.

I decided that for me, as a non-Indigenous person and outsider to the communities I work with, a community-based participatory research (CBPR) approach is most appropriate both in terms of expressing cultural humility, but also for the benefit of the project, as a co-designed study ensures that questions, methods, and outcomes are appropriate and relevant to the

community, especially given the lack of prior academic work on this topic and with these populations. A close partnership with the radio stations also allowed for more successful recruiting of research participants from the community. My community partners (the general managers of KUYI and KYUK) have been involved at every step of the project, from project planning and participant recruitment to data collection and analysis, to project evaluation and dissemination of results.

In keeping with the core values of CBPR, such as mutual respect, building on existing community resources rather than imposing foreign structures, respecting local cultures and organizational structures, and reciprocity (Israel, Schulz, Parker, & Becker, 1998; Israel et al. 2013), this project focuses on existing community resources with the goal of strengthening them, rather than focusing on deficiencies in the community with the goal of remedying them through new, foreign structures and solutions. The objective of the project — to learn about tribal radio as a health information resource for rural Indian reservation residents in order to strengthen this existing resource in rural Indigenous communities and work towards greater health equity — is in line with the mission statements of my community partners. The general managers of each station and myself as the Principal Investigator (PI) of the project are the “core partners” of the CBPR partnership (Baker, Motton, Barnidge, Rose, 2013, p. 441). Other members of the radio stations, as well as members of the communities at large were involved in specific aspects of the project, as recommended by the community partners. Due to time constraints and geographical distance which did not allow for in-person planning meetings outside of my fieldwork period, I used a centralized communication network (Becker, Israel, Gustat, Reyes, & Allen, 2013) with my research partners, in which the key representatives of each station shared project-related information with their advisory boards, other employees, and volunteers as they deem necessary for planning purposes on their end.

Another consideration in the project design was the local community’s lack of research experience, with the vast majority of my participants, especially in Alaska, stating that they had never participated in any kind of research study before. Adequate time was planned in to explain the research process, the purpose of the study, approvals that had been obtained, the informed consent process, the rights of study participants, compensation, and how participants can reach

me during and after the study, as well as where they can report any ethical concerns to my institution. This information was given verbally and in written form to all participants.

During the year of planning, both radio stations and I drafted a community partnership agreement outlining the expectations and contributions of each partner throughout this project. In addition, the general managers of each station provided letters of support, which were used in grant applications.

### **Data Collection Method**

While I had previously conducted research on the Hopi Reservation, have some local contacts, and am more familiar with this community, I had no prior experience working in Alaska. Thus, while I did not see it necessary to hire an assistant in Arizona, I hired a research assistant in Bethel, Alaska, who was a local community member and undergraduate student at the time. The assistant helped with recruitment by posting flyers around the community prior to my arrival and was present during the focus groups (not the individual interviews) to take notes. The assistant worked approximately 10 hours in total and received a \$200 stipend paid in cash. In addition to flyers posted at prominent places in both communities, participants were recruited through radio adverts (for which I paid the stations at their usual non-profit advertisement rate), adverts in the local newspaper, and word of mouth. Recruitment was very successful, and all scheduled focus group sessions met the recruitment goal of 6 or more participants per group. For the individual interviews, an announcement was made at the station and my phone number provided so that employees and volunteers could sign up with me for an interview without feeling personally pressured into participating. At each station, every employee and some of the volunteers signed up to be interviewed and I easily exceeded my target number for interview participants. Each focus group and each individual interview participant was paid \$25 in cash for 60-90 minutes of their time. In addition, lunch was provided to focus group participants. The informed consent process, including the written form that each participant signed, were very similar for focus group and interview participants; I merely adjusted the wording to reflect the appropriate data collection method the person participated in.

With the help of my community partners, I was able to recruit a diverse group of focus group participants with regard to age, gender, and occupation. A total of 54 individuals participated in the focus groups — 35 in Arizona (4 groups) and 19 in Alaska (3 groups) — whose demographics are outlined in table 1.

Table 1

	Arizona (N=35)	Alaska (N=19)	Total (N=54)
<b>Marital Status</b>	Single, never married: 17 (48.6%) Married/in a committed relationship: 10 (28.6%) Divorced/separated: 4 (11.4%) Widowed: 3 (8.6%)  [Non-responses: 1]	Single, never married: 10 (52.6%) Married/in a committed relationship: 3 (15.8%) Divorced/separated: 3 (15.8%) Widowed: 2 (10.5%)  [Non-responses: 1]	Single, never married: 27 (50.0%) Married/in a committed relationship: 13 (24.1%) Divorced/separated: 7 (12.9%) Widowed: 5 (9.3%)  [Non-responses: 2]
<b>Age</b>	Mean= 46.7 Median= 43 Range = [18, 85]  [Non-responses: 2]	Mean = 44.3 Median = 42.5 Range = [23, 73]  [Non-responses: 1]	Mean = 43.2 Median = 43 Range = [18, 85]  [Non-responses: 3]
<b>Gender</b>	Female: 23 (65.7%) Male: 10 (28.6%) Other: 1 (“both”) (2.9%)  [Non-responses: 1]	Female: 11 (57.9%) Male: 6 (31.6%) Other: 2 (“both”; no answer) (10.5%)  [Non-responses: 1]	Female: 34 (62.9%) Male: 16 (29.6%) Both/Non-binary: 2 (3.7%) Other: 1 (1.9%)  [Non-responses: 1]
<b>Highest Level of Education</b>	Less than 12 years: 3 (8.6%) High School/GED: 10 (28.6%) Trade school: 3 (8.6%) Some college: 11 (31.4%) Associate’s degree: 3 (8.6%) Bachelor’s degree: 3 (8.6%) Master’s or doctorate: 1 (2.9%)  [Non-responses: 1]	Less than 12 years: 3 (15.8%) High School/GED: 6 (31.6%) Some college: 3 (15.8%) Associate’s degree: 1 (5.3%) Bachelor’s degree: 4 (21.1%) Master’s or doctorate: 1 (5.3%)  [Non-responses: 1]	Less than 12 years: 6 (11.1%) High School/GED: 16 (29.6%) Trade school: 3 (5.56%) Some college: 14 (25.9%) Associate’s degree: 4 (7.4%) Bachelor’s degree: 7 (12.9%) Master’s or doctorate: 2 (3.7%)  [Non-responses: 2]
<b>Occupation</b>	Self-employed: 9 (25.7%) Keeping house/raising children full-time: 5 (14.3%) Working for wages (full- or part-time): 16 (45.8%) Student: 2 (5.7%) Unemployed: 1 (2.9%) Retired: 1 (2.9%) Other: 1 (2.9%)	Self-employed: 1 (5.3%) Student: 1 (5.3%) Working for wages (full- or part-time): 7 (36.8%) Unemployed: 4 (21.1%) Retired: 5 (26.3%) Other: 1 (5.3%)	Self-employed: 10 (18.5%) Keeping house/raising children full-time: 5 (9.3%) Working for wages (full- or part-time): 23 (42.6%) Student: 3 (5.56%) Unemployed: 5 (9.3%) Retired: 6 (11.1%) Other: 2 (3.7%)

With permission of the participants, focus groups and interviews were audio-recorded and transcribed verbatim by a human transcriber. Any names or references to job titles, places,

names of other people, or other information that might make individuals identifiable was removed by the PI in a thorough review of the transcriptions. Only fully de-identified versions of the transcriptions were securely stored on a password-protected computer. While all focus group data was fully de-identified, interview participants could choose whether to allow use of their name and/or job title in the study or not. Of course, the participant's choice was strictly respected, and even if explicit permission for use of their name and/or job title was granted by them, I have used this information in the dissertation only where I felt that adding this information to a quote would truly add value, for example, instances where a station manager describes their vision for the future of the station.

In collaboration with my community partners, I decided that qualitative methods would be the best approach for the project. Indigenous Methodology scholar Margaret Kovach argues that “qualitative research offers space for Indigenous ways of researching,” because “Indigenous methodologies [...] encompass characteristics congruent with other relational qualitative approaches that in the research design value both process and content” (Kovach, 2009, p.24-25). Specifically, I used individual in-depth interviews and focus groups, wherein interview data helped inform focus group questions.

From mid-July until early August 2016, I conducted five individual, in-depth interviews of about 60 minutes each with employees of KUYI and four 90-minute focus groups with 6-8 participants each on the Hopi Reservation in Arizona. During the remaining three weeks of August 2016, I conducted seven individual in-depth interviews with employees of KYUK and 3 focus groups with 6-8 participants each in Bethel, Alaska. In total, 66 participants contributed to this study across my two study locations during my fieldwork in 2016. All focus group participants also completed a brief survey prior to the group discussion. The survey results are of course not to be understood as representative of the community due to the non-random sampling and completion numbers too low to make any generalizable claims, but help to provide context for the responses given by focus group participants and were collected for this purpose only. As Merton, Fiske, & Kendall (1990) point out, four criteria are necessary for effective focus groups in qualitative research: a wide range of relevant topics should be covered (interviewer questions should not be too restrictive and narrow), interaction among participants should be encouraged

such that their responses are discussed to a greater depth, it should generate data that is as specific as possible (the interviewer should make sure to ask probing and clarifying questions), and take the context of participants' responses into account (Merton, Fiske, & Kendall, 1990; Morgan, 1997), which the pre-survey helped me accomplish. All research participants were adults who self-identified as enrolled members of the respective local tribes and as regular listeners of the local tribal radio station. The survey data, which was collected pen-on-paper, has been digitized for analysis (descriptive statistics which provide background to better understand the qualitative data).

This project was guided by the following sets of research questions:

***Practitioner-Centered Research Questions (Individual In-Depth Interviews):***

- In what ways do tribal radio practitioners understand their stations to be similar to or different from other community media in the U.S.? (RQ1)
- What role do tribal radio's historic roots in Indigenous activism play in its functioning today? (RQ2)
- How does tribal radio aim to improve the health of rural Indigenous communities? (RQ3)

***Audience-Centered Research Questions (Focus Group):***

- What role does tribal radio play in the lives of Indigenous communities in rural areas? (RQ4)
- What are the barriers and facilitators of tribal radio as a health information resource for reservation residents? (RQ5)
- What contributions does tribal radio make to the health education of rural reservation residents? (RQ6)

## **Analysis Strategies**

### ***Individual In-Depth Interviews***

Individual in-depth interviews were semi-structured with 11 questions, each with at least 3 additional probes that were used where necessary in order to gain a more detailed response or to help the participant interpret the question, while leaving enough room for participants to include any information they saw as relevant to the topic of the interview.

The fully de-identified transcripts of the interviews were analyzed by hand one by one and line by line, using an inductive open-coding approach (Strauss and Corbin, 1998). Codes

were identified and noted whenever they were referred to, and broader themes were inferred from the codes through axial coding (Strauss and Corbin, 1998), where codes were refined and connections among them across the different interviews examined further, in order to understand what broader themes emerge from the dataset as a whole.

The individual in-depth interviews were strategically held before the focus groups at each study location and included a question regarding recommendations or requests for questions to be asked in the focus groups. Given that this interview question served a different purpose, it was treated differently in the analysis, where it was still examined for the topics of interest and thus importance to the participant in their role at the radio station, but those responses were not considered to be part of the codes that were identified in the interview data.

### ***Focus Groups and Focus Group Pre-Survey***

Prior to the start of each focus group, after the informed consent process was completed and any questions had been answered, participants were asked to complete an 23 question survey, pen on paper, which was later digitized and used to summarize the descriptive statistics of audience members in the study, including standard demographics, tribal citizenship, media and Internet access, awareness of health-related programming on the respective tribal radio station, as well as general media consumption and radio listening behaviors. This information is useful as context for the participants' responses, and of course cannot be understood as representative of the larger population in any way, due to convenience sampling and the low number of surveys completed (each focus group participant completed a survey, but the number of participants would be too small for a quantitative, representative study).

Focus group data was analyzed using the documentary method, which has its roots in contemporary German sociology and emphasizes the social context and interactions of a focus group (Bohnsack, 2004; Bohnsack, Pfaff, & Weller, 2010). Participants' responses are therefore not to be regarded not just as statements on their own, but as expressions of the interactions with other participants. Morgan (1997) emphasizes that "the discussion in focus groups depends on both the individuals that make up the group and the dynamics of the group as a whole" (p. 60). Individual codes are identified from statements and interactions and overarching themes are

inferred from the codes based on repetition and prominence in the dataset. The more quotations correspond with a code, the more grounded in the data this code is understood to be. As suggested by Morgan (1997) as one of the three most prominent approaches to analyzing focus group data, all mentions of a given code were noted to determine the groundedness of broader themes within the data based on mentions of the codes associated with the theme. Another factor in determining themes was the importance of a topic or code to the participants based on the interaction its mention generated, the emphasis which participants placed on their statement, the depth of experience and example they offered, as well as nonverbal cues that were present. Further, it was also taken into account what was not mentioned in a group that was discussed in the others at the same project site, or what was not mentioned in any of the groups that one might have anticipated to come up based on the literature or the prior individual interviews with station employees. These absences were included in the discussion of focus group results where the absence appeared to be purposeful or meaningful in the context of the discussion and research questions.

*Atlas.ti* qualitative data analysis software was used for the analysis of all focus group data. Only fully de-identified, written transcripts were used for analysis. The data was analyzed for main codes and corresponding themes. *Atlas.ti* allows for marking of text segments as individuals codes, so that the context of multiple quotations in interaction is not lost. This does allow to compare multiple text segments and interactions corresponding with certain codes side by side, across all of the focus groups, so that overarching themes across all participants can be identified.

Because the same questions were asked at each study location, there was also an opportunity for comparative analysis and triangulation of findings between the two research sites. While some codes were specific to the particular radio station and community, most overlapped between the two project sites.

Station managers and the prior individual interviews with other station employees had further informed the focus group questions, and each station had articulated what they were particularly interested in finding out about from audience members, which was primarily feedback on current programming and recommendations for health programming and formats to



use for these. This information was passed on to the stations first as a verbal discussion of preliminary results soon after the focus groups and later through a written report (at KUYI there was also an in-person follow-up and discussion of findings at the station in Arizona one year later).

Overall, 64 individual codes were identified in the focus group data from which 10 major themes were inferred.

Member checks (Morgan, 1997; Kirk & Miller, 1986) were possible mostly through discussion with station employees and advisory boards, as well as any audience feedback received on the radio interviews discussing preliminary findings.

In addition, results could be triangulated between the two project sites, and there were significant similarities in the focus groups codes.

While not an ethnographic project, I did take field notes and record my experiences, observations, and information that was shared with me outside of the focus groups or interviews. These informal field notes were consulted throughout the project to improve participant recruitment, data collection, and dissemination methods, and throughout the analysis and write-up for context and additional information.

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## CHAPTER 2

### Health Disparities and Technology Access on U.S. Tribal Lands

#### *Health Conditions on U.S. Tribal Lands and Health Disparities Affecting the Native American/Alaska Native Population*

Indigenous people globally, who represent a significant ethnic and cultural diversity, all share, despite unique local histories and relationships with federal and state governments where they live, a history of injustice rooted in colonization and face its adverse effects in many ways, including population health (Henry, Lavallee, Van Styvendale, & Innes, 2018). Many of the health inequities affecting Indigenous people around the world are associated with poverty, lack of access to ancestral lands and attacks on traditional ways of life including food traditions, often resulting in worse nutrition overall. Indigenous people worldwide face disproportionate health and social issues compared to the non-Indigenous settlers living on their lands (Gracey & King, 2009; King, Smith, & Gracey, 2009). However, despite ongoing colonialism, Indigenous people show tremendous strength, resilience, creativity, and innovation to face those challenges, improve their situations, and preserve their cultures and languages (Duarte, 2017; Henry, Lavallee, Van Styvendale, & Innes, 2018). Examples in the health realm include the resurgence of traditional farming, fishing, hunting, use of local medicinal plants, midwifery and child-rearing practices (Gracey & King, 2009; King, Smith, & Gracey, 2009), as well as practice of ceremonies and community building, and much more. While Indigenous people actively cultivate the health of their community members in ways that is in line with their relations to their traditional lands and ways of life that pre-date colonization of those lands and their original inhabitants and caretakers by many centuries, the structural effects of colonization and ongoing colonialism are so strong that Indigenous health and the very survival of Indigenous peoples



around the world has become a global emergency (Henry, Lavalley, Van Styvendale, & Innes, 2018; Stephens, Porter, Nettleton, & Willis, 2006).

One issue in addressing the severe inequities affecting Indigenous people, including in the realm of health, is the lack of research and reliable data, particularly for those Indigenous groups who live in rural and remote areas, often in small, widespread communities (Henry, Lavalley, Van Styvendale, & Innes, 2018).

In the United States, all of these aspects hold true. Overall, the health inequities American Indian/Alaska Native (AI/AN) populations in the U.S. are experiencing are severe, particularly so among individuals living in rural areas and on reservations (Bailey, Krieger, Agénor, Graves, Linos, & Bassett, 2017; Friedman & Hoffman-Goetz, 2006; Geana et al., 2012; Miller, 2012; O’Connell, Wilson, Manson, & Acton, 2012; Tran et al., 2010; Weaver, 2010). Policy change is necessary to sustainably and effectively address this health crisis, and research is needed in order to inform policy (as well as a willingness on part of policymakers to make research-backed decisions and listen and work collaboratively with Indigenous nations themselves). Listening to Indigenous people and their priorities and ideas for health policy and intervention is absolutely critical for a lasting, positive effect on the determinants of health affecting population health for this population (Stephens, Porter, Nettleton, & Willis, 2006).

Across both urban and rural AI/AN populations, over 30% of all adults over 18 are living below poverty level, with the percentage likely being much higher among rural reservation residents, and 28% of all Indigenous adults under 65 have no health insurance (Warne & Bane Frizzell, 2014).

As determined in a number of laws and treaties, the United States, which hold tribal lands in trust, have a legally binding responsibility to provide health services, among others, to AI/AN individuals who are enrolled citizens of a federally recognized tribe. As a result, the Indian Health Service (IHS) was created to provide health services to the over 2 million eligible individuals across the country, both directly through IHS clinics and hospitals — often located on tribal lands, but also in urban centers with a large AI/AN population — and indirectly through contracts with tribes and funding for health-related programs (Warne & Bane Frizzell, 2014). Among numerous laws affecting how health services are provided to the citizens of federally

recognized tribes, one of the most important is the Indian Self-Determination and Education Assistance Act of 1975, because it authorized tribes to manager IHS programs themselves. A federally recognized tribe can take over management of any IHS-funded program or service by becoming a federal contractor authorized to provide certain health services as outlined in the IHS line item budget for the service unit, such as an IHS clinic or hospital (Warne & Bane Frizzell, 2014). Several later twentieth century laws also affect the complexities of tribal healthcare including the Indian Health Care Improvement Act, the Snyder Act, the Transfer Act, the Indian Self-Determination and Education Assistance Act, or the Indian Health Care Improvement Act. As other areas of Federal Indian Law, healthcare provision for tribal citizens is highly complex.

One major issue in Native American healthcare that has not changed throughout all of this legislation is the chronic and severe underfunding of the IHS since its inception. A 1890 report of the Commissioner of Indian Affairs states that medical doctors working with Native American populations were paid less than half than Army or Navy physicians (\$1082 as compared to an \$2823 and \$2622 annual salary, respectively) (Warne & Bane Frizzell, 2014, p. 263). Between 1993 and 1998, total funding allocated to the IHS increased by 8%, however, medical inflation increased by more than 20%, so that in reality, per capita funding of the IHS actually decreased by 18% during this period (Warne & Bane Frizzell, 2014, p. 256).

Today, over half of the total IHS budget is managed by tribes themselves (Warne & Bane Frizzell, 2014), but the severe underfunding — and therefore the limits to its effectiveness — remain. In response, many tribes have used their own funds for health innovation, such as tribal self-insurance programs for their citizens, private sector partnerships with insurance companies, pharmaceutical companies, academic institutions, and other entities to help develop new solutions and approaches for Indigenous healthcare in the U.S. (Warne & Bane Frizzell, 2014). Of course tribal government funds are also extremely limited, and healthcare is not the only severely underfunded area that needs urgent attention. Education and housing are in a similar crisis on rural tribal lands, and funding is lacking in all of these areas.

While research is lacking, the health-related statistics that are available for the AI/AN population are staggering. For example, cancer mortality across all types of cancers is the highest among AI/AN as compared to any other population group in the U.S. (Weaver, 2010). Overall

life expectancies are also lowest among rural reservation residents (Indian Health Service, 2019) while malnutrition rates and infant mortality rates are the highest (Miller, 2012).

American Indians and Alaska Natives also have the highest prevalence of diabetes of any racial/ethnic groups in the United States. AI/AN individuals are 2.3 times more likely to be diagnosed with diabetes than the general U.S. population, and the overall prevalence of diabetes among Indigenous individuals over 20 years old was over 16% in 2004 (O’Connell, Wilson, Manson, & Acton, 2012, p. 301). Mortality rates for diabetes among AI/AN are the second-highest in the nation after African Americans with an age-adjusted mortality of 31.3 per 100,000 individuals as compared to 19.3 per 100,000 individuals among white, non-Hispanic adults (Bailey et al., 2017, p. 1455). Others report a diabetes-related mortality rate for AI/AN that is 3 to 4 times higher than that of any other racial/ethnic groups (O’Connell, Wilson, Manson, & Acton, 2012, p. 301). Almost half of annual IHS hospital stay days are accounted for by diabetes patients (O’Connell, Wilson, Manson, & Acton, 2012, p. 303), and roughly a third of all IHS treatment funding goes to treating adults with diabetes (O’Connell, Wilson, Manson, & Acton, 2012, p. 304).

Mortality rates due to heart disease are also higher among AI/AN than any other population groups in the U.S. — about 2.5 times the rate for white, non-Hispanic adults. In addition, 36% of premature deaths due to heart disease among AI/AN occur in individuals younger than 65 years old (O’Connell, Wilson, Manson, & Acton, 2012, p. 301).

Health inequities affecting the Indigenous population are also severe when it comes to mental health. Native American adults over 18 reported the highest rates of psychological distress experienced in the past 30 days of any racial/ethnic groups in the U.S. at 5.4% as compared to 4.5% of African Americans and 3.4% of white, non-Hispanic U.S. adults (Bailey et al., 2017, p. 1455). Suicide rates among AI/AN have been steadily increasing since 2003. The rates among AI/AN in the 18 states that participated in the National Violent Death Reporting System were 21.5 per 100,000 in 2015, more than 3.5 times higher than those among the U.S. racial/ethnic groups with the lowest rates. More than a third (35.7%) of AI/AN individuals who died by suicide between 2003 and 2014 were between 10 and 24 years old, as compared to

11.1% of white American suicide victims in this age group over the same time span (Leavitt, Ertl, Sheats, Petrosky, Ivey-Stephenson, & Fowler, 2018).

In Alaska, suicide rates are particularly high. In 2017, the suicide rate among all Alaskans was 26.9 per 100,000, nearly 2 times the national average. Among Alaska Natives, the rate was 51.9 per 100,000, more than 3 times the national average in 2017 (Alaska Department of Health and Social Services, 2019). In addition, around 60% of Alaska Natives live in areas that are severely medically underserved (Hudson, 2011).

At the same time, access to information and communications technology (ICT) including broadband Internet, community resources like public libraries, and health information specific to the Indigenous population continue to be extremely limited (Bissell, 2004; Friedman & Hoffman-Goetz, 2006; Geana et al., 2012; Kemper, 2013). The lack of information access and outreach or health education programs, in addition to poverty and other infrastructural issues, such as lack of paved roads and public transport, complicating transportation to a clinic, are likely to contribute to individuals seeking medical advice and care later than they otherwise would have, which may lead to death from preventable and treatable diseases. Studies with non-Indigenous minority groups have shown that lower use of certain healthcare services like diagnostic tests, medication, or surgeries led to poorer health outcomes overall (O'Connell, Wilson, Manson, & Acton, 2012). The consistently high rates of chronic disease, like diabetes and cancer, and resulting premature mortality of the Indigenous population in the U.S. highlight how important it is to improve availability and access of prevention and treatment for this population (O'Connell, Wilson, Manson, & Acton, 2012).

Because AI/AN individuals join the military at very high rates, proportionately more U.S. veterans are Indigenous than of any other race/ethnicity (Kramer, Wang, Jouldjian, Lee, Finke, & Saliba, 2009). This means in addition to the IHS, the Veterans Health Administration (VHA), available to all U.S. military veterans, also provides healthcare services to Native Americans. IHS and VHA have made an agreement to share resources and collaborate in order to better serve the AI/AN population (Kramer, Wang, Jouldjian, Lee, Finke, & Saliba, 2009). Among Indigenous veterans treated at either program's facilities, the most frequent diagnoses were diabetes (48.3%) and hypertension (45.3%) (Kramer, Wang, Jouldjian, Lee, Finke, & Saliba,

2009, p. 672). Of those with diabetes, 41.3% had additional diabetes-related complications worsening their overall health condition (Kramer, Wang, Jouldjian, Lee, Finke, & Saliba, 2009, p. 672). Also frequently diagnosed among Indigenous veterans were mental health disorders and addiction, including depression (14.9%), anxiety disorders (12.2%), alcoholism (11.6%), and Post-Traumatic Stress Disorder (PTSD) (6.4%) (Kramer, Wang, Jouldjian, Lee, Finke, & Saliba, 2009, p. 672). About a quarter of Indigenous veterans in treatment used both an IHS and a VHA facility (25.3% of patients) (Kramer, Wang, Jouldjian, Lee, Finke, & Saliba, 2009, p. 672). Those who sought care at both types of facilities were more likely to receive diagnostic tests and behavioral care at a VHA facility, but primary care at an IHS facility. Researchers have found a concerning lack of coordination among the two, as well as increased travel burdens for these patients, especially when it comes to diabetes and cardiovascular disease care (Kramer, Wang, Jouldjian, Lee, Finke, & Saliba, 2009). In many cases, this dual care model may not be the patient's choice but rather due to referrals, understaffing, and underfunding of both systems so that they are only able to provide certain aspects of care to a patient at certain times. Researchers recommend that attempts to improve health outcomes for AI/AN veterans in particular should start with those receiving IHS and VHA care simultaneously and improve coordination and information sharing between IHS and VHA in order to reduce treatment conflicts and duplication (Kramer, Wang, Jouldjian, Lee, Finke, & Saliba, 2009).

Of course, infrastructural and health inequities affecting Indigenous communities are due to centuries of colonialism, racism, a long history of forced displacement and dispossession, attempts to eradicate Indigenous cultures and languages, over-policing of Indigenous individuals, and so on (Bailey, Krieger, Agénor, Graves, Linos, and Bassett, 2017; Miller, 2012b).

The health effects of racism are understudied, and the empirical research that exists on the topic has predominantly focused on effects of interpersonal racism on stress levels, and not on the myriad of individual health problems and population health inequities resulting from structural racism (Bailey et al., 2017). Bailey, Krieger, Agénor, Graves, Linos, and Bassett (2017) focus on this issue in their contribution to the series on

equity and equality in health in the U.S. published by the leading general medical journal *The Lancet*.

Interpersonal racism affects health through biases and discrimination occurring between providers and patients leading to worse care and outcomes for patients of color, which has been found to be a pervasive issue (Bailey et al., 2017). However, Bailey et al. (2017) emphasize that it is not enough to study these interactions within the healthcare system, but that we must also focus on the wider context within which healthcare is situated, including the particular settings in certain areas, which would, for example, include Indian reservations as a unique setting that merits further study. According to the authors, a focus on structural rather than only individual racism as a key determinant of health is more promising in terms of advancing racial health equity long-term (Bailey et al., 2017). Examples of ways in which structural racism harms health that have been identified in the literature include environmental inequities, such as strategic placement of toxic waste sites in or near poorer neighborhoods, predominantly those with a high percentage of Black residents and on tribal lands, targeted marketing of health-harming substances in particularly rural communities of color, e.g. for alcohol, tobacco products, and unhealthy food options like fast food (Bailey et al., 2017).

In addition, political exclusion in combination with state-sanctioned violence, over-policing, and in many cases alienation from property and traditional lands, also leading to inadequate healthcare resources in communities of color, and increased difficulty of taking advantage of what is available (Bailey et al., 2017). These factors in combination with interpersonal racism lead to stereotype threats, such as a stigma of inferiority reinforced by these structural factors, leading to physiological stress reactions and impaired patient-provider relationships, maladaptive coping behaviors such as the generally higher consumption of commercial tobacco and alcohol in marginalized communities of color (Bailey et al., 2017), for which they are also specifically targeted by advertisers, and the psychosocial trauma and chronic stress stemming from the overall living situation and poverty combined with the micro-aggressions and discrimination rooted in interpersonal racism (Bailey et al., 2017).

Because healthcare infrastructure and services are distributed unequally, and many rural places lacking much of the infrastructure and resources that richer and more urban communities have, rural areas like tribal lands are considered by many cultural outsiders to be much less desirable places to live, thus particularly poor and rural communities have not only fewer healthcare professionals, but often also professionals with less training and lower qualifications compared to their peers in more affluent regions. This is likely to expose people of color living in poor, rural communities to racially biased services at an even greater rate (Bailey et al., 2017).

Little research has been done examining the health effects of policy changes and other interventions aimed at dismantling structural racism (Bailey et al., 2017), which is likely in part because there just haven't been many such anti-structural racism policies in the United States. In their report, Bailey et al. (2017) recommend that outside of full-scale community development, more immediate changes that could improve health outcomes for people of color in poor, rural areas are improvements in housing — which have been shown to improve population health — and implicit bias and anti-racism training for healthcare professionals, particularly in these regions.

One instance where additional training for doctors working with Indigenous patients, in combination with expanded screening and additional services, like nutritional consulting, have had a remarkable positive effect on health outcomes is chronic kidney disease (CKD) (Narva, 2018). In 1996, the CKD prevalence among AI/AN was about four times that of white, non-Hispanic individuals. Over the next 20 years, it CKD prevalence among AI/AN reduced by 54% despite per capita healthcare expenditures that equal only 40% of that for the non-Indigenous population (Narva, 2018, p. 408).

Unlike what one might expect seeing such drastic decline, this improvement was not due to any new therapies or significantly higher expenses, but rather relatively simple improvements in care made by the IHS. Those changes included making CKD part of primary care so that different diagnostic tests for it became part of the routine reporting, change of diabetes care protocols to include treatment of CKD complications often linked to diabetes, and offer nutritional counseling and early education about CKD to at-risk

diabetes patients (Narva, 2018). Finally, new continuing education programs regarding the implementation of these changes were created for medical doctors, nurses, physician assistants, pharmacists, and medical laboratory professionals (Narva, 2018). This example goes to show how even relatively little additional funding can have tremendous impact if spent on prevention, education, early detection via additional screening becoming part of routine checks, and continuing education for all professionals working in Indigenous healthcare settings. Of course significant increases in funding for Indigenous healthcare are urgently needed, and so are a studies like these, which can point to the most promising and cost-effective ways to improve how well the healthcare system functions in serving the Indigenous population. Since incidence and mortality of preventable and treatable chronic diseases are so high, where both education about prevention and regular screening for early detection are critical for successful treatment, and are more easily implemented than entirely new treatment approaches, these areas seem like a promising way to begin improving the system.

### ***Information and Communications Infrastructure on U.S. Tribal Lands***

Internet access, particularly a high quality, high-speed broadband connection<sup>1</sup>, has become a key requirement for successful integration into the modern workforce, access to health information, public safety, economic development of the region, civic participation, and to access educational and other professional opportunities (LaRose et al., 2007; Warren, 2017). Research in developing nations has linked broadband availability to GDP growth and consumer benefits, like greater access to social and healthcare services, as well as educational opportunities (Hudson, 2013).

I focus on broadband here as a means to access the Internet, rather than satellite Internet, for example, because broadband can provide the highest connection (download/upload) speeds, and a majority of policies and grant programs aimed at decreasing digital divides in the U.S. specifically focus broadband technology. There are also other issues with alternatives to

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<sup>1</sup> See <https://www.fcc.gov/general/types-broadband-connections> for a definition and the different types of broadband Internet connections



broadband, such as satellite Internet accessed via smartphone. While cost-effective for minimal use, data caps and/or slowing speeds limit Internet access particularly for low-income users, and in many rural Native communities, cell phone reception and data access can be very unreliable. Broadband access refers to the availability of broadband technology to a household or an area, whereas adoption means that a household or area is actually connected to broadband Internet through a residential subscription.

For Indigenous communities in particular, the health inequities affecting them are exacerbated by the lack of infrastructure in rural areas and on Indian reservations that hinders economic development, educational opportunity, and access to critical health information. While exact data is lacking, as tribal lands are rarely included in government reports on infrastructure, what data points are available are startling. For example, in 2010, about 18,000 households (roughly 20% of the population) on the Navajo Nation reservation, the largest Indian reservation in the U.S., lacked electricity (Kemper, 2013).

Robert Miller, Arizona State University Law Professor and chief justice of the Confederated Tribes of the Grand Ronde in Oregon, argues that “the physical remoteness of most reservations was purposely intended by the United States because it located tribes far from valuable resources and population centers” (Miller, 2012b, p. 123). The remoteness from population centers remains true in the 21st century, as one in six reservation residents has to travel more than one hundred miles to reach the nearest bank branch or ATM (Miller, 2012a). In 2000, the Department of Energy reported that 14.2 percent of households on tribal lands had no electricity, compared to only 1.4 percent across all U.S. households (Miller, 2012a).

In addition, the American Indian and Alaska Native (AI/AN) population is affected by some of the most severe health disparities in the nation, high unemployment rates, and particularly residents of rural Native communities and reservations lack access to other vital infrastructure as well, such as 9-1-1 emergency services, door-to-door mail service, sufficient landline and mobile telephone service coverage, and paved roads (Hudson, 2011; Hudson, 2013; Kemper, 2013; Morris & Meinrath, 2009). This further complicates access to information and leaves those communities doubly disadvantaged in

that access to high-speed Internet could make an important contribution to alleviating those health, civic, and economic disadvantages, as long as access is sustainable and affordable (FCC 2016 Broadband Progress Report; LaRose et al., 2007; Warren, 2017).

Access to information is included in Article 19 of the Universal Declaration of Human Rights (UDHR)<sup>2</sup> (UN General Assembly, 1948), which the United States was instrumental in drafting shortly after the end of WWII and the UN's founding, and which was unanimously adopted by its member states in 1948. Yet, many rural areas in the United States are being left behind, with Indigenous communities being the least connected (ATALM, 2014a). FCC data indicate that over 90% of Americans now have access to high-speed broadband Internet, while only 32% of residents of tribal lands are connected to this technology (FCC 2016 Broadband Progress Report, p.34), which some scholars believe be exaggerated (Hudson, 2013; NTIA, 2017).

One reason for this is how this data is being reported. Broadband providers are required to file form 477 with the FCC twice a year, reporting where they offer fixed, high-speed (at least 200 Kbps in one direction) broadband service. One of the issues is that this data is reported by census blocks, and if a provider serves at least one household or location in the census block, the whole block is counted as served with high-speed broadband. This gives no information about how extensively this census block is actually covered (NTIA, 2017). Another issue is that different providers might use different methodologies internally for their measure of whom they serve with which broadband speeds, which is not accounted for in form 477 data. The National Telecommunications and Information Administration (NTIA) states that improving data accuracy is the top priority for the FCC's form 477 going forward, and adds that the FCC should clarify the definition of a "served area" in form 477 and release the resulting datasets much faster and with more publicly available information so that it can be used more effectively in policymaking (NTIA, 2017).

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<sup>2</sup> "Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers." (UN General Assembly, 1948)

In addition, having access to broadband Internet infrastructure does not mean all of these households are actually connected to high-speed Internet (i.e. have a broadband subscription for their household). FCC data on adoption show that on tribal lands, only 25% of households in rural areas are actually connected to high-speed fixed broadband (FCC 2016 Broadband Progress Report, p. 46). Research examining the economic impacts of broadband access in rural regions in the U.S. found a stark difference in economic outcomes when access was defined as broadband infrastructure being provided in the region, as opposed to access being defined as actual adoption of a residential broadband connection. Broadband infrastructure alone provided only minimal economic benefits to the region, while increased broadband adoption was linked to individual-level and community-level economic improvements (Whitacre et al., 2014).

The cost of fixed broadband subscriptions is often cited as the single most important factor in preventing broadband adoption in areas where the infrastructure is available. However, research suggests that while affordability is certainly key, there are also other factors that should be considered. A cross-country analysis of cultural factors affecting broadband adoption lists lack of understanding of the services and content that can be accessed online as one reason individuals in the U.S. may not adopt high-speed broadband, as well as an actual insufficiency in online content relevant to a particular community (Fife & Pereira, 2002).

A report compiled by *Native Public Media* in 2009 estimated that broadband Internet was available for less than 10% of households in U.S. tribal communities at that point in time (Morris & Meinrath, 2009). The report further notes the lack of recent research on the availability and uses of ICTs in AI/AN communities as a major barrier to increased investment, development, access, and adoption of ICTs in these communities (Morris & Meinrath, 2009). While one of the best estimates we have, it is only an estimate and reliable data is still lacking. Broadband data gathered by national organizations has typically excluded American Indian/Alaska Native populations, even in reports in which specific statistics for Asian Americans, African Americans, and Hispanic people were provided (ATALM, 2014a). In summer 2017, Duarte stated again that “there are no publicly available reliable data sets assessing Internet coverage in Indian Country [meaning on tribal lands], either in terms of technical reach of existing infrastructure or in actual numbers and locations of users. [...] As of this writing, affordable, reliable, and robust

broadband Internet services continue to be scarce in remote reservation communities” (Duarte, 2017, p. 56).

Considering that about a decade later, reliable, accurate data on actual broadband connectivity on tribal lands is still not available, this concern remains true and the necessary investment in this research and ICT infrastructure for tribal lands still has not occurred. In 2013, Kemper called the state of access to information and technology among Indigenous communities “an emergency in the 21st century” (p. 442). According to the study, access is particularly vital for rural and remote Indigenous communities, and the existing digital divide impacts not only those communities and regions negatively, but has negative economic consequences for the U.S. economy at large (Kemper, 2013).

Prior studies have also shown the positive relationship between broadband availability and employment growth to be stronger in regions with lower population density, which is a characteristic of most rural Indigenous communities and tribal lands in the U.S., indicating that they would particularly benefit from better connectivity (Hudson, 2013). The same is true for health, as most rural Indigenous communities lack medical resources. For example, about 59% of Alaskans, primarily Alaska Natives, live in medically underserved areas (Hudson, 2011).

Several federal programs exist to increase access to broadband infrastructure in rural areas, such as the Rural Utilities Service (URS)<sup>3</sup> of the U.S. Department of Agriculture and the Universal Service Fund (USF)<sup>4</sup> of the Federal Communications Commission (FCC) — particularly the USF programs Lifeline<sup>5</sup> and the Connect America Fund<sup>6</sup> (Congressional Research Service, 2019). In addition, the 2010 FCC National Broadband Plan included the goal of increasing broadband access on tribal lands specifically (ATALM, 2014a), but as far as we can tell — due to the massive lack of data — not much has changed regarding access on tribal lands over these past 10 years. Despite nationwide increases in fixed broadband availability and adoption over the past fifteen years (FCC Industry Analysis and Technology Division Wireline

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<sup>3</sup> For more information, see: <https://www.rd.usda.gov/about-rd/agencies/rural-utilities-service>

<sup>4</sup> For more information, see <https://www.fcc.gov/general/universal-service-fund>

<sup>5</sup> For more information, see: <https://www.fcc.gov/consumers/guides>

<sup>6</sup> For more information, see: <https://www.fcc.gov/general/connect-america-fund-caf>

Competition Bureau, 2016, p. 7), rural and tribal lands continue to be affected by a digital divide precluding them from accessing vital information and opportunities.

Where available, tribal libraries provide critical, often the only, public access points for computers and Internet for rural Indigenous communities (ATALM, 2014a; ATALM 2014b). The Association of Tribal Archives, Libraries, and Museums (ATALM), a Native-led non-profit, lists 519 tribal libraries, archives, and museums in the United States, but is still building its directory of tribal libraries (Association of Tribal Archives, Libraries, and Museums, 2014). The most recent reliable number is likely from 2007, listing 237 tribal libraries based on a survey of 280 Tribes and Institute for Museum and Library Services grant recipients (Peterson, 2007).

Tribal libraries have not been included in any national surveys assessing the role of public libraries in increasing digital literacy and bridging digital divides, and ATALM's 2014 report is the first examining their contribution in this area. They found that while in 2014, every public library in the U.S., including rural libraries, offered computer workstations and Internet access, 11% of tribal libraries were not able to offer any Internet access and 14% did not have computers for visitors. Only 68% of tribal libraries could offer WiFi while the library is open, and 17% continued to offer WiFi when the library is closed. Regarding licensed electronic database access, such as academic databases, science learning tools and resources, or genealogical data, 98% of rural public libraries were able to provide access, compared to 46% of tribal libraries. Of all public libraries, 90% were able to provide technology training, dropping to 87% among rural libraries only, and 42% among tribal libraries. The report could not give an exact number or percentage of tribal libraries that have a broadband Internet connection, but states it is at least 40% and probably as high as 89% (ATALM, 2014a, p. 6-8).

When asked what their main barriers are to expanding computer workstations and Internet access, cost factors were named as the number one reason, with nearly 70% of tribal libraries stating that cost factors had a "very strong" effect on their ability to expand those services (ATALM, 2014a, p. 13). Unlike other public libraries, tribal libraries are not eligible for any funding from states, state library agencies, or local property taxes — since they are on tribal lands — which are the main income sources for other U.S. public libraries. Instead, tribal libraries have to rely on tribal governments and the Institute of Museum and Library Services for

funding (ATALM, 2014b). ATALM (2014b) estimates that all tribal library funding combined, across the nation, equals less than \$3 per capita per year, whereas other public libraries receive \$45 per capita per year, on average (ATALM, 2014b, p. 4).

Tribal libraries should be able to use funding from the FCC Universal Service Fund's E-Rate Program, which provides discounts of 20-90% on broadband Internet connections (both for public WiFi and internal systems) for eligible schools and libraries in the U.S. (FCC, 2020). The E-Rate Program has supported 61% of all public libraries and schools with over \$2.25 billion per year in total, helping to raise the fraction of public libraries that offer free public Internet access from 28% in 1996 to over 95% by 2012 (ALA, 2012). This has made a significant difference for most minority populations, decreasing the digital divide they are experiencing, but this has not been the case for Indigenous Americans (ATALM, 2014b). In fact, the E-Rate Program is one example of a policy specifically designed to address inadequate broadband connectivity in rural areas that has not made any significant difference for Indigenous Americans, while it has had a tremendous positive impact for all other minority groups in the States. A lot of the issues affecting the effectiveness of E-Rate also affect other federal programs aimed at reducing digital divides that have so far failed tribes and rural Indigenous communities.

ATALM (2014b) found that only 15% of tribal libraries had received any E-Rate discounts and that 52% of tribal libraries included in their survey had never heard of E-Rate (p. 5). So from the beginning, there is an issue regarding information sharing. It is not sufficient to create a website about new programs, host events in major cities, and assume that tribal organizations will thereby become aware of new programs. Tribal libraries are severely understaffed and underfunded and cannot be expected to spend more their time actively searching for federal funding; this information should be made available in ways that truly makes it accessible, including representatives traveling to tribal libraries and meeting with their employees. In addition, among those who were aware of E-Rate, lack of training was cited as a major barrier to their ability to apply for the program (ATALM, 2014b). The application is complex, and includes, among other things, the requirement to submit a technology plan, which tribal library staff in the survey indicated they had no experience with and no guidance or information on how to draft (ATALM, 2014b). In addition, E-Rate recipients must comply with

certain regulations, which tribal libraries were uncertain they could fulfill, or what exactly would be required of them should an application be successful. Finally, in order to be eligible for the E-Rate Program, libraries must have their technology plans approved by a state library agency, which are actually prohibited by state statutes to provide such services to non-state entities (ATALM, 2014b), which includes tribal libraries.

This is a great example of a federal program specifically designed to support rural libraries in the United States, facing exactly the hardships that tribal schools and libraries are facing, and that is often pointed to when tribal schools and libraries speak about their concerns, but that includes barriers and contradictions that preclude tribal entities from taking advantage of them, while everyone else can. For other communities, E-Rate has worked very well and made a significant positive difference, while it leaves Indigenous communities in the same situation they were in before, only causing them to fall further behind in terms of ICT access and services they can provide. What is needed to improve E-Rate and other programs is first, greater support (or any support to begin with), from awareness raising of such opportunities to help with the application and crafting the required documents, to ensuring compliance with required reporting once an application is successful. Second, the application process should be made as accessible and simple as possible, perhaps with additional steps or documents required later on, for which information and support should be provided. Finally, federal programs need to ensure that such policies do not contain any requirements that by design exclude tribal nations and their entities due to their unique political relationship and status with state governments and the federal government itself. Particularly the 38% of tribal libraries that state they are the only source of free public Internet access in their (often very remote) communities (ATALM, 2014b, p. 1) would benefit greatly from a program like E-Rate, given that they rate their current number of workstations and broadband speeds as insufficient to meet demand and rated cost factors as the most important barrier to improvement. Of course, the 10% of tribal libraries that currently aren't able to offer any Internet access (ATALM, 2014b, p. 1) and the many Indigenous communities that do not have a tribal library to begin with, also need support programs specifically addressing their needs, from funding to training to support with federal program applications.

A few Indigenous nations have also begun to operate their own telecommunications companies (telcos) which provide cellular, data, and sometimes broadband Internet services to their communities. Presently, the National Tribal Telecom Association (NTTA)<sup>7</sup> has nine member companies, all owned by different tribes, predominantly located in the U.S. Southwest. One of the members is Hopi Telecommunications Inc. (HTI), a telco under tribal ownership established in 2004, which provides DSL Internet service to households who have a landline phone connection (which is a minority at Hopi) and satellite Internet to those outside of DSL range or without landline, which is most households, even though power, including from solar panels or a generator, is still required first. HTI's DSL plans range from 4 to 15 Megabits per second. DSL is much slower and more expensive than cable Internet, and HTI's service is too expensive for most reservation households. However, there is no infrastructure for cable Internet at Hopi, so these are the only options. The cheapest plan, 4 Mbps, is currently priced at \$37/month, but at least 10 Mbps would be required to manage a basic website, for example, in order to sell arts and crafts online or advertise a tourism business, etc. The 10 Mbps plan costs \$98/month and 15 Mbps cost \$150/month (HTI, 2020). For households without landline, the satellite Internet option is even more expensive.

The remoteness and difficult topography of most rural Native communities often makes infrastructure installment challenging and costly (Hudson, 2011; Hudson, 2013; Prieger & Church, 2013). For example, one case study of Native Alaskan communities notes that 75% of these communities have no road access and can only be reached by boat or bush plane (Hudson, 2013). In addition, the low population density of many rural Indigenous communities leads to low expected demand on the side of providers, making them less likely to invest in infrastructure there (Hudson, 2011; Prieger & Church, 2013). Tribes also face other unique difficulties in applying for certain types of funding, for example, Tribes cannot mortgage their lands in order to apply for third-party loans to assist with the higher costs of infrastructure installment, as it is legally considered land held in trust by the U.S. federal government (McMahon, 2011).

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<sup>7</sup> For more information, see: <http://www.nationaltribaltelecom.org>



Federally recognized tribes in the United States are sovereign nations. In this framework of tribal sovereignty, tribes exercise 8 key rights: the right to self-govern, to determine citizenship of their nation, administer justice (though jurisdiction on U.S. tribal lands is another complex legal issue in reality), regulate domestic relations, regulate property inheritance, taxation, rules of conduct for government employees, and finally, the right to sovereign immunity (Cobb, 2005; Alfred, 2005). This is, of course, a negotiated, limited, and in many ways imposed form of government that resulted from colonialism (Duarte, 2017), and in many cases, these rights of tribal nations and their citizens are not actually respected and observed as they should be, according to federal law and individual treaties between tribal nations and the United States.

Legal scholars have addressed the general tension between tribal sovereignty and private competition, arguing that tribes can and should assert their sovereignty by applying for Eligible Telecommunications Carrier (ETC) designation for tribally owned telcos operating on their own tribal lands, as granted to a telco belonging to the Standing Rock Sioux Tribe in South Dakota in 2011, allowing this tribal telco to provide their services to the entire Standing Rock reservation, encompassing about 560,000 acres of land inhabited by about 10,000 residents. (Kemper, 2013). In *Network Sovereignty* (2017), Duarte argues that “ICTs — and especially broadband ICTs — are about helping people connect with one another. For tribal peoples who have been forcibly disconnected from one another for generations by settler-state leaders interested in seizing Native lands and waters, tribally owned broadband infrastructure takes on a value beyond that of simply enabling education, economic development, or cultural revitalization” (p. 63). Rather, tribal telcos allow for technological innovation and agenda-setting by the tribes for their own communities, which builds capacity and emphasizes their standing as independent nations (Duarte, 2017).

It is also critical that representatives of Indigenous nations are included in the discussions and policymaking around ICT infrastructure in the United States, particularly as it relates to rural regions. A potential barrier here is that while some opportunities exist for tribes to actively engage in policymaking regarding broadband, for example, community members and tribal leaders do not always have the training on policy, technology, and FCC procedures needed to

truly be informed and active participants in the policymaking process, and this training is not provided or otherwise accessible to them (Hudson, 2013).

Another major barrier to sustainable broadband access on tribal lands identified in the literature is the general lack of research (Hudson, 2011; Hudson, 2013; Kemper, 2013; McMahon, 2011; Prieger & Church, 2013). The American Indians/Alaska Native population is not included in most reports and studies on the topic, even including reports that do distinguish between other major racial/ethnic groups in the U.S. (Kemper, 2013). Available estimates for AI/AN are therefore often skewed as they rely on insufficient data on the Indigenous population due to this lack of research. For example, Hudson (2011) points out that a 2011 National Telecommunications and Information Administration (NTIA) report estimated that 70% to 76% of Alaskans use broadband to access information, an estimate highly skewed to the urban population in Alaska, largely disregarding Alaska Native villages, where broadband availability and other infrastructure continue to be extremely limited (Hudson, 2011). Sample sizes are also often too small to make any generalizable statements about broadband access in Indigenous communities (Hudson, 2011).

Research on ICT availability in general and broadband in particular is lacking in both quantity and quality in the Indigenous context (Hudson, 2011; Hudson, 2013; McMahon, 2011; Prieger & Church, 2013). Some scholars have suggested that research in this area should examine the effectiveness of substitutes used by Indigenous residents of areas that lack fixed broadband, such as mobile broadband, and implications for local economies and digital divides. (Prieger & Church, 2013). In researching access, studies should further distinguish between personal, household, community, and institutional use (Hudson, 2013), as well as between access gaps and usage gaps (Kemper, 2013). Kemper (2013) also suggested a national study on tribal telecommunication service providers and impacts of tribes gaining ETC designation. A greater body of research on access to information on tribal lands, particularly via broadband Internet, would also strengthen the voice of tribal nations in policymaking (McMahon, 2011).

In order to improve research on the topic, of course, more research funding for this topic area has to be made available as well, including from federal sources (Hudson, 2011). Hudson (2011) suggests that the framework for analysis of broadband connectivity in rural Indigenous

communities, such as those in rural Alaska, should not only include the availability of broadband technology, but also examine adoption rates and predictors thereof, as well as outcomes on household and community levels. Further, studies must distinguish between urban and rural Indigenous communities, but could explore differences and similarities in broadband availability, adoption, and types of use, all of which are currently under-examined in either setting (Hudson, 2011). Studies on access also need to be carefully designed, ideally with community input and collaboration, to make sure the most effective approaches are being used. Hudson (2011) found that broadband usage and computer ownership are overrepresented in telephone surveys of rural Alaska, so other methods of data collection should be considered in order to gain more accurate results. Research in remote, rural areas is particularly cost- and time-intensive, mainly because obtaining quality data from these regions often requires methods beyond online or telephone surveys, such as interviews, focus groups, or mail surveys (Hudson, 2011). Given the complexity of the issue, qualitative or mixed-methods research may be necessary to better understand a particular community's information needs, as well as barriers and facilitators of broadband adoption that quantitative data will document but may fail to adequately explain without additional insights gained from qualitative data.

In prior studies (on any topic), American Indian/Alaska Native individuals have often been subsumed within categories of “other” or “rural” due to lack of specific data for this group McMahon (2011), which is detrimental to policymaking that can work well for Indigenous communities. Many policies that work in other rural areas may not work at all for Tribes due to the complex legal structures in which they are embedded (McMahon, 2011). McMahon (2011) recommends that a community-based strategic planning approach should be employed in policymaking on ICTs.

Several scholars have also argued that we need to carefully consider what broadband efficiency really means in the context of rural Indigenous communities, particularly on tribal lands. Kemper (2013) argues that we need to redefine “efficiency [of broadband access on tribal lands] to consider important concepts like tribal sovereignty and not just the financial exigencies of private parties. This approach forces consideration of the specific and unique needs and desires of Indian tribes as part of legal policies about, and the spread of, broadband access” (p.

444). Hudson (2013) suggests that the benefits of broadband access should be measured in terms of four key aspects: efficiency (to what extent greater connectivity is saving time and costs), effectiveness (finding the right services or information at the right time), equity (reducing the gap in ability to access information and opportunities that exists between rural and urban populations), and reach (in terms of access to new markets and job opportunities).

Duarte (2017) notes that “when it comes to theorizing the impacts of ICTs in Native and Indigenous communities, we also have to acknowledge the significance of digital connectivity for people who were oppressed for generations through an intentional colonial imposition of containment and forced disconnection” (p. 67). She also states that in most research and reports so far, “descriptions of Native uses of ICTs did not account for the legacies of colonialism, exigencies of tribal sovereignty, histories of self-determination, and the realities of day-to-day reservation life” (Duarte, 2017, p. 29). To avoid this, and gain a more complete and accurate understanding of ICT needs, adoption, and uses among Indigenous populations, we need not only more research, but ideally research led by Indigenous peoples. According to Duarte (2017), “at present, there are no published theories or conceptualizations in the fields of information science or Native and Indigenous studies that center Native and Indigenous peoples’ experiences with ICTs at an epistemological or ontological level” (p. 28). When non-Indigenous researchers characterize ICT needs and use among Indigenous people, there is a risk of what she calls a “colonizing logic” (Duarte, 2017, p. 28) and “epistemic injustice” (Duarte, 2017, p. 28), in which Indigenous peoples are portrayed as pre-modern, lacking progress, and in need of outside support, when in reality, there is tremendous innovation and creativity in Indigenous communities with or without these technologies. She agrees, of course, that greater access to ICTs is wanted and needed, and would likely have a multitude of positive effects on rural communities, but wishes to caution against these types of portrayals of Indigenous peoples in the process of studying and writing about the topic.

In terms of education, many rural regions do not have the human and financial resources to offer certain advanced placement or language courses for secondary school students, which can be accessed online if a reliable high-speed connection is available (Hudson, 2011). Similarly, many job training programs can be accessed online that may not be available from any other source

in a rural and remote region. Hudson (2011) makes the case that given these online opportunities, ensuring access for Indigenous communities becomes a matter of inclusion and ‘digital diversity’: “These services should be considered as components of digital diversity, as they are a means of providing services for remote Indigenous communities that would not otherwise be available” (Hudson, 2011, p. 381).

There is also a steadily growing number of online resources aimed at Indigenous cultural vitality and language preservation. Examples are interactive maps showing Indigenous languages spoken in certain regions and Indigenous place names, as well as a variety of online language learning programs (Hudson, 2011).

Most studies focus on the potential economic benefits of broadband access on tribal lands and rural Indigenous communities. However, besides micro- and macro-level economic growth, broadband is also integral to community development and increased social capital linked to new economic opportunities (McMahon, 2011; Prieger & Church, 2013). Specific examples of economic activity in rural Indigenous communities that would benefit greatly from broadband availability include websites for local ecotourism businesses and arts and crafts produced by community members that could be sold online (Hudson, 2011). Prior studies have also shown the positive relationship between broadband availability and employment growth to be stronger in regions with lower population density, which is generally a characteristic of rural Indigenous communities and tribal lands in the U.S. (Hudson, 2013).

Hudson (2013) cites a number of advantages of broadband access for natural resource industries, such as mining, fishing, or forestry, in terms of optimizing logistics and back office management. Tribal organizations, particularly non-profit organizations, have also reported that broadband would allow them to save time in accessing information and completing online grant applications and so on, as opposed to using alternative Internet connections currently available to them, like satellite, which are slower, less reliable, and less convenient to use for purposes like online applications that require uploading of documents, for example (Hudson, 2013).

However, again, Duarte (2017) warns of portraying ICT access for rural Indigenous populations as an ultimate solution, or to discuss it without proper context, “as if widespread adoption of ICTs could somehow ameliorate the chasm of political and social marginalization of

Native peoples effected through overlapping waves of preindustrial and industrial-era colonization of Native lands, waters, and bodies” (p.31). So, while discussing the advantages of ICT access, it is critical to keep the complex context in mind, and not suggest ICT access as a sort of ultimate solution to the inequities Indigenous peoples are facing, because those are deeply rooted in ongoing colonialism, which needs to be addressed through policy, proper respect for tribal sovereignty and self-determination, in addition to more Indigenous-led policymaking, research, education, and economic development.

While consumer demand on tribal lands is high, so are the infrastructure buildout costs. Some factors commonly discussed as reasons for high buildout costs are the remoteness, rurality, and often challenging topography of many tribal lands. While this is true, these factors apply to many other types of rural areas as well, which are connected at a higher rate than tribal lands. An often overlooked factor that leads to infrastructure deployment costs being much higher than those for other rural areas is the fact that a large number, often a majority, of households on tribal lands lack basic infrastructure, sometimes to the point of not meeting the definition of a domicile or private home as they are conceptualized in FCC or national survey data. Being overlooked in the census as well as FCC survey data on consumer connectivity and broadband needs lead to a gross underestimation of broadband support and financial means necessary to achieve connectivity goals on tribal lands.

In a recent report, John Badal, co-founder and CEO of Sacred Wind Communications<sup>8</sup>, a small, privately owned telco in New Mexico, founded in 2006, which predominantly serves rural tribal lands in their state, stated that:

“As part of the FCC’s recent Alternative Connect America Cost Model (A-CAM) support order, Sacred Wind Communications took the opportunity to identify all locations — structures that might be served by broadband and voice telecommunications services — within its study areas’ census blocks declared by the FCC eligible for A-CAM support, and found that the FCC undercounted the locations in those census blocks by over 4,000 locations. Those undercounted homes represented a loss of nearly \$4 million annually in funding needed to provide broadband to those locations. [...] Had Sacred Wind accepted

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<sup>8</sup> For more information, see: <https://sacredwindcommunications.com/>

the FCC's A-CAM offer of support, the company could have met its obligations of providing broadband at 25 Mbps download [speed] to 100% of the locations in the FCC's database, without ever having to deploy to a single one of these excluded locations, ignoring nearly 40% of the households" (Benton Institute for Broadband & Society, 2019, n.p.).

Thus, what the FCC in this case would have considered 100% connectivity, would be a maximum of 60% connectivity in reality, all due to data collection methods and definitions of domiciles and households that do not hold up on tribal lands.

The operating costs per customer of Sacred Wind Communications and those of other, similar rural and tribal telcos serving rural Indian reservations, far exceed those of telco providers in urban or even other rural areas and need to be taken into account in calculations for necessary government support and the overall operating costs federal programs would need to cover (Benton Institute for Broadband & Society, 2019). According to the CEO, these higher costs often result from the higher number of company vehicles, miles traveled, and need for more outside plant technicians, as homes are extremely spread out and distances too great for few technicians to be as efficient as they can be in more concentrated areas. In addition, there are often high rights-of-way costs associated with infrastructure projects on tribal lands, applying to both broadband and microwave technology (Benton Institute for Broadband & Society, 2019).

A further unique complication of tribal lands is that even within one reservation, legal classification can vary, complicating data collection and infrastructure deployment. For example, on the Navajo Nation Reservation, the largest Indian Reservation in the United States at a size of 27,425 square miles extending into New Mexico, Arizona, and Utah, and Colorado (Navajo Epidemiology Center, 2013, p. 5), with 173,667 residents according to the 2010 U.S. Census (96% of whom are Navajo or enrolled citizens of another tribal nation) (Arizona Rural Policy Institute, 2010, p. 6), some areas are classified as homesites under lease with the Navajo Nation, some are allotment lands managed by the Bureau of Indian Affairs (BIA), while yet others live in Navajo Housing Authority (NHA) housing (Benton Institute for Broadband & Society, 2019).

Besides different rules that apply for occupation and construction on these differently classified lands, some, like Navajo Nation homesite leases and BIA allotments, also allow for

multiple households per allotment, usually for individuals who are related to each other. However, there are often friends and other non-registered residents living on these allotment lots, who are overlooked by census takers. More than 30,000 Navajo families are on a waiting list for an NHA home. Most of these families are living as secondary occupants on another family's homesite lease or allotment and are omitted in the census, partly because they are not officially registered as residents of the site and often also because the structures these families occupy are not recognized by the US Census as "living quarters" by Western standards (Benton Institute for Broadband & Society, 2019). Most of these allotments also lack street addresses, making it even more difficult for agencies and outside telco providers to keep track and produce accurate population or household estimates. Sacred Wind Communications has provided an example of the discrepancy in number of homes eligible for voice and broadband services in one census block between their count, based on in-person visits of homes in the area, and that of the FCC, based on census and FCC form 477 data. In U.S. census block #350319436002056, located on Navajo Nation land, the FCC counted three eligible households while Sacred Wind Communications counted seventeen (Benton Institute for Broadband & Society, 2019). Sacred Wind CEO Badal states that they have delivered services (in particular fixed-wireless broadband) to some of these homes, where it was necessary to also install solar power units to power the communication equipment, as the customer did not have electrical power, further driving up installment costs per households for providers on tribal lands.

Sacred Wind Communications' experience on Navajo Nation land is not an isolated example. A recent U.S. Census Bureau audit determined that the 2010 Census had missed about 1 in 7 Native Americans living on an Indian Reservation, amounting to over 82,000 individuals (Keller & Fox, 2012), roughly the population of New Mexico's capital Santa Fe, going uncounted, which especially for residents of tribal lands can have stark consequences in terms of allocated government funding for much needed development programs, in the area of ICT infrastructure and elsewhere.

Indigenous media, as well as broadband infrastructure projects on tribal lands, have been regulated and overseen by the Office of Native Affairs and Policy (ONAP) at the FCC since its establishment in 2010. ONAP is responsible for corresponding and consulting with all 567



federally recognized tribes in the U.S. (FCC ONAP, 2020). For example, formal processes are in place requiring the FCC to consult with tribal leaders and community representatives about any infrastructure development plans and procedures that take place on tribal lands or otherwise directly affect their residents (McMahon, 2011).

An open question is whether federal regulation of Indigenous media is truly beneficial or appropriate, and what implications arise for tribal sovereignty. Legal scholar William Haney (2016) argues that “tribes have an inherent sovereign right to regulate tribal airspace” (p. 6), grounded in “the idea that this right arises from the federally recognized inherent power of Indian tribes to exclude non-citizens of the tribe from tribal lands, and that this power has not been relinquished by Indian tribes or abrogated by the United States” (p. 6). Haney (2016) limits his proposition to aviation in tribal airspace, however, I believe his argumentation to also be applicable to the inherent right of federally recognized tribes as sovereign or even semi-sovereign nations to regulate the airspace over tribal lands when it comes to telecommunications — including radio waves, even though I am aware that laws and regulation from another area cannot simply be applied in telecommunications regulation. However, the current system of federal control over tribal telecommunications, even radio signals which do not extend beyond tribal lands and where no one is competing for those frequencies, is not only a way to exercise control over the infrastructure and development on tribal lands, but also over Indigenous narratives which may stand in opposition to dominant cultural and political narratives.

With regards to broadband Internet infrastructure and access regulation, Rob McMahon (2011) introduced the concept of “digital self-determination” (p. 155) and names control over and active participation in broadband infrastructure development on tribal lands as one way tribes can and should be able to exercise their sovereignty in the 21st century. He argues that tribal telcos are likely able to provide broadband services to their community members at a lower cost than outside providers while achieving higher penetration rates. In 2011, the FCC recognized the Standing Rock Sioux as an ETC on their own tribal lands, paving the way for other tribal telcos to receive this designation and compete on the telecommunications market to provide these services to residents of their reservation (Kemper, 2013). This FCC decision did not only have practical implications, but was in itself an acknowledgement of tribal sovereignty.

Kemper (2013) notes that “tribal sovereignty and competition are not antithetical, though they could be framed that way. In fact, one builds the other. Tribal sovereignty in this context simply stands for the proposition that tribes have inherent powers recognized by Congress to function as governments, organize businesses, and compete with other entities if they so choose” (p. 447). Another important step towards greater digital self-determination is to include tribal leaders and organizations in federal and state task forces on broadband issues (Hudson, 2011).

As emphasized before, more research is also essential to improve policymaking. Specifically, the existing literature calls for greater sample sizes in quantitative research with Native communities, additional qualitative research on the topic, and highlights the importance of collecting and reporting data specific to tribal lands instead of subsuming them in a “rural” or “other” categories, given the unique political, geographical, and cultural complexities of Native American tribes and communities in the U.S. (Duarte, 2017; Hudson, 2011; Hudson, 2013). In line with the recommendations on greater community involvement in policymaking, studies also called for more community-based research conducted in partnership with Native communities, in order to improve applicability of the research in policy and build capacity locally (Duarte, 2017; Hudson, 2011; Hudson, 2013)

Broadband infrastructure is not only a matter of residents of tribal lands gaining access to outside resources, but also of community members being able to use online resources already created by tribal governments and community organizations, as well as access Indigenous media content available online, often in Indigenous languages. In addition, it is worth keeping in mind that online content becomes more diverse for all users as more communities become connected, with the ability to participate and create content in online spaces. A greater diversity of individuals having access to information and being included in knowledge creation results in new opportunities for all (Hewitt de Alcantara, 2001; Servon, 2002).

Particularly among Indigenous peoples across the world, new opportunities to engage and organize emerge from multiple previously excluded rural Indigenous communities becoming connected via ICTs. Alia (2010) has referred to this as the “New Media Nation”: An “internationalization of Indigenous media audiencehood and media production” (p. 8). She argues that:

“Although culturally distinct, the world’s Indigenous communities have collectively experienced many of the elements of Diaspora. Small numbers of people are scattered over great distances, some far from their homelands, as in Oklahoma — where survivors of forced relocation landed at the end of the Trail of Tears and the high Canadian Arctic, where Inuit were moved from Northern Québec. Some reside in their homelands newly ‘legitimated’ by dominant governments — as in the instances of Nunavut Territory and Greenland Home Rule” (Alia, 2010, p. 5, 6).

Thus, Indigenous media, particularly if they can be shared over large distances and across the world, with the help of ICTs, make a contribution to connecting Indigenous groups around the world who face a lot of similar political and human rights struggles, and promotes a pan-Indigenous identity that could strengthen a unified political voice of Indigenous peoples.

However, several scholars have also argued that ICT access by itself is actually unlikely to lead to economic and particularly political empowerment of individuals, unless it is augmented with traditional mass media, like radio, and interpersonal discussion and knowledge exchange (McLeod & McDonald, 1981; McLeod, Scheufele, & Moy, 1999; Nisbet & Scheufele, 2004; Scheufele, Nisbet, & Brossard, 2003; Shah, Kwak, & Holbert, 2001).

One example of this augmentation with traditional media to maximize usability and benefits of ICTs is rural Zambia. There, broadband Internet has been available in a few rural villages at affordable pay-per-use rates since 2004 through community-owned networks (Van Stam, 2011). Despite this affordable broadband availability, this community lobbied for the next 7 years to get a non-commercial community radio license, which was finally granted in 2011. The radio station functions in part as a sort of guide to the Internet, not necessarily teaching computer literacy, but rather giving suggestions and advice on how this resource could be used, such as encouraging community members to set up YouTube channels to share their knowledge, giving suggestions for most efficient use of the Internet to find information on certain topics, where to find online courses to earn certificates for employment, find online work to supplement meager farming incomes, and so on (Van Stam, 2011).

A study conducted in South Africa examined the potential of 10 community radio stations serving as a means of access to ICTs for rural communities. Unlike the rest of the community, the

radio stations there have ICT access and equipment and do their best to diffuse the benefits of this access to the rural residents they are serving. However, the study found that beyond sharing information, the radio stations lack the staff and expertise to act as accessible technology centers for their communities, and that even greater benefit of ICT access could be shared with the wider community if the radio stations had more resources available to them for this work (Megwa, 2007).

Speaking of Indigenous media around the world, Alia (2010) writes that: “Radio remains the chosen medium for local communication, both in traditionally transmitted forms and transmitting via the Internet to expand and globalize originally localized broadcasts. As access increases and technologies evolve and blend, the Internet is fast becoming the second medium of choice, with websites, blogs, social networking, chat rooms, mobile phones, and radio intertwined with it” (p. 17).

Improving connectivity and ICT-related resources in rural Indigenous communities is critically important and should be realized through greater inclusion of representatives from Native nations in the policymaking process — in addition to capacity building and training for these policy discussions — as well as greater funding for projects led by tribes and support for tribal telcos serving their communities. At present, rural Indigenous communities do not only heavily rely on their local tribal radio stations because few other media and ICTs are available, but tribal radio provides a unique gathering and learning space that cannot simply be replaced by other media. They can, and do, however, complement each other, and having the greatest possible access without relinquishing control to outside providers and governments.

The following chapters present both the radio producer and audience views of tribal radio, interviews and focus groups, in two remote rural locations, detailing how tribal radio functions in Indigenous communities who are facing many of the barriers described here regarding lacking ICT infrastructure and rely heavily on tribal radio for information. The chapters also highlight the contributions of tribal radio that cannot be simply replaced by online resources, and how local residents do not only appreciate their tribal station so much because they have no other options for media access. This certainly plays a large role in the continued importance of radio in these communities, but there are benefits and unique affordances of tribal

radio that cannot be simply replaced by online resources. While communities such as the two included in this study would certainly like to have, and would greatly benefit from, affordable and reliable high-speed broadband connections, local residents do not seek to replace their tribal station with the Internet, or other media for that matter, but rather appreciate unique aspects of tribal radio discussed in the following chapters, and would most likely still use it even if a multitude of other media and high-speed Internet was available. In fact, those who have moved away from their rural community and now live in an urban center with access to all of the above, still listen to their tribal stations online, for reasons discussed in detail in Chapter 4.

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## CHAPTER 3

### **Tribal Radio as a Unique Community Medium and the Relevance of its History in its Functioning Today**

In this chapter, I discuss the practitioner's view of tribal radio, based on data from 12 semi-structured individual in-depth interviews with station employees of both KUYI (Arizona) and KYUK (Alaska). Seven interviews of about 60 minutes each were conducted with employees of KYUK and another five interviews of the same length with employees of KUYI.

Interviewees include the General Managers of each station, reporters, show hosts, translators, technicians and engineers. I wish to highlight here that among those interviewed at KYUK is John Active, a true pioneer of tribal radio. John Active had been with KYUK since its earliest days in 1971 and started then what remains to this day the only daily Indigenous language news program. He passed away two years after we met and he participated in this study, on June 4, 2018<sup>9</sup>. Not only was he a central figure in tribal radio, having been one of the first Indigenous voices on air at an Indigenous radio station, and speaking an Indigenous language, he was also a well-respected tribal elder and one of the most highly skilled Yup'ik speakers, who could even translate events from English to Yup'ik in real time for live radio broadcasts. He also hosted the Yup'ik language call-in show which will be referenced in this chapter, and the "Yup'ik Word of the Week" program, recordings of which KYUK continues to air even after his passing. To this day, John Active remains the only Indigenous commentator to air on National Public Radio (NPR) in its 50 year history<sup>10</sup>. I did have his explicit permission to share his name for the quotes included here, and he is also a highly identifiable KYUK staff member, given the programs he hosts and the wealth of experience he was able to share.

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<sup>9</sup> KYUK's obituary for John Active can be found here: <https://www.kyuk.org/post/remembering-our-friend-native-media-pioneer-john-active>

<sup>10</sup> See, for example, this KYUK story published one year after his passing: <https://www.kyuk.org/post/year-after-his-death-john-active-remains-nprs-only-indigenous-commentator>

In addition to John Active, the two General Managers have given their permission to be identified. Others may have also given permission, but will not be identified by name or specific job title here for the sake of confidentiality.

To begin this chapter, I first discuss the historical roots of tribal radio in the U.S. and its ties with the Indigenous activism of primarily the 1960s and 70s, leading up to the first tribal radio stations coming on air. I briefly discuss other tribal media like the first tribal newspapers in the U.S. and Indigenous media development around the world, particularly in Canada, New Zealand, Australia, and South American countries.

The interviews with current practitioners in the field shed light on the extent to which these historic roots in social activism remain relevant today, what the current challenges of the medium are, and how practitioners aim to use radio to inform their audiences, including about critical health topics.

Besides answering the research questions pertaining to the media practitioners in Indigenous radio, a major aim of this chapter is to situate tribal radio within the literature on community and alternative media. I argue that there are unique aspects of this medium that set it apart from other community media and necessitate special consideration. Examining Indigenous radio as a particular instance of a community medium allows us to expand on existing literature and theories about community radio. I believe that there are lessons to be learned about community and minority media in general from the example of Indigenous media in the United States.

To understand how tribal radio functions today and the contributions it makes to audience members, particularly in the realm of health education, I believe it is important to include both the practitioners' and the audience members' perspectives. This chapter focuses on the aims, barriers, and characteristics of tribal radio — in general and a source of health information — as described by station managers, reporters, DJs, engineers, and other employees, whereas the following chapter examines the audience perspectives shared in the focus groups. Since both chapters discuss data from both study locations, this analysis as well as the following one provide an opportunity for triangulation. Practitioner as well as audience perspectives reveal

stark similarities between the two stations despite significant cultural and environmental differences of the study locations and partnering communities.

### **Indigenous Activism and Early Media in USA**

Rural radio in the US, beginning as early as 1922, had almost entirely ignored Indigenous news, concerns, and voices (Keith, 1995; Browne, 1996; Smith & Cornette, 1998; Smith, 2004). Even stations which had a significant Indigenous audience, such as KKOB-AM in Albuquerque, New Mexico, largely neglected Indigenous concerns (Keith, 1995). The very first radio station licensed to a U.S. Tribe was commercial station WYRU-AM in Red Springs, North Carolina, licensed to the Lumbee Tribe in 1970. The first non-commercial radio station officially affiliated with a Native Tribe, governed by an Indigenous board of directors, and serving a predominantly Indigenous audience, namely the Yup'ik, went on air in Bethel, Alaska, less than a year later, in 1971. Unable to comply with the financial requirements attached to a commercial radio license, the Lumbee station WYRU-AM has since been sold and is no longer under tribal ownership (Smith & Cornette, 1998), which makes KYUK AM the oldest continuously operating tribal radio station in the U.S..

The early 1970s, when these stations came on air, was, of course, a time of social activism. Just weeks before WYRU-AM came on the air, the American Indian Movement (AIM) had occupied Alcatraz Island for 19 months in an effort to protest against the continued disregard of tribal treaty rights and Indigenous concerns at the federal level (Keith, 1995). During this time, Indigenous activists became acutely aware of the powerful role the media could play in shaping public opinion and in soliciting support for their cause from the American public. At the same time, Indigenous activists and their protests were portrayed in mainstream media as overly aggressive, disorganized, and unwarranted, so that activists saw the need to communicate their own perspectives of their protests and demands to the general public, including fellow Native Americans in other states who were also learning about the protests from mainstream media, and of course the non-Indigenous American public (Keith, 1995).

Founded in 1968 in Minneapolis, Minnesota, AIM initially focused on improving the lives of Native Americans living in cities who faced police brutality, poverty, poor housing, and

the highest unemployment rate of any ethnic group (McDonald, 2010). AIM is credited with being one of the first pan-Indian movements, uniting members of multiple Tribes across the United States, on and off reservations, in activist action. It is important to note that certainly not all, or even most, Native Americans were supportive of AIM, involved in their actions, or even aware of them at the time they took place. But it was what generated unprecedented media coverage of Indigenous concerns in the United States (McDonald, 2010).

AIM is known for the 19-month occupation of Alcatraz Island from November 20, 1969, to June 11, 1971, citing a treaty from 1868 that said American Indians could use federal lands that were not currently being used by the government. AIM also led the 1972 Trail of Broken Treaties, a caravan that traveled from Denver to Washington, D.C. to present President Nixon with a list of demands they called the 20 Points. In addition, AIM is known for the six-day occupation of the Bureau of Indian Affairs in Washington, D.C., and — most notably — the 1973 occupation of the site of the 1890 Wounded Knee Massacre, which lasted from February 27 until May 8 and resulted in the deaths of two activists and one FBI agent, and arrests of almost 1,200 activists and supporters. Finally, AIM participated in other actions alongside other groups and organizations, like the Longest Walk, a protest march across the country from San Francisco to Washington, D.C. in 1978.

Even before the occupation of Wounded Knee, shortly after the Trail of Broken Treaties, AIM was classified as “extremist organization” by the FBI, and on January 8, 1973, several AIM leaders who participated in the Trail were added to the FBI’s list of “key extremists.” (International Leonard Peltier Defense Committee, 2019; McDonald, 2010)

AIM’s actions received significant media attention though most of it misrepresented their goals, portrayed them as overly aggressive and their protests as unwarranted. However, AIM’s radical actions did help to bring Indigenous concerns into the mass media, where Native Americans had largely been ignored.

Dennis Banks (Anishinaabe) a co-founder of AIM, stated in a 1996 phone interview with a reporter from the free newspaper MetroActive: “What we did in the 1960s and early 1970s was raise the consciousness of white America that this government has a responsibility to Indian people. That there are treaties; that textbooks in every school in America have a responsibility to

tell the truth. An awareness reached across America that if Native American people had to resort to arms at Wounded Knee, there must really be something wrong. And Americans realized that Native people are still here, that they have a moral standing, a legal standing. From that, our own people began to sense the pride” (Wilcox, 1996, n.p.).

AIM leaders were well aware of the key role of the media in their struggle for justice and national attention. Heppler (2009) states in his analysis of AIM’s interactions with mass media that “unlike the Black Panther Party that organized a Ministry of Information to handle interaction with the media, the American Indian Movement (AIM) never developed an official organ to voice their goals. Instead, drawing upon lessons learned by observing the Civil Rights Movement of the 1960s and other Indian activists, AIM used high-profile forms of dissent to draw attention. The Trail of Broken Treaties caravan and subsequent six-day occupation of the Bureau of Indian Affairs in November 1972 thrust AIM into national headlines.” (p. 7)

As the occupation of Wounded Knee was still underway, Marlon Brando declined the Best Actor award for his performance in *The Godfather* at the 45th Academy Awards and boycotted the ceremony, instead having Sacheen Littlefeather, an Apache actress and activist, represent him on stage to read a short statement. As his reasons for declining the most prestigious award in the film industry he cited the treatment and harmful portrayals of Native Americans in Hollywood, but also specifically referenced Wounded Knee and wanting to raise awareness of the ongoing protests (McDonald, 2010).

However, while the goal of national attention was certainly achieved, AIM had little control over its media representation and had little ability or outlets to counter media coverage they felt misrepresented them and their goals. As Heppler (2009) further states: “AIM leaders adopted the politics of confrontation to challenge institutions they were trying to change, and in so doing undermined their position of authority as the media focused on the spectacle rather than the message” (Heppler, 2009, p. 7).

Leading Indigenous scholar, lawyer, and activist Vine Deloria Jr. (Standing Rock Sioux) wrote about the media coverage of AIM in the 1970s that “the media misunderstood that the Indian was trying to preserve culture. Media, bored with anti-war protests and civil-rights marches, became fascinated with Indians. Rather than understanding the protests as a continuing



struggle of Indians, the media characterized them as a new development, thereby missing the entire meaning of the protest issues” (Deloria, 1970, p. 32).

Another achievement of AIM, though, especially at the time, was a raised self-esteem among Native activists and communities they represented. Russell Means (Oglala Lakota), another AIM co-founder, stated in a 2002 PBS television interview: “Before AIM, Indians were dispirited, defeated, and culturally dissolving. People were ashamed to be Indian. You didn't see the young people wearing braids or chokers or ribbon shirts in those days. Hell, I didn't wear 'em. People didn't Sun Dance, they didn't Sweat, they were losing their languages. Then there was that spark at Alcatraz, and we took off. Man, we took a ride across this country. We put Indians and Indian rights smack dab in the middle of the public consciousness for the first time since the so-called Indian wars” (Public Broadcasting Service, 2002).

This moment of renewed cultural pride is reflected in the onset of Indigenous radio shortly after AIM's occupation of Alcatraz in the 1970s. Indigenous radio stations sprung from a strong need paired with a renewed sense of pride, self-confidence, and desire for self-determination. Indigenous media also learned from the ongoing activist actions by AIM and others and the misrepresentation that was happening in the mass media. And from the beginning, tribal radio broadcast in Indigenous languages, which continues to be one of its central contributions to not just cultural preservation, but also self confidence and a stronger shared sense of identity. As Frances Svensson states: “To refer to language as ideology is an exaggeration. Yet, its emergence as a primary vehicle for political mobilization represents both a natural and widely recurring phenomenon, in the U.S. and elsewhere. What is politically important in the American Indian case is simply, fundamentally that Indian people have begun to identify their language as the core of their culture, and as a key to their never-ending hope of the struggle for cultural autonomy. Language is a symbolic banner of this new American revolution.” (Svensson, 1975, p. 34)

Susan Douglas notes that “radio, like other mass entertainments, was a site of class tensions and of the pull between cultural homogeneity and diversity. So language use over the air became controversial by the late 1920s.” (Douglas, 2004, p. 102) While this refers to the use of the English language, using slang on air, importance of pronunciation and the inherent meanings,

it is interesting to consider the importance of language on tribal radio in this light. A majority of DJs and other voices on air on tribal stations have the local accents, from speaking English as a second language, and a non-Indigenous voice can usually be easily identified. In addition, though, tribal radio stations assert tribal sovereignty and cultural vitality by broadcasting not only in English but in the local Indigenous language — not in foreign languages like other community radio stations, but in languages more American than English could ever be.

Tribal radio is in some ways comparable to early rural radio or “farm radio” in the U.S., which functioned as a community medium providing information about the weather, local politics, and current pricing for agricultural products to farmers in the area in a timely fashion (Smith, 2004). There was a high need for this information among farmers and residents of rural areas during the 1920s and 1930s, and the number of radios in U.S. homes doubled between 1929 and 1933 (Ware, 2009, p. 63). The popularity and influence of rural radio peaked in the 1930s and 1940s, about a decade after the first radio station began operating (Smith, 2004). In the 1920s, radio had an effect of uniting Americans in a perceived national community, even across diverse sub-groups (Douglas, 2004). Native Americans, on the other hand, were not granted U.S. citizenship by Congress until June 2, 1924, and were excluded not just from the imagined national community of Americans, but were, in fact, not claimed as members of the nation by the United States until 1924, and were not allowed to vote in every state until 1962.

An advantage of radio for farmers in particular was that “radios blended well with rural and social work routines” (Craig, 2009, p. 80). Radio “carried people back into the realms of pre-literacy, into orality, to a mode of communication reliant on storytelling, listening, and group memory” (Douglas, 2004, p. 29). Both of these aspects of life — rural lifestyles and a focus on oral culture and storytelling — remain central in the rural Indigenous experience, and radio is certainly valued in part for these characteristics.

Tribal radio stations today also receive significant audience interaction that is similar to early radio in the 1930s. Susan Douglas (2004) reports that “early radio also generated tens of thousands — sometimes hundreds of thousands — of fan letters a week. [...] Early studies of this fan mail suggested that it came primarily from those of a lower socioeconomic group who lived in rural areas and small towns” (p. 134). And similarly to immigrant radio for Germans and

Poles in the U.S., which functioned as community bulletin boards (Douglas, 2004), tribal stations also fulfill this role, focusing heavily on local events, community news, and additional local programs like KYUK's extremely popular Birthday Line, where residents can call in and send birthday greetings to friends and family.

Susan Douglas (2004) also cautions that “we cannot understand the changes in — and, I would suggest, the survival of — radio in the 1950s and beyond if we don't place radio in the context of changing race relations, the rising aspirations of African Americans in the postwar period, and the often powerful reactions against those aspirations” (p. 223) and that “stations specializing in Black programming also served as models for how to use radio to build a sense of community, something that would be essential to the success of white DJs on AM radio in the 1950s.” (p. 239). While African American radio stations or DJs were not mentioned in any of my interviews with Indigenous radio practitioners, the Indigenous activism of the 1970s that the first tribal radio stations are rooted in was directly informed by the civil rights movement and Black Panther Party, so certainly in indirect ways, Black radio stations and DJs helped pave the way for the Indigenous stations that began to broadcast a few decades later, whether station employees today are aware of this early influence or not.

Even though African American music, especially Jazz, was quickly becoming popular in the 1920s, especially in Chicago (which still has a very active Jazz scene today), African Americans themselves were still excluded from radio production (Vaillant, 2002). Local radio brought African American music to an audience who otherwise may not have been exposed to it, particularly white Americans. But in doing so while excluding African American people themselves — simply offering African American music as a product seemingly independent of its producer — radio created a shared experience among white Americans who produced and consumed these programs, listening to the ‘Other’ who is never given a voice or space in this perceived community. Vaillant (2002) calls this the “sound of whiteness” (p. 26).

Regarding FM radio overtaking AM in popularity, Douglas (2004) further notes, “while technical refinements, overcrowding in the AM band, and regulatory changes were obviously critical factors in the FM explosion, it was primarily the emergence of a profoundly anti-commercial, anti-corporate ethos in the 1960s that caused FM to flower” (p. 259), Indigenous

voices and concerns were still largely missing from radio as a whole. Douglas (2004) continues to say that “from the beginnings of its technical, business, and regulatory history, FM was an antiestablishment technology marginalized by vested corporate interests. It is not surprising, then, that FM’s renaissance would be pioneered by those very much outside of — even at odds with — the media culture those corporations had created” (p. 263). But while FM radio is now mostly commercialized, outside of the remaining freeform FM stations, tribal radio stations, which operate under noncommercial licenses, very much still embody the anti-corporate and anti-establishment ethos, but without identifying as freeform stations (and they do hold different licenses). Tribal radio stations see themselves as a service and an advocate for their local community, as the interviews in this chapter will show.

Radio fits in particularly well with the oral cultural traditions of Indigenous peoples (Smith & Brigham, 1992; Smith & Cornette, 1998). KUYI, for example, plans its programming around the ceremonial calendar of the Hopi Tribe, which is related to the farming calendar that traditionally dictated daily life — and still does for many Hopi farmers — and the spiritual meaning assigned to particular times of year, like a month or a season that is meant for certain behaviors and ceremonies, that other times are not considered appropriate for. One example is KUYI refraining from playing fast, loud music using drums during the time of *Kyaamuya* in December, which is considered a quiet time for reflection and storytelling. KUYI airs more story segments during this time, and focuses on calmer, slower music (Dukepoo, 2013).

Radio continues to be an important medium of the Indigenous resistance. One recent example is the makeshift radio station run out of a trailer at the water protector’s camp on the Standing Rock Sioux Reservation during the Dakota Access Pipeline Protest in 2016. The unlicensed station *Standing Rock Spirit Resistance Radio* operated a low-power FM signal on 87.9 FM that could be received throughout the camp. They soon streamed online, and their programming was also shared on many tribal and non-Indigenous community radio stations (Norrell, 2016; Upham, 2016).

How severely under-researched and under-appreciated tribal radio still is in radio and community media research is not just evident in the extremely small number of academic sources on the topic, but also in how little can be found in national archives. Part of the reason for this

may be that tribal radio stations maintain their own archives in-house and that gaining access is difficult for outside researchers. For example, in summer 2017, I visited the National Public Broadcasting Archives in College Park, Maryland several times during a 2-month stay there, and worked with several librarians and archivists to locate materials pertaining to tribal radio stations from 1970 onwards. However, we were only able to find a few references to stations broadcasting near tribal lands, and while there were numerous materials on community radio stations, there was nothing to be found on tribal radio stations. I was also told that no one before me had ever asked, nor had it occurred to the archivists there that tribal stations exist.

### **Global Indigenous Media**

In many other places around the world, Indigenous media developed with similar ties to social activism. For example, in New Zealand, the first radio station broadcasting primarily to a Māori audience, *Radio Pacific*, came on air in 1979 following Māori activism during the 1960s and 1970s, and the misrepresentation thereof in New Zealand mainstream media that Māori activists sought to counter with their own stories and accounts of current events (Browne, 1996). *Radio Pacific* included programming in te reo, the Māori language, which was prohibited in schools during the early 1900s until high Māori military enlistment during World War II led to the first regularly scheduled te reo radio program in 1942 (Browne, 1996).

In Canada, activist groups in different regions led efforts to gain greater representation of First Nations people and their concerns, as well as programming relevant to them, on Canadian mass media. For example, in the North, the Yukon Native Brotherhood (YNB) advocated for greater representation of local Indigenous peoples and their languages on mass media, also noting that “radio, TV, and newspapers must contain programs and articles that are put together by Indian people” (The Council for Yukon Indians, 1977, p. 29). Eventually, YNB’s advocacy work led to changes in federal media licensing and funding policies, as part of the newly created Native Communications Program, which made it easier for First Nations radio stations to be established and remain sustainable (Moore & Tlen, 2007; Roth, 2005).

In Australia, public, noncommercial radio licenses were being made available on the FM band for no cost but by application only in the mid-1970s, and no Aboriginal broadcasters

applied. In the 1980s, large, national, commercial stations made short periods of air time available to Aboriginal broadcasters, who had full control over their program within that time. It wasn't until 1985 that the first Indigenous radio station came on air in Australia: 8KIN, a non-commercial station which broadcast over 90 percent of its programming in one of seven Aboriginal languages, and 10 percent in English (Browne, 1990). In this case, the Australian government was quite supportive of Aboriginal involvement with radio broadcasting from the beginning.

During fieldwork in Central Australia with Aboriginal Australians in Yuendumu, Eric Michaels (1994) attempted to define what constitutes "Aboriginal content" on radio and television, and found great diversity among Aboriginal people and their definitions of what is appropriate, interesting, and considered "traditional" or not. What some stations shared about traditional practices, for example, was considered too sacred to be shared on such a public medium as radio by Aboriginal people in another region, who reacted with anger to the other Aboriginal communities' programming they saw as breaking an important cultural taboo. The cultural diversity among Indigenous people in a country as vast as Australia should not be surprising, and the same is true for the United States. This chapter and the following will highlight some of the differences in perception between Hopi and Yup'ik radio practitioners and audience members, even pertaining to the exact issue Michaels identifies here. He also points out that content cannot be independent of production systems. An example he gives is a Central Australian Aboriginal Media Association (CAAMA) radio station, with the slogan "Aboriginal radio for Aboriginal people" (p. 28), that created a physical space outside their station, similar to a campsite, so that community members would gather there, which ultimately led to greater involvement in the programming. Of course that something like this is possible requires full control of the physical space surrounding the station and the station itself, which in this case was ensured, or at least not prohibited, by the Australian government.

Other governments continue to work explicitly against Indigenous media, as is the case in Guatemala. There are over 240 community radio stations broadcasting in 23 Indigenous languages and Spanish (Portalewska & Camp, 2005). However, these stations do not have official permission to use the radio frequencies they operate on and are therefore regarded as

pirate radio stations by the government, which they see as unfairly competing with national commercial stations. However, it is difficult to see how small, non-commercial stations without any national advertisers or sponsors and that only cover a few square miles would be any sort of competition to Guatemala's national radio stations based in Guatemala City. In addition, the prices to officially buy bandwidth at the auction are simply far too high for these small non-commercial stations (Portalewska & Camp, 2005).

More recently, there have been new youth-led initiatives in South America focused on using community radio for Indigenous cultural and language revitalization. In November 2013, the first International Radio Conference for Indigenous Youth was held in Guatemala in order to build and strengthen collaboration among Indigenous youth from across South America interested in using community radio as a foundation for Indigenous youth advocacy work and language learning (Cherofsky, 2015).

This of course highlights the continued importance of Indigenous radio for activism, development, language revitalization, and community building in many parts of the world. Many recent studies have found radio to continue to be highly relevant, heavily used, and even preferred over other media in many Indigenous rural regions.

Another example is South Africa, where a 2007 study found that community stations have tremendous support and trust of their audiences and create important "opportunities for community members to hear their own voices" (Megwa, 2007, p. 349).

## **Conceptual Foundations**

### ***Community Media***

The United Nations Educational, Scientific, and Cultural Organization (UNESCO) defines community media, and specifically community radio stations, as media outlets that are "operated in the community, for the community, about the community, and by the community" (Fraser & Estrada, 2001, n.p.). UNESCO notes that in this definition, a community can be either territorial or geographical, or a "group of people with common interests, who are not necessarily living in one defined territory" (Fraser & Estrada, 2001, n.p.). UNESCO has one of the broadest possible definitions of both community and community radio. A key question in

attempts to define community media is the importance of locality and a geographically bound community as opposed to a more culturally or identity-bound community regardless of location.

Howley (2005) defines community media as “grassroots or locally oriented media access initiatives predicated on a profound sense of dissatisfaction with mainstream media form and content, dedicated to the principles of free expression and participatory democracy, and committed to enhancing community relations and promoting community solidarity” (Howley 2005, p. 2). While the importance of locality is not as evident in this definition, he later states that “place provides a basis for individual and collective identity formation” (Howley 2011, p. 9), and that while “dominant media tend to conceal the interconnected and mutually dependent character of social relations, community media work to reveal this fundamental aspect of human communities”(Howley 2011, p. 9).

### ***Alternative Media***

Some understand alternative media as non-mainstream and inherently counter-hegemonic due to their roots in social movements and ultimate goal of social change. In this view, alternative media represent the marginalized who do not see themselves represented in the mass media and use alternative media to share a perspective missing from other outlets and often directly countering information about them shared there (Downing, 2001). Downing (2001) defines alternative media as media “that express an alternative vision to hegemonic policies, priorities, and perspectives” (Downing, 2001, p. v). Chris Atton (2002) also highlights the importance of alternative media production originating from small-scale, counter-hegemonic groups and individuals. Building on Downing’s (2001) definition, Rodriguez (2011) argues that alternative media are a form of citizens’ media in which otherwise ordinary citizens — meaning individuals not traditionally trained in journalism and not necessarily working in media full-time or for compensation at all — are actively contributing to the mediascape, which in itself is an empowering act.

On the other hand, other scholars warn against understanding all ethnic or alternative media as counter-hegemonic, as some may merely reproduce hegemonic narratives in a different setting (Echevarría Vecino, Ferrández Ferrer, & Dallemagne, 2015).



Fuchs (2010) offers a definition of alternative media that doesn't necessitate alternative media to be necessarily opposed to the perspectives shared in mainstream media, just that it must be different in some way. According to his definition, alternative media have four distinct properties: 1) Citizens or community members are involved in the creation of content, 2) The content and functioning is different from mainstream media outlets, 3) The perspectives shared are also different from, or offer something new in addition to, the narratives of the State and major corporations, 4) due to their structure and functioning, alternative media have a different relationship with the State and the market than mainstream media outlets do (Fuchs, 2010).

Most tribal radio stations operate under a non-commercial license, are governed or advised by a board comprised of predominantly Indigenous members from the local community, and are funded like most community media, namely "through donations, underwriting, limited advertising, grant funding, in-kind contributions, and other noncommercial forms of support" (Howley, 2010, p. 3). Though most tribal stations struggle financially, what they value, like other community stations is that they "are insulated from the direct and indirect influence advertisers exert over media form and content" (Howley, 2010, p. 3). Tribal radio serves communities which continue to be underserved, underrepresented, and misrepresented by mainstream media, and thus will want to be free of mainstream influences on their content.

Tribal radio fits within Howley's definition of community media which posits that "community media are popular and strategic interventions into contemporary media culture committed to the democratization of media structures, forms, and practices. Popular in that these initiatives are responses to the felt need of local populations to create media systems that are relevant to their everyday lives; strategic in that these efforts are purposeful assertions of collective identity and local autonomy" (2005, p. 2). Given the general lack of Indigenous voices and concerns in mainstream media, tribal radio stations respond to a need for media outlets and content relevant to Indigenous populations. They also assert collective identity through the use of Indigenous languages, cultural norms, and a topical focus on community initiatives, Indigenous activism, and other content centering the rural Indigenous experience that is otherwise misrepresented or ignored entirely.

Tribal radio also fits many definitions of alternative media, such as “media that challenge the dominant capitalist forms of media production, media structures, content, distribution, and reception” (Fuchs, 2010, p. 178). However, scholars like Echevarría Vecino, Ferrández Ferrer, and Dallemagne (2015) caution that media produced by underrepresented groups should not automatically be considered alternative or counter-hegemonic simply for this reason, and that a closer look is necessary to assess how alternative community media truly are. What is important to remember when discussing tribal radio as a community medium is that Indigenous communities are distinct from any other population group, not just historically as the first peoples inhabiting and caring for the land, but also politically and legally, in that Indigenous peoples have collective rights and a legitimate claim to sovereignty and nationhood. No other population group has collective rights. Immigrants, refugees, and other ethnic minority groups all have particular individual rights, but not collective rights.

While tribal radio fits definitions of community and alternative media, several characteristics set it apart from all other community media, produced by any non-Indigenous community. Given the long history of forced relocation and dispossession and the ongoing exploitation and oppression that Indigenous peoples face in most parts of the world, having media outlets to share Indigenous perspectives, strengthen local cultures, and organize politically takes on particular importance (Keith, 1995). In many countries, including the United States, the languages of Indigenous groups were prohibited, and Indigenous children were forcibly taken from families to be educated in boarding schools where they suffered a multitude of abuses, including physical punishments for speaking their own languages. Radio quickly became a particularly effective tool for cultural and language revitalization among Indigenous communities. The small amount of research on the topic has almost entirely focused on this aspect.

As mentioned in the previous chapter, another major difference to any other community medium is that Indigenous media are regulated through a different process than other mainstream or community media in the US. The Office of Native Affairs and Policy (ONAP) at the Federal Communications Commission (FCC), established in 2010, is responsible for licensing tribal radio stations and consulting with federally recognized tribal nations on broadband and other

infrastructure development projects (FCC, 2018; McMahon, 2011). Media production and regulation are inextricably linked to Indigenous sovereignty and the collective rights of Indigenous peoples. With regard to broadband Internet infrastructure and access regulation, for example, Canadian media scholar Rob McMahon introduced the concept of “digital self-determination” meaning control over and active participation in broadband infrastructure deployment on tribal lands as an important way tribes can and should exercise their sovereignty in the 21st century (2011, p. 155).

## **Results**

Analysis of the data from the 12 individual in-depth interviews, which was conducted using Atlas.ti qualitative analysis software, resulted in 71 individual codes. The analysis software indicates how grounded each code is in the data based on frequency, and in addition I used my memos and field notes to gauge groundedness of the less frequently applied codes, so as to not rely as heavily on the quantitative measures suggested by the software in this qualitative project.

From the most prevalent of the 71 codes, the following eight overarching themes were induced, which will be explained in greater detail and with example quotes from the interviews in the remainder of this chapter:

- 1) Tribal radio as unique and different from other community radio stations
- 2) Tribal radio stations as part of the community
- 3) Language revitalization, cultural empowerment, and tribal station archives
- 4) The station as the main source of information
- 5) Focus on local health information and partnerships with health organizations
- 6) Culturally grounded health information
- 7) Radio helping to encourage and improve doctor-patient interactions
- 8) Strong trust in health information from tribal radio

The first four of these themes help characterize tribal radio as a medium and help us better understand the significance of the history of the medium in its functioning today, as well as its goals, challenges, and contributions as described by the general managers, DJs, reporters,

other employees and volunteers. The latter four themes address health in particular and shed light on how tribal radio aims to improve the overall health of their communities who are facing a myriad of health threats combined with infrastructural challenges.

As stated in Chapter 1, the research questions for this portion of the project were as follows:

***Practitioner-Centered Research Questions (Individual In-Depth Interviews):***

- In what ways do tribal radio practitioners understand their stations to be similar to or different from other community media in the U.S.? (RQ1)
- What role do tribal radio's historic roots in Indigenous activism play in its functioning today? (RQ2)
- How does tribal radio aim to improve the health of rural Indigenous communities? (RQ3)

These research questions are addressed by multiple of the themes and are strongly interconnected. How the research questions can be answered based on the results and these eight major themes that emerged from the interviews is addressed in the discussion following the in-depth description and analysis of the results.

### **1) Tribal radio as unique and different from other community radio stations**

While most of the analyses in this chapter and dissertation illustrate ways in which tribal radio is a unique medium worthy of much greater respect and attention, including from scholars, than it has received thus far, tribal radio practitioners directly pointed out some characteristics that they see as setting them apart from other community media, which will be discussed in this section.

Interview results show that tribal radio stations do not understand themselves as a distinct medium that offers information which cannot be found in any other media outlet, especially not in mainstream media. In addition, the counter-hegemonic identity of the medium, closely tied to Indigenous activism in its earliest days, remains important to tribal radio practitioners today.

This is even reflected in employees' motivations for beginning work at the station. For example, one reporter said about his decision to stay in a rural area and work at KYUK: "I

thought it was a fascinating opportunity to do something [...] just out of like mainstream America” (KYUK Interview 2, p. 1).

While the differences between tribal radio stations and mainstream, commercial media are quite obvious, there are also many, less obvious and more interesting, differences between tribal radio and other community radio stations. One interesting difference brought up by the KUYI General Manager is that comparatively, there are much fewer radio stations — or media outlets in general — that represent Indigenous communities compared to those that represent other minority populations in the U.S. Even within the realm of community media, Indigenous voices are marginalized and there are significantly fewer community radio stations on air that serve Indigenous groups than there are for other minority populations. In the words of the KUYI Manager: “With just about 50 Native stations on the air right now as compared to well over 1,000 [non-tribal] community radio stations — the largest distinct difference is the amount of people whose communities are not being represented” (KUYI Interview 1, p. 2). This statement is also a call for representation within the public sphere that adequately reflects the diversity of Indigenous groups and provides greater visibility.

Continuing on the difference between tribal radio and other types of community radio, the KUYI General Manager explained: “You'll find those strengths in community radio. So, I don't wish to paint community radio as being absent in that way of micro-responding to their own individual communities' needs. However, you'll find much more American-wide programming... — the programming still is a little bit macro, meaning, any listener can really tune in and get some benefit from it, whereas we're — we're hyperlocal. We're extremely micro casting in what we respond to. And so, I think that's the greatest difference between the two” (KUYI Interview 1, p. 4). This “hyperlocal” programming that can be found on tribal radio is relevant to radio as a source of health information in rural Indigenous communities and will be discussed in greater detail in that context in later sections of this chapter.

The KYUK General Manager echoed the notion that tribal radio differentiates itself from other community media in its hyperlocal focus on a unique population in a unique region, and in the essential role that it plays in the lives of the local population. While most community radio stations may be adding another perspective to an existing media environment, in many cases,

tribal radio stations are *the* resource for the community, with little to no alternatives in rural areas. Tribal stations are highly aware of their role and reflect this particular responsibility in their mission statements and programming. He expressed it this way: “Well, what makes KYUK unique? Going back to our history, I mean it's historically a very unique station. It's the first, you know, majority Native board public media organization as far as I've ever understood it. And I think part of the reason for that was the great need at the time, because there was nothing out here. There was literally not one thing. [...] I feel like KYUK is like singularly vital, because there's not a split market. Because this is who people have to rely on. So, everything we do — every service we provide, every program we create, I know has — if we do it well — has impact. Because the audience is there. So that's super rewarding, you know? It's like not a lot of people, but everyone you know is impacted by it. So that makes it awesome. And on top of that the uniqueness of the region, you know, it's just — it's tough to be more unique” (KYUK Interview 1, p. 4).

Due to this critical informational role that many tribal radio stations play, entertainment often becomes secondary and the stations are emergency communications providers for many of the rural communities they serve. As another KYUK employee pointed out: “We provide emergency communication. If there's flood warnings, if there's extreme weather conditions where people should stay indoors. If school is canceled. If there's other things, this radio station can get that information out to the community. If the school buses are canceled, people have to have their radio turned on. And in this modern world, people check online for stuff. But if something happens to the Internet, if there's a disruption in service with the Internet, we're still there. We're still on. If the power drops, people have battery-operated radios. We're still on the air. And our AM signal, of course has a reach where we can get out as far as the coast. So we cover all the villages around. You know, and that's why we're an emergency broadcasting system — station, as far as radio goes. And so, that's important. And because of that nature of how important we are in that sense, I mean, we do have our entertainment value...” (KYUK Interview 7, p. 5), expressing that while there certainly is high quality entertainment provided by the station, it becomes secondary to the key mission or at least to explaining the vital importance of the station to Yukon-Kuskokwim Delta residents.

Another unique aspect that became clear from the interviews is that it is very important for station leaders and employees that the station is operated in a way that is consistent with local Indigenous cultural values and norms. This is true from the way the station is run and funded to the way employees interact with each other.

The independence of the station is of utmost importance to the station leaders and the community and even much needed funds will not be accepted if station leadership suspects ulterior motives that might compromise the station's independence or mission. This also reflects tribal radio's historic roots in social activism, focused on bringing Indigenous concerns into the public consciousness, fighting for Indigenous rights and quality of life, and protecting the community from further colonial exploitation.

The KUYI General Manager shared an experience about declining funds for ethical and cultural reasons: "When it comes to things like fundraising, [...] that is at the forefront of my mind as well: Will this potential funder support our mission to educate our listener base, or are they funding us out of some other reason? And if it's the latter then we graciously, you know, decline their funds. So, you know, we try and be culturally appropriate as well when it comes to funding sources. And so, that is probably an equally important part of the job, is making certain the station stays alive fiscally without ethically selling ourselves short. So, you know, no money from alcohol companies or commercial tobacco companies. We don't run ads for casinos. If there's a concert at a casino owned venue, then we usually do that, but we don't talk about slot machines, or gambling, or anything else that would be taking away from someone else's experience, let alone, wallet. And yeah, that's part of every decision that gets made; does this benefit the Hopi people at large, not just, does this benefit the station? If someone perceives impropriety or a poor connection between us and a funder, you know, that can look bad on the entire community. And so we don't wish that to occur" (KUYI Interview 1, p. 8, 9).

This sense of advocacy for the community, of protecting the listeners from being taken advantage of in different ways, while also protecting their way of life and language, was very pronounced at Hopi. In Alaska, this focused more on combatting harmful stereotypes about Indigenous people that are abundant in mainstream media.

At Hopi, KUYI employees are very careful about what they put on air, what is designated for the archive with strictly regulated access, and what is perhaps not to be recorded at all. As certain information and elements of cultural practice, like songs, are considered sacred, their inherent power in the wrong hands is seen as a very dangerous thing that could harm the Hopi people in deeper ways than other forms of cultural appropriation can. Thus, this kind of information must be protected and kept away from the public. A KUYI reporter shared: “We shouldn’t be teaching about certain things on the radio waves, ‘cause some things are sacred and when we talk about it, that sacredness is going away. Or somebody — if the outside world learns it then they’re gonna do something wrong with it. They might go about it wrong.” (KUYI Interview 3, p. 15)

However, this is not the station acting as a gatekeeper as much as the station respecting the listeners’ wishes of what is to remain accessible to Hopi tribal members only. There is a very high sense of accountability to the audience and the culture as a whole. Tribal radio is also uniquely positioned to advocate for communities like these that mostly find themselves either misrepresented or entirely absent in mainstream media. At KYUK, an interviewee put it this way: “On the individual level, people can feel like they don’t have a voice. So, I mean obviously our biggest commitment is to those with the least voice” (KYUK Interview 2, p. 15) and: “I think on some level our job is to advocate for the community. [...] Like, there’s advocacy beyond just sharing information. [...] It’s absolutely, you know, more than just journalism” (KYUK Interview 2, p. 17).

Here, protecting the community and if necessary stepping into an activist role to represent their interests, is seen as more important than upholding journalistic standards of objectivity. Tribal radio practitioners in all roles see themselves and their work as including a lot more than gathering and sharing information. For many, working for their tribal station as a community member is one way they can protect their community from those who have historically exploited and taken advantage of Indigenous peoples, and a system that continues to do so. For many, this goes back to how they were raised, and the context in which the college education that many station employees have, was placed by their families, which frames their thinking about work to the present day. One KUYI reporter shared his perspective with me: “My growing up was ‘learn



the white man's way, learn how they do everything, come back and teach us so we [...] don't get taken advantage of, we don't get misled or anything like that. Learn their ways, come back, help us, work for us and then protect us in that way” (KUYI Interview 4, p. 11).

As I have written about before (Wilbricht, 2019), the idea of protecting the community is realized in two ways at tribal radio stations: by serving the local community with information vital to their safety and wellbeing, and by selectively sharing information about the community to the outside world, helping to protect them from further misrepresentation. Many station employees felt that even when Indigenous issues were covered on other media outlets, the stories presented there often lacked depth or were incomplete. Tribal radio is present on the ground, in the communities, and can provide a much more complete, detailed picture. They enjoy the freedom they have at an independent, non-commercial station, to produce informational segments that are quite different from what mainstream media are able to do. The KYUK General Manager felt that: “A lot of times I feel like we're the underdog out here. I used to love doing statewide stories about us. Who we are, what our struggles are, how we're dealing with them. Giving them [non-Yup'ik people] a more complete picture than the other larger media organizations that aren't out here, but report on us sometimes — a larger picture than what they are providing” (KYUK Interview 1, p. 10).

Tribal radio plays a key role as an amplifier of community voices and advocate for their concerns. Given the stark inequalities affecting Indigenous populations to this day, much is at stake for these communities, and media representation can have broader impacts on their visibility.

Harmful stereotypes about Indigenous people continue to be prevalent in mainstream media. As Indigenous film scholar Beverly Singer stated: “The historical misrepresentation of ‘Indians’ has been outside of tribal control and perpetuated by American cultural, political, academic, and social institutions that promote, produce, and communicate information to the public. Indians have been misrepresented in art, history, science, literature, popular films, and by the press in the news, on radio, and on television. The earliest stereotypes associating Indians with being savage, naked, and heathen were established with the foundation of America’ (2001, p. 1).

Similar to Singer, KYUK news reporter and tribal radio pioneer John Active made a connection between the need to educate white missionaries about Alaska Native cultures when they first arrived in Alaska, and the educational mission of the radio station today: “The funny thing is, when the missionaries first came to our area, they were telling us all about ‘Love one another, care for one another’ and stuff like that, but that’s what we were doing long before they came. So we tell them ‘Oh we know how to do that already.’ And we tell them about the Yup’ik way of doing things. We want them to know. [...] Different people that work in different areas, from the hospital,... we want them to hear our language and understand how we think. You know? Because our way of thinking is different from the white man’s way” (KYUK Interview 3, p. 6).

Here, educating cultural outsiders is about more than combatting stereotypes among individuals who perhaps have never met a Yup’ik or other Indigenous person, such as people from outside the region — sometimes from outside the United States — listening to the station online out of curiosity or a genuine interest in the region and culture. What John Active is referring to here is the importance of sharing Yup’ik values and worldviews with the non-Indigenous people in the region, working at the local school or hospital, so that they will have a basic understanding of cultural norms that helps them serve Yup’ik people better. In this way, the stations also act as an instrument of intercultural understanding, aiming to support the sustainability of a local community which is becoming increasingly diverse.

The General Manager of KUYI also spoke to the need to oppose stereotypes with accurate information, with the purpose of protecting the community from further exploitation and harmful effects of false, negative mainstream media portrayals. He saw this as integral to the role of tribal radio: “The role of any tribal station is to think about being that vanguard of protecting the things about a culture that have already been exploited and to not propagate that further. At the same time being aware of stereotypes that are unfolding in the mainstream world. [...] This [radio station] is an organ of communication, of strength, of resilience, and perseverance” (KUYI Interview 1, p 11, 12).

The radio station is framed here not only as a source of information, but as a site of resistance and resilience, opposing stereotypes, amplifying Indigenous voices, and increasing visibility of Indigenous issues in mainstream society.

Culturally grounded operations are also a part of this identity of tribal stations. This means that everything is done with integrity and in accordance with the Indigenous cultural norms, rather than mainstream society's norms. This reaffirms and re-centers the Indigenous perspective and approach to journalism. One example is the way a KUYI reporter described conducting interviews and recording health PSAs with tribal elders. Despite being short-staffed and often under time pressure, culturally appropriate ways to engage with elders take precedence in how the work is being done: "Even the PSAs that you hear, like the elderly PSAs. Those, I go to the elderly centers. Interviewer: Oh. You record them there? Respondent: Yeah. I go to the elderly center. Especially that one. I go there to record them - at their centers. They're, like, the cultural PSAs and stuff like that. I usually go to the centers and record them. Have lunch with them. That's pretty unique, too. I spend the day with them. And talk to every one of them. They got a bunch of stuff to say. So, it's just having a nice day with them — A whole day" (KUYI Interview 2, p. 7).

This quote illustrates just how much more than just the actual task of recording goes into the production work of this PSA, where allowing adequate time — in this case, spending the whole day — and listening to the stories the elders share are expected and essential in order to maintain respect and trust and work in culturally appropriate ways. Functioning like other radio stations outside this specific cultural context is not an option for KUYI, which is so central to the Hopi community and so deeply connected to and intertwined with Hopi values. The same is true for KYUK in the context of Yup'ik cultural norms and values. In fact, several KYUK employees spoke about how Yup'ik culture is reflected within the station itself and the ways in which employees interact and what they value about their work in this particular location and cultural context. Thus, for Indigenous stations, culture is not merely something they represent and talk about on air, they embody local cultural norms in their everyday interactions at work. And this remains true even though there are Indigenous and non-Indigenous individuals working together

in most tribal radio stations. What unites them is that the Indigenous perspective, Indigenous values, Indigenous ways of interacting are foregrounded are made the norm, on- and off-air.

John Active, who was not only a long-time KYUK employee but a well-respected tribal elder with a mission to share and teach about Yup'ik culture explained to me that: “Here at the station — I love to cook, so when I'm at home, before I come to work, I cook something. A pot of stew or something. Moose meat, maybe fish. And then I bring it and I share it with the — with my coworkers here, who some of them are Caucasian. But I don't tell them that I'm teaching them anything. But I'm teaching them to share” (KYUK Interview 3, p. 6).

This nicely illustrates how KYUK functions as a space of sharing information — of teaching and learning — not just for the listeners but among employees as well. This speaks to tremendous integrity of radio practitioners at Indigenous stations and begins to explain the immense trust audience members have in the information shared on tribal radio.

A non-Indigenous employee who grew up locally spoke specifically about enjoying the culture of the station, which mirrors the culture and population of the Yukon-Kuskokwim Delta: “I love the staff here. I think it's a really diverse group of people. Most of them have a really deep understanding of the region. And I think just like the attitudes in the workplace and the culture in the workplace just sort of reflect the region and I think that's what I like about it. It really is like a nice reflection of the whole community in one little station” (KYUK Interview 4, p. 9).

The KYUK General Manager shared these views as a non-Indigenous person and long-time resident of the region who is now very well integrated into the local Yup'ik community. He added that cultural values are part of what makes working and living in this region unique and enjoyable: “I mean, the values of sharing — the measures of success are so much different than Western culture tends to be. And I like these measures of success way better. Like what, what makes for a good person. What makes someone who could be proud of themselves, is, you know, a difference. There's some overlap, but there's a lot of difference, too. So, yeah, I prefer living here. So, just living here is part of it” (KYUK Interview 1, p. 15, 16).

Other aspects interviewees discussed regarding tribal radio as different from mainstream and often also other community media are the strong emphasis on bilingual programming. For

example, KYUK is the only truly bilingual radio station in the State of Alaska. In addition, the extraordinarily challenging topography and lacking infrastructure that characterizes many rural Indigenous communities, and certainly rural Alaska and Arizona — in different ways, of course. This unique infrastructural context creates a very strong reliance on the local tribal radio station by community members for information, including news, health and safety information, emergency announcements, and more. Where many other community radio stations offer entertainment and information in addition to many other available media outlets, many tribal stations are the central information source, not an addition or afterthought in the mediascape.

There is tremendous respect for Hopi and Yup'ik culture, respectively, among all employees, and not only in terms of programming, but in terms of everyday interactions at work, Indigenous norms and success measures are foregrounded and purposefully made dominant.

## **2) Tribal radio stations as part of the community**

Tribal radio stations are deeply connected with their communities, and often continue the advocacy work central to the inception of the medium. There is a strong sense of belonging and responsibility to the community that is unusual of media organizations in other contexts.

When asked about the station leadership structure at KUYI, the General Manager asserted very clearly that “this station is owned by the community. Nobody else. [...] They're the ones running the station, not us” (KUYI Interview 1, p. 3).

This sentiment was echoed by one of the reporters at KYUK who shared his experience working for KYUK after working for a non-Indigenous, public radio station in another state:

“And I also think in terms of radio, like I was telling you the other night, we have more accountability than any other place that I've ever worked. I worked [for a public radio station in another state] and it was like a big shield. This accountability just didn't exist there. You could say whatever you wanted and nobody could touch you. You were in this like ivory tower. And that's the thing with national news, I feel like it — most times it's not really connected to a people or a person. But here, you know, if I say somebody's name wrong, which I did earlier today, I get a call right away. Like, ‘That is not how you say my name Sir. Correct it.’ You look stupid and, you know, that happens every day. And that's both good and bad. I mean there's a

strong sense that we are the property of the community. Because we are. And when we do something that displeases the community they make that known to us. And I feel that it's within their right to, you know, have ownership over their public radio station” (KYUK Interview 2, p. 8).

Another reporter at KYUK felt the same way, saying that “people have, in the listening audience, a tremendous ownership of the station, and a connection with it. And they hold us very accountable. So, working here as a news reporter, if we do something that people don't like or they don't approve of then they'll let us know. They're very vocal about calling us and saying, ‘You mispronounced this person's name’ or ‘Hey, I have a news tip for you’ or ‘Hey, I didn't like how you did this.’ And they'll call or email. And so, people have this sense that they will be heard, and that they can say things, and that they have an ownership” (KYUK Interview 5, p. 1, 2).

A KYUK reporter alluded to a connection between culturally appropriate programming and ways to communicate on the radio that might make listeners more comfortable sharing personal viewpoints, including on air: "There's entertainment for sure. And kinda that, like, local humor is sometimes woven throughout the programming which is nice. It's a place to express opinions. We have a lot of community members expressing opinions on the radio station, which I think is good when it's managed well [laughter]” (KYUK Interview 4, p. 13).

The extraordinary sense of belonging to the community — by both station employees and community members — leads to open criticism that may at times be uncomfortable to those who work at the station, especially in a small, rural community with a lot of direct contact to listeners in other contexts, but is overall viewed as an asset and a sign that the community truly cares about the radio station's programming.

In terms of the programming, reporters and producers consider the community as a whole, but also recognize the local diversity and aim to satisfy a variety of informational needs: “Our role with public broadcasting is that if there's one person in our audience that wants to have this type of programming, then we should think about them too. And I meant it's kind of hard to accomplish. [laughter] But, you know, in some communities it is the alternative radio, you know,

where there's programming that can't be found in the mainstream that we should be offering here” (KYUK Interview 7, p. 15).

There is a sense that programming should be different from the mainstream, specific to the local community, and considering even minorities that exist within it. However, unlike other community radio stations and media outlets, in the Indigenous context, the community radio station also occupies the space of a culturally meaningful gathering space which mirrors the tribal history, resilience, and continuity. This is only possible due to the strong trust placed in the radio station due to employees who are locally known, the history of tribal radio stations as community advocates, and the adherence to cultural norms and values from station funding and employee interactions to the programming itself. For example, John Active said the station occupies a space in Yup'ik society that mirrors that of a particular traditional teaching and learning space, called a *qasgiq*:

“You know, the Natives out here, Yup'ik speakers, they consider - have the idea [...] that KYUK is like a *qasgiq*. *Qasgiq* was a men's house in the early days, where young boys were taken to live with their fathers and grandfathers in the men's house. [...] They lived separately in the old days. And so, a lot of our listeners consider, and especially I consider KYUK as their *qasgiq*, because that's where we teach. In the early days like how to make hunting tools, canoes, sleighs, stuff we used every day to make a living in the early days. But now it's a *qasgiq* for passing on information and knowledge, so people will know what to do in case of an emergency or something. But it's - they consider it a *qasgiq*, a place where information is given out for everyone to hear and learn from” (KYUK Interview 3, p. 3, 4).

The comparison with a traditional cultural space of great importance in Yup'ik society — and by someone who is a well-respected, knowledgeable tribal elder — highlights the cultural relevance and integrity of the radio station, as well as the deep-rooted respect for the station as a space of learning and teaching that exists both among employees and community members. He went on to explain that passing on the knowledge of the elders is important to the station as a preservation task, so that traditions won't be forgotten about, but rather documented, recorded, and passed on to the younger generations over the radio: "Like I said, passing on wisdom to the

listeners, so they won't forget our Yup'ik ways. And that's what this guy is doing right now, too. [points to one of the studios, where a call-in show is taking place] People call in and say, 'Well, long before you were born, when I was a kid, we used, to — this and that' and they talk about the old ways of doing things. Their knowledge" (KYUK Interview 3, p. 4).

At KUYI, the notion of the station as a community gathering and learning space was supported in more general terms: "KUYI is a good central station for information and topics that people need. And KUYI is here for the people" (KUYI Interview 2, p. 26).

Community members are in turn very involved with their local station, calling and visiting frequently. During my research stay, local residents would walk or drive to the stations to request songs, share local news, visit with station employees and volunteers, buy merchandise, make a donation, or to volunteer their own time hosting a show or helping out with other tasks. This high involvement of community members strengthened the sense of belonging and importance of the work, knowing how much the community cares about their station, and how many people listen to the radio for much of their day. An employee at KUYI said: "I know there is some avid listeners out there that just call in, especially when you do something wrong or they want to hear something. Or you've been playing something too much, like a certain genre.' Interviewer: 'Oh okay. So you know they listen [to KUYI] a lot because they know this when they call in?' Respondent: 'Yeah!'" (KUYI Interview 3, p. 5).

The support from community members in form of donations or volunteering their time is essential to keeping many tribal stations like KUYI and KYUK on air, and also contributes to the sense of community ownership and collaboration. Both stations are very open and welcoming to any form of community member contribution and collaboration, particularly volunteering at the station. Employees and existing volunteers invest time and energy to train incoming volunteers and show great flexibility in terms of the programs, topics, and music new volunteers want to contribute. There is a particular emphasis on bringing in youth and supporting any interest they have in media and radio production, both for cultural reasons and community capacity building goals that are reflected in the stations' missions.

An employee at KUYI said: "I like supporting the station. The station's pretty, like I said, our station's unique. And what differentiates it from a lot of other stations is the community



support that we have for it. Our volunteers” (KUYI Interview 3, p. 3). Volunteers themselves felt similarly, and understood their volunteering not just as a hobby or personal interest, but as a service to the wider community: “So that's why I enjoy volunteering, because those are the things that I think, you know, is a benefit to the community. And so it's a way of I guess for me it's just giving back” (KUYI Interview 4, p. 11).

Volunteers at both stations were almost exclusively Indigenous and represented a wide age range, from teens who became interested after station employees came to their school for a radio class, or after completing an internship at the station (at present, only KYUK has an internship program, not KUYI, however, KUYI offers free production classes to local students), to elders over 70 years old, who often contributed their knowledge of the language, stories, and local knowledge. Some volunteers host their own shows, ranging from particular genres, to talk shows (mostly hosted by youth) and call-in shows (mostly hosted by elders).

### **3) Language revitalization, cultural empowerment, and tribal station archives**

#### ***Cultural empowerment***

Indigenous radio stations make a strong and purposeful contribution to what can be considered cultural empowerment, including Indigenous language revitalization, local capacity building, instilling a sense of shared identity and cultural pride, and curating an extensive audio archive of the communities' youth, elders, traditional teachings, songs, local musicians, and events.

Station leaders and employees emphasized the importance that the cultural empowerment aspect of their mission has for them, and that they take pride in doing their part to strengthen the local Indigenous culture and language. This is in line with the earliest tribal radio station missions and objectives, being not just an entertainer or informant, but also an advocate.

A producer at KUYI restated the mission in their own words succinctly as "just mainly connecting them [KUYI listeners] to the outside world. And, and reminding them where they come from" (KUYI Interview 2, p. 13).

There is a purposeful avoidance of deficit framing, of focusing on the negative and the problems, though they are certainly directly addressed, but this is done with the same spirit of

resistance, strength, and resilience that characterized the Indigenous activist movements of the time of the first tribal stations. The focus is communicating hope and sovereignty, even when discussing difficult topics.

The KUYI General Manager clearly describes his view of the role of the station given the challenges the Hopi people are experiencing, but also given their history and strength: "There is not a culture of absolute removal in the Hopi community, but there is a long lineage of resisting extirpation, whether it be from surrounding tribes, let alone the US government. And part of the history of that has resulted in a very strong core and retention of that core, but, institutionally, having either the options to communicate their strengths removed, if ever presented in the first place. So, whether it's dealing with the Indian Health Service, and the lack of proper resources available to people to stay alive, to the Bureau of Indian Education [...]. Every day in this community is at risk of extirpation through the transition of the Indian wars going away from bullets and physical genocide to cultural and language, and health genocide through inactivity, which is even, I think, more difficult to fight, and more deep-seated. [...] This [radio station] is an organ of communication of strength and resilience and perseverance. [...] If you can't hear your strengths mirrored back to you, if you can't see your resilience mirrored back to you, then it becomes a little more difficult to keep that fire going to resist against appropriation, or to resist against the dilution of a culture, let alone physical threats to farming and, you know, agrarian livelihoods, and a lifestyle that is more in harmony with this world. So, the station plays a large role in that remembrance that these things have been here for a long time, they're under threat, but the solution is not hidden... it's here, it exists" (KUYI Interview 1, p. 10, 11).

A colleague later referred to culture as a way to re-energize oneself, as a source of inner strength and motivation that the radio station can help provide through their deeply culturally grounded programming and operations. In their view, this was true regardless of the topic: "And so we kind of cover a broad spectrum of just talking about every little thing, you know, and — but using culture as a way of focus on how we can always re-energize ourselves. [...] You know, and people have called and they've told us — they don't really say it like that, but it's really therapy for them, it's a good way of revitalizing them. From a negative to a positive" (KUYI Interview 4, p. 14, 15). Culture is always the lens through which topics are approached, and very

consciously and purposefully so. In Hopi culture, as in many Indigenous cultures, where health is understood much more holistically than in most Western contexts, this positive framing and focusing on strengths can in itself be seen as illness prevention and as part of the station's health programming.

When probed about "cultural programming," a KYUK reporter was quick to clarify that the programs at their station are not designed to be "cultural," but that rather, that in this community and context, no topic can be addressed as existing outside of the cultural framework, even if the programming is not purposefully designed to focus on culture: "I mean [laughter] it's funny to think about like something as sort of obvious as like, you know, cultural programs, because everything is cultural, you know? Like, every story that we do is ingrained in the culture, you know? I mean the story that I'm doing today is about fish, it's about subsistence, which you can just tie that right back to anything you want. It's about the relationship between tribes and the federal government. It's the relationship between the federal government and tribal sovereignty. So, I mean it's impossible to do a story that isn't culturally relevant here" (KYUK Interview 2, p. 5).

Both stations have high audience involvement and participation, and are seen as a medium that brings the community together — partly out of necessity, because other physical or mediated gathering spaces are few and hard to access, and partly because radio allows for both information sharing and conversation between remote villages and among otherwise increasingly isolated elderly residents. This is even true for families connecting with each other via the local tribal radio station from across different local villages within the same larger community and region (in this case Alaska, but a similar example was given at KUYI in Arizona): "I think it's a good way to connect with people. You know, 'cause a lot of times, people can't travel. You know, because they don't make a lot of money. And the way they connect with other people, their family in another village is by listening to the radio. 'Cause it's like it's bringing communities together" (KYUK Interview 6, p. 5).

At the same time, the stations aim to not just provide a gathering space that in itself can strengthen cultural identity and community connection, but also programmatically highlight local resources, initiatives, and professionals, which also supports cultural empowerment and a sense

of independence. Without being prompted to speak about health topics in this part of the interview, almost all respondents offered examples related to healthcare, prevention, and local health-related initiatives.

A reporter at KYUK shared: "The stories that I think of first are, like, stories that kind of celebrate YKHC [Yukon-Kuskokwim Health Corporation, principal healthcare organization in the region, whose Board of Directors is elected by tribal leaders] and that sort of Native self-determination. Like, last week there was a story about the health aid program, which is a huge success.[...] It's like, these are your health aids, we celebrate them, we respect them, we honor them. And that says, you know, that tells you immediately there is someone in your community who cares. They've been through this training if you need them. And then also you could do this training too. You know. And so, I think that — I feel like there's a lot of those types of stories that kind of celebrate the different employees and trainings" (KYUK Interview 4, p. 25).

### ***Capacity building and educational mission***

Along with instilling a sense of empowerment and sovereignty, tribal radio stations aim to build capacity within their communities. Both stations focus strongly on youth, involving children of all ages in different types of programming, classes, and internships. Involving both youth and elders as much as possible is also highly consistent with both Hopi and Yup'ik cultures. And of course, in an environment with not many resources and opportunities, the stations support the local schools and create jobs and internships that are otherwise very hard to come by on many reservations and other rural Indigenous communities.

Station employees felt that this dimension of empowering and supporting their communities was an important part of their work, and often told related stories, or emphasized their work with youth, without being specifically asked about it.

For example, a KYUK employee this was what came to mind first, when asked about what they enjoy the most about working for KYUK: "For me, what I like about this place here is that it offers opportunities for us. I was asked about this just yesterday by some students that are now going to become interns here" (KYUK Interview 7, p. 9).

KUYI has an established program with the local high school, but also work more informally with younger youth. One of the reporters explained: "We do have a program with the school [...]. That's where they come to the station. They record their own material. They get live on air. They talk about topics that are going on in the high school, like sports or any clubs or things like that that they do. So they come here and talk about that. That's advanced radio. And then we have a beginner's radio where we have to go to the school and talk to the students and just prepare them how to do interviews and how to work a board like this. It's actually a smaller board that we use over there" (KUYI Interview 2, p. 15).

KYUK also has a strong aspiration to involve youth of different ages to such a degree that a significant amount of programming would be actually run by them: "I think the fact that so much of our programming will eventually be produced by youth is gonna be really unique. And we're hoping that — the vision for that is that those youth will eventually — not all of them obviously — like maybe one in a dozen or one in 20 will come back and work here at some point. And that way we're actually like training people to — we're giving them the tools to be the storytellers in their own region" (KYUK Interview 4, p. 5).

Particularly the notion of empowering local youth to become the storytellers of the stories for and about their own communities resonates with tribal sovereignty and the motivations behind the first tribal radio stations. Both stations are actively involved in training the next generation, despite very limited funding and understaffing.

### ***Language revitalization***

In the same vein, language revitalization is critical. As other studies mentioned previously in this chapter have pointed out, language is absolutely central to most Indigenous radio stations around the world. In the U.S. context, stations are particularly concerned with preserving — through active use and archiving — and re-teaching Indigenous languages. Both KUYI and KYUK are bilingual, and have programs entirely in the respective Indigenous language (often call-in shows) that are not necessarily translated into English, though some parts may be repeated in English. KYUK is also unique in that it is not only the first non-commercial tribal station on air in the States and has broadcast in the Yup'ik language from the beginning, but continues to be

the only station offering daily radio news in an Indigenous language: "So, what, you know, what continues to make us unique is our dual language emphasis. I believe still up to this day we're the only station doing daily indigenous language newscasts that I've heard of. Hopefully not. I mean I would hope there might be others by now" (KYUK Interview 1, p. 5).

Similarly to KYUK, the emphasis on offering Hopilavayi programming on KUYI was there since the beginning and remains strong. One long-term employee thought the the focus on language revitalization did in fact help KUYI in terms of the initial support that allowed for its establishment: "One of the most important things I think with KUYI that it was able to get off the ground and that is getting supported is because of the language. That the language was a big part of the reason why KUYI was supported through, to be established. And so knowing that, I speak that language. That was also the other big part about hey I can do this, you know? I'm not perfect and everything, but so what, you know? Like, radio is part of entertainment so if I can just entertain and, you know, just make it fun, make it more comical instead of all serious and stuff, I think that can work for me, so ... So that's why I chose this program because that's all Native music. And then I took that opportunity to just do it in Hopi because that's what people were asking me to do, too. They say 'You speak Hopi. Just do it in Hopi.' You know? And then people started calling in and say 'Okay, I'm glad you're doing it because I'm trying to learn Hopi and I listen to you and I'm kind of learning with this'. So it's educational too" (KUYI Interview 4, p. 13).

So for both stations, strengthening the local Indigenous language has been essential from the first day on, and it is important to station employees, especially those individuals directly involved with Indigenous language programs, that these are not translations from English — that as much as possible, the Indigenous language here does not come second to English and is not an added bonus for listeners, but one of the core aspects of the station that they could not imagine their station without, as this quote from a KYUK reporter interview illustrates:

"I mean I think we put a big emphasis on being bilingual, which you've probably already heard from many people — that, you know, we're the only truly bilingual station in the state and I mean we're trying to — everything we do, we have to think about, you know, both languages and it's not an afterthought. Like we don't think, 'Oh, we'll make this news and then translate it

into Yup'ik.' Sometimes we think, 'Oh, these people won't say the same things in English that they will in Yup'ik.'" Like, I talked to a group of fishermen a couple of weeks ago, and a lot of them are old men really, and they don't speak English that well. Like, you have to speak to them in Yup'ik. And if you have that tape, you know, it's better to put that upfront, and the other thing is, we're dealing with a largely bilingual audience. So, you know, we can — those things are like interchangeable for most of them, and, you know, that is predominantly our audience, a bilingual people. You know, the English speakers are in the minority, the people that only speak English. So, I'd say that's the biggest difference between us and many other radio stations. That is our target group" (KYUK Interview 2, p. 3, 4).

According to John Active, who hosted the Yup'ik language call-in show, particularly elderly residents are eager to call in and participate in these types of shows, especially in the Yup'ik language. So by the station providing this space, in form of a Yup'ik language call-in show, a need or strong interest in the population was met to speak their language, engage with others that way, and also pass on traditional knowledge to the younger generations. Another factor playing into the high rated of participation during these radio shows might be the relative isolation of the elderly that were mentioned to me by several community members. Call-in shows also provide a space for them to socialize in a way, even with others in other villages, that they otherwise couldn't reach, as many people lack transportation.

He further reported that: "We encourage elders to especially call in to pass on their Yup'ik knowledge to the younger listeners. Of course, they're in school, but, you know it reminds parents, when they hear our show, when their children come home from school to talk to them and, you know, pass on their knowledge. So that's one good thing I like about the Yup'ik call-in shows, because people get to call-in and share their opinions about different topics that we're talking about. We get a lot of calls during the Yup'ik language call-in shows. And they're calling in from Bethel. They're calling — We have 56 villages around Bethel and KYUK is their source of information and education, and so when we have certain call-in shows, different topics, people from all over the different villages call in and share their opinions. It's very important, I think, for them. And it's all kinds of different topics" (KYUK Interview 3, p. 3).

The reporters and show hosts themselves also deeply enjoyed using their Indigenous language on air, and were motivated in their work by the radio station's mission, which they were very much in tune with.

About his Yup'ik news program, John Active shared: "I love informing and educating my listeners in the Yup'ik language. That's most important to me. And using all Yup'ik words that haven't been used for a long time, so people will hear it and remember, 'Oh, yeah, that's the way we used to say that.' Informing and educating, mostly. [...] I really enjoy doing Yup'ik news. I just love it" (KYUK Interview 3, p. 15).

Many reporters hosting the Indigenous language programs at both stations shared how they grew up speaking Yup'ik or Hopilavayi, and how strengthening the language through their work at the station is important to them because of their commitment to their communities and because of their own personal stories, honoring the family members who raised them.

Using the language as much as possible in programming is only a direct contribution to language revitalization, that most prior tribal radio studies have focused on, but also empowering to those community members who might have trouble understanding information in English, or simply prefer the Indigenous language, which is still the first language of many elderly people in the region.

At KYUK, it was shared with me that: "it's pretty unique in that, you know, a lot of information that's being passed out [on KYUK] is in the Native language — the Native language around here. And a lot of times, there's elders or older people who — They might speak a little English but, you know, they understand more in Yup'ik. And to get information out to the people, out here to where they could understand it. You know, they're better informed of what's going on in the community and what will happen, you know" (KYUK Interview 6, p. 5).

At KUYI, there is also a conscious effort to encourage those learning Hopilavayi, which can be intimidating to many who feel that they might be judged if they don't speak the language well or are just beginning to learn, and thus might feel discouraged or lack a space to practice without judgment. One of the hosts of a Hopilavayi radio show talked about this aspect of the Indigenous language programming, speaking about purposeful dynamics between the two co-hosts of the program, aimed at encouraging and motivating Hopilavayi learners: "And we do it



all in Hopi. And the nice thing about [the co-host] is because he's trying to learn Hopi. And so we're — and I tease him about his Hopi and that's part of the humor which for our listeners to tell them, 'Hey, it's okay to make mistakes. Because this guy here is making mistakes.' You know. I don't really say it that way, but — But it's telling them it's okay" (KUYI Interview 4, p. 16, 17).

In addition, having Indigenous language radio programs was described as strengthening the self-confidence and cultural pride in both the station employees and the listeners. Not just actively speaking, but even just hearing their language on the radio is empowering to communities, who often were forbidden to speak their languages for centuries. Hearing them now on the radio is a testament to their resilience, strength, and vitality. At KYUK, one interviewee said this is true even for those who presently do not speak the language: "I think the fact that so much of it is produced in Yup'ik is a source of pride and, I mean that even me being a non-speaker, it's a source of pride for me just that, you know, that we're — that the language is still — it's part of life. It's, it's not just like [laughter] something like cute that we do, it's actually, this is how people communicate. And we're able to provide that service [at KYUK]. I think a lot of people out here take pride in that" (KYUK Interview 4, p. 18).

And finally, Indigenous language programming on the radio is tied to cultural empowerment in that it supports self-confidence and a deeper understanding, of health issues, for example, to those who speak English as a second language and prefer receiving information in their Native language, for which the radio station may be the only source: "I think we're playing a role, and helping people be better advocates for their own, their own care, because we're able to do things in both languages" (KUYI Interview 1, p. 18).

### *Archives*

In addition to all that has been discussed so far as aspects that make tribal radio stations unique and contribute to cultural empowerment, another aspect must be addressed are their audio (and sometimes, like in the case of KYUK, video) archives. Many tribal stations create, curate, and host extensive archives of not only their own radio programs over the years, but also recordings they actively collected in the community of stories, traditional teachings, songs, school programs, presentations, city council and tribal council meetings, interviews, music, and

so on. Station employees go to community gatherings, the homes of elders, schools, kindergartens, and other places to collect recordings. They also encourage anyone who has recordings at home of Indigenous stories, songs, any materials in the Indigenous language, to bring these recordings in whatever format they exist to the station, where they will be digitized and archived, with a digitized copy given to the person who brought in the material. Often, so much material is brought in and staff have so much other work to do at the station that not all of it is digitized yet. Recordings in non-digital formats are often more fragile and at risk of loss in quality, thus digitizing and properly archiving (e.g. labeling and sorting) materials is very important to the stations, but I am not aware of any tribal stations having the means to have a dedicated staff person for the archive. What makes tribal radio station archives unique is that much of what is collected and curated there was never intended for the public. Even tribal members and organizations need special permissions or must explain their need for a particular recording in order to gain access. The archives are not public, and much of the material was truly intended as documentation of the traditions, knowledge, and music of this community, not meant to be aired on the radio. While there is the sense that collecting and archiving these materials is an important part of the radio station's work, it is not always clear how it should be decided who may gain access and for what purposes. There is also often simply not enough funding to ensure materials are digitized quickly, with original tapes housed in safe and dry conditions. While station employees certainly wish for these materials to stay safe and functional, and even greater concern is with outsiders gaining access or control over these recordings, thus the archive cannot be housed outside the community, and especially not in a federal, government-controlled archive. The Indigenous radio stations creating and housing these archives within their own community is an assertion of tribal sovereignty and self-determination.

In almost all of the interviews with station employees, the archive was brought up by the interviewee before they were specifically asked about it. Similar to the programming, including both youth and elders in the archive is important to the station, and reflects the the norms and values of both Indigenous communities.

Most of the youth recordings in the KUYI archives come from their partnerships with local schools. Youth of different ages learn from the partnerships, and according to the KUYI

employees are eager to share their songs, plays, etc on air, and KUYI often keeps the recordings for the future. Someone who is involved with recording youth at KUYI shared that he works with a wide variety of age groups and schools: “Head starters, kindergarteners — I usually go to the head starts too. During their program. It's like Christmas time or Halloween. They sing. And record those. So, all those that you hear with the kids singing on the air. That's usually homemade recordings. Most anything that's — I go out and record those. Either that or they come here on like, their field trips. Their teachers usually bring them. They want to share their music. They bring them and sing at least two, three songs. And get a tour of the station. [...] We also have shooting stars for little kids too. That's just where they come in like that. They just get recorded. They sing their ABC's, things like that. Their cool lullaby songs. And that's the things I do too for that show. [...] So that's how we get kid's material” (KUYI Interview 2, p. 14, 15).

Similarly, KUYI is purposefully trying to accumulate material from elders in the community. The same is true for KYUK with their respective communities. There is also an effort to bring together audio materials that exist in private homes in the community and preserve them in the radio station archive. As mentioned before, this work from collecting, recording, digitization, curation, organization, and managing access, is all done by just a handful of employees who also have busy full-time jobs at the station that don't necessarily set time apart just to work with the archive. Growing, maintaining, and protecting the archives is an important task to the employees at the station that they do not take lightly in terms of the cultural importance but also the sensitivity of the recordings that they collect and house.

“That's with traditional music too. We archive all of those. And last year, we were trying to push it a lot where we ask in the community, you know, if they have old music, traditional music, tell them to bring it in where we can record it and rip it, you know? Put it in digital form. Because, you know, they have all those tapes and M-tracks and records. We have all that here to convert it, so we can put it into digital. And usually when a person does that, we give them a copy. And we have a copy for ourselves. And just give the original tape or whatever back to them. And that's when we call for more music for our DJs to play as well. Because sometimes they get tired of the same ones and then, then we call out to the community. Say, you know, we need more music, traditional music. If you guys are getting tired of these [laughter]. If you have

old tapes or anything gladly bring them over and we can transfer them and put them in digital form. So that's how we archive those” (KUYI Interview 2, p. 21, 22).

As was mentioned here, a copy of the recording is typically given to the person who brought in the original material. It was also shared with me that when musicians come to play live on air or be recorded at the station, the station not only provides the recording to the artist but aims to support them by sharing on air where the artist’s music can be purchased, and also answer questions about the artist later that they often receive in form of phone calls following a live performance or artist spotlight.

Every employee I interviewed greatly enjoyed recording community members, and valued being able to have access to, and learn from, the materials in the archive as part of their job at the station: “What I like is that, when there is a story produced by KYUK and like, we will go out sometimes and we will gather hours and hours of interviews. And it all has to be distilled down, refined down to these few little statements. And there's so much that never gets out. But by working here and being part of the gathering side of it, I've listened to interviews with old people and other people in different positions, and I have heard so much more. There's so much more knowledge that I gained about many different topics. [...] Working here, the variety of topics that we end up having to deal with and learn about in order to convey that message out to the community is really cool” (KYUK Interview 7, p. 9).

There is much in these archives that doesn’t get out or on air simply because there is not enough time and a lot of recorded material, but there are also strict boundaries to what is culturally appropriate to be shared with the wider public especially because outsiders can listen to the station online, and what is not be shared except in specific settings or with particular individuals. Some recordings are created strictly for archiving and are never meant to be aired or shared widely. However, the person who provided the original recording or volunteered to be recorded maintains the right to distribute this material, as it continues to be seen as theirs, even though at that point it also becomes part of the station’s archive: “The deep topics like that, the things that you're not able to say on air. I mean, we can record. But that's the — the agreement that we won't be airing it. That it's not shared and the person that wanted that certain event they usually want a copy for themselves. It's like, maybe to be shared with the inner community. Like

a community setting is where they share those. But we do keep them here. We archive them. And if the person that did the event wants a copy of it or wants to share it with somebody else, then they usually request copies. And they get to do as they want with it” (KUYI Interview 2, p. 20).

KYUK also has some equipment for video production, and is involved in both audio and video recordings for their archive: “We had a panel of elders that came in multiple times, and we'd film them for like four to six hours at a time. And they covered all the main topics and values. And they're gonna do a DVD package. So I don't know that it would ever go online just 'cause it's like, I think it's literally gonna be like six to eight hours long or more. I think YKHC will distribute it to their sub-regional clinics and then they'll teach workshops based on, on what the elders have said. So, yeah, it's really cool to capture that, too, 'cause, you know, the elders won't be here forever. So capturing that knowledge now on tape is pretty cool. Yeah. There's lots of potential for health awareness” (KYUK Interview 4, p. 18).

In several interviews about the archive, health topics were brought up as relating to the traditional knowledge that elders share on these recordings, often including information about local medicinal plants or teachings related to holistic wellbeing. This kind of information would be collected for the archive, but with the intent of sharing it with the wider public. This might happen on air, or through partnerships, as in this example given here. Usually, staff would already know before the recording whether this was something appropriate or even necessary to share with everyone, or something that is culturally restricted in some way, as certain songs or information relating to ceremonies only open to initiated or otherwise chosen and qualified individuals.

#### **4) The station as the main source of information**

In addition to these differences between tribal stations and other community stations (and certainly larger-scale non-commercial and commercial radio), the unique environment in terms of lacking infrastructure, relative isolation, and rurality has a strong impact on how these stations are run, how they are used, and how strongly listeners are relying on them for a wide range of information. For many households in communities like the Hopi Reservation or the Alaska

Native villages of the Yukon-Kuskokwim Delta, their local tribal station is the central, most accessible, and often the only source of information and news.

A long-term KUYI employee expressed it this way: "You were talking about the isolated settings and we're... that's the only — I always tell the staff and say, 'We're the only show in town. And we've got to do the best that we can'" (KUYI Interview 4, p. 33).

The same is true for KYUK. Two different employees there shared their perspective on the role of their station vis-a-vis the extremely limited media environment of not only their immediate location, but the larger region:

"Well, for one thing there's really one radio station in a geographic area the size of Oregon. And so that alone means that we're, like, that only voice out there. And there are — I think there's, like, a couple, like, religious affiliated radio stations and maybe music. But as far as public broadcasting and news goes, we're kind of it. And even in the age of internet and television, you can get really remote really quick out here. And so people rely heavily on the information that we provide" (KYUK Interview 4, p. 16).

And: "Another thing's unique is, for a lot of places we're still the only source of broadcast, you know, free access to media for a lot of our population. And affordable, because our rates are — tend to be way higher for paid access to media, internet, you know? There's no broadcast out here or in Bethel anyway besides us of any kind. And because we're the only show in town, it, uh, as far as radio, besides the one small, actually two now, this, low power FM, just by that simple fact alone, we are that much more of a convener of the community. You know, like if there were a bunch of commercial stations to open here that split the audience up. But that's not the case. So they're stuck with us for better or worse. [...] Out here, radios, I mean, it's essential. Like I said lots of people don't have cable, and there's really no one, as far as I see, there's no one else really tailoring their work towards the people of the YK Delta and their issues. So, yeah, radio is still effective. It's affordable, everyone here has got a radio. [...] And there's only one channel anyway where you gonna hear your Yup'ik culture, or your Yup'ik language" (KYUK Interview 1, p. 19).

Other employees at both stations shared that though more people have Internet access now, it is typically not high-speed broadband Internet at home. People either access the Internet

on their phones, or have access to broadband at work, school, or a community center. However, it was also mentioned that many people do not have transportation, and depend on others to access those spaces. So, radio remains the most reliable option to access information even for those who have options to access the Internet. And as illustrated by the quote above, these radio stations also remain the only sources of culturally tailored information that is specifically relevant to this region and community, in addition to information in the respective Indigenous language: "It's more informative. The information that we — I guess the majority of the information that we have gathered and collected that comes through our airwaves pertains to our community members. And it's more informing to them" (KUYI Interview 3, p. 2).

When KYUK first started operating and wanted to share news on air, the lacking infrastructure and young radio station without a news department and reporters at that time also meant that KYUK initially had to rely on news being produced in Anchorage to share with the residents of the villages in the YK Delta. John Active, who had been at the station since the beginning and had been in charge of the Yup'ik news program for the 47 years he worked at the station, recalled that "there wasn't even a news department then either. We had to read the Anchorage Daily News that was flown in on the jet by some passengers. We'd scavenge the airline to look for an old newspaper copy for that morning. That was what we used to translate into Yup'ik, in the early days" (KYUK Interview 3, p. 1).

The radio stations maintain their status as the central information hub in their community today, with local residents often calling for different kinds of information, and the stations trying to tailor their programming accordingly: "I started thinking about, wow this is a good way of getting not just music but information out. And I think what really caught my attention was the people that call in for certain questions and requests. You know, what are they calling about? You know, where are you calling from and what do they need?" (KUYI Interview 4, p. 5, 6)

Often, the information most urgently needed is health and safety information. In remote regions with limited transportation options and difficult topographies, weather information becomes critical to the safety of residents, and is difficult to access from sources other than the radio station. In this regard, two other KYUK employees shared that "a lot of people, they like to listen to the radio to see what's happening, you know, what's going out here, what happened, or

the weather. 'Cause a lot of times they don't travel by plane. They go on a boat, you know. And they're exposed to the weather. They want to know if it's gonna rain, how cold it's gonna be, and, like, floods and things like that. Plus, I think informing community about certain things, like if the commercial or subsistence fishing is open or closed [allowed or not at a given time]. You know, what days they could come to Bethel. [...] So if they're out there fishing and they don't know it's closed, you know, they're gonna end up going to jail" (KYUK Interview 6, p. 8).

And that "people will use it for safety information, or find out the weather forecast. Or, you know, we'll announce, 'Hey, school is gonna open late today.' And sometimes that's the first information people get about it. And we announce like, you know, 'You can fish for six hours tomorrow.' Or, like, 'Hey, get your permit for moose hunting'" (KYUK Interview 5, p. 5).

In sharing health and safety information, the stations keep the local infrastructural circumstances in mind and consider, for example, what the local health care system can actually provide. The KUYI General Manager explained how this concerns affects programming: "We definitely don't want to spread fear, or panic, or overwhelm our taxed health care system. And so, that's another aspect of deciding what goes into programming — knowing that resources are limited, people choose to drive to Tub City to get their health care. People choose to drive to Flagstaff or Winslow to get their health care. Same as how people from Tuba city will drive to the Hopi Healthcare Center [laughter] to get their treatment. So, we're always mindful of the barriers that people have in accessing treatment. Also in our neighborhood communities, our Navajo friends that listen, you know, if it's heavily rained in an area, we know people aren't going to be able to go and make their doctor's appointments. All those private health transport vehicles you see zooming along the highway, they're going to get stuck in the mud. And so, we're always very mindful of, of what's going on, both environmentally and, infrastructure-wise with healthcare delivery out here. It's, it's unique to Indian Country" (KUYI Interview 1, p. 21).

And tribal radio is positioned uniquely well to cater to the needs of the residents of even the most remote and isolated communities in "Indian Country." These infrastructural challenges are unique in the United States, but quite similar to those faced by rural Indigenous communities around the world, and of the vast majority of poor, rural communities of any background living in developing nations. In those places, radio continues to be as popular as tribal radio is to rural



Indigenous peoples in the U.S. Radio also continues to be heavily used in development work, particularly because it allows for a cost-effective way to work around some severe infrastructural challenges complicating communication and travel.

### **5) Focus on local health information and partnerships with health organizations**

To serve their communities in the most effective and helpful way, and to offer high-quality health programming, many tribal radio stations, including KUYI and KYUK, partner with the local healthcare clinics, providers, and other health-focused organizations to produce programming, bring experts on air, and produce PSAs that can be repeated on the radio over time as needed. Most of the health programming has to be produced locally, as many existing PSAs that are aired on public radio state- or nation-wide would not be applicable for residents of these particular communities and environments.

In addition, as mentioned before, the focus on culture and language remains when it comes to health programming: "Because, you know, the language is a pretty strong topic now in the region. So, that's what we try to push a lot with the language and traditional doings. Just topics of what special remedies they can do to, you know, get over a sickness. Or just things like that to comfort themselves at their own home instead of going out, because most of the elders or older folks out here really don't have rides. They depend on the medical transportation. So, sometimes they're not able to get out. And we do have this show on the air called 'house calls' that talks about health topics. So, that's pretty helpful, too, because they do local things that you can do to keep yourself healthier. And just things like that. So it helps" (KUYI Interview 2, p. 13, 14).

Partnerships with local organizations can take different forms, as for some materials and programs, like call-in shows, the initiative is with the radio station, for others, healthcare centers and other organizations also hire radio station employees to produce audio and sometimes video about an event or initiative, with is then often aired on the radio and/or is added to the radio station archive.

KYUK was involved in such a project during my visit. One employee had told me that: "This weekend I'm actually going to film the YKHC Health Fair. Um, and they've hired us to do

that. So we're gonna produce, like, a three minute video about the healthcare" (KYUK Interview 4, p. 16). They continued to explain that "I think it's a really good source for — we partner with YKHC a lot, and public health nursing to kind of put reminders out there — little PSAs about, like, a wellness child check up, so getting your shots or flu vaccinations, things like that. I think that's really helpful" (KYUK Interview 4, p. 20).

Of course producing so much health content locally and maintaining different partnerships with organizations and providers takes a lot of time, which presents a challenge to sell non-commercial stations reliant on donations and volunteers. The KYUK General Manager shared that: "Some of the challenges are making it entertaining so it could be more digestible, you know? So I reach an even broader audience. I think that's one of the challenges. We are not big enough. I'd love to have a producer that I could have spend more time with our [local health organization] partners" (KYUK Interview 1, p. 21, 22).

This was echoed by someone at KUYI, who also highlighted the importance of local health content and translational work that is needed in terms of medical jargon and in terms of language: "I think where we need to get a little bit better is the engagement part; the interactive portion of our program. We're really good with that, but when it comes to healthcare, sometimes, the language just goes right over people's head, when they [the doctors in a call-in show] start talking in medical language. We have this great partnership with the healthcare center. And we always get a, a practitioner to come in who's not afraid to be on the radio to do the program. Which is awesome, but we need a counterpart that helps offer the translation" (KUYI Interview 5, p. 17). This translation work, in terms of level translating jargon to easier language, actually is done to a remarkable extent at tribal radio stations, as the remainder of this chapter and chapter 4 will show. To those working at the stations, it may seem that they are never doing enough, but to me as an observer, and certainly to the audience, these efforts are very visible, much appreciated, and seen as very effective.

While both stations have established partnerships locally, it is also important to them to maintain the freedom to decide whom to work with. Similarly to the freedom to turn down certain donors mentioned earlier, deciding what healthcare providers to work with is tied to the missions of the stations and indirectly to tribal sovereignty. The KUYI General Manager

explained it this way: "That's also a strength, you know, to be able to stand up as a community and say 'We'd rather not have a show this week than have someone external come on that has no connection to our listeners or no connection to tribal community.' It's a delicate line to walk. I unsubscribe and send back replies of polite denial every day to media consolidation groups that are attempting to get the author of a latest health book on air to have a company that has just released a new clinical trial of some medication on air, to get a so called alternative healing practice or practitioner on air. So we do have strict guidelines, and that is, I will ask someone, 'Has your client that you're attempting to sell to us, have they worked in Indian country, and has it been meaningful work? Have they had a stay of length? Are they even familiar with the challenges and the strengths across Indian Country?' And if no, it's a very polite thank you, keep that information on file, and that we're a tribal station [...] and that, we will not play into that. We'll not assist external folks making money off of this community. That last part isn't said, but that's where that denial comes from. And then, we request that those people keep that information on hand, and if they ever come across someone that's worked in Indian Country, we are going to be your first place to go to" (KUYI Interview 1, p. 13, 14).

He further explained that an urgent health issue, like the threat of an epidemic, is an instance where the radio station archive is used: "One thing that we do as second nature is health crisis reporting, whether it's hantavirus cases, issues with bubonic plague, coming from prairie dogs and other critters, to things like vaccination. [...] Anytime there's a ripple of an illness spreading through Hopi, we dig through our audio archives and see if we can find a material that addresses that. If not, they'll bring a provider in, and have that translated in Hopi, as well as just spoken in clear English. You know, we also are responding to critical outbreaks in rapid time, and again, that's another gift of radio — that you don't have to wait for it to be printed, you don't have to wait" (KUYI Interview 1, p. 20).

KYUK employees also mentioned epidemic outbreaks as a key issue they report on and play their part in prevention: "There's times when we were faced with the possibility of having a pandemic, epidemic, you know, flu or when HIV/AIDS was first coming in and increasing the public awareness of how these things were transmitted and just giving people — getting people away from these conceived ideas that are untrue and establishing the facts, so that people can be

informed about these health issues has been real important. [...] I think that using our airwaves to address some of these public health issues is really important, because some people, myself included, are very unlikely, because of the cost of medical care, to go to the doctor's office and get help for anything that's not an emergency. We're supposed to have affordable healthcare, but what has happened to me is that the cost for me to go see the doctor and what my insurance covers went — the deductible went from \$1,000 to \$4,000" (KYUK Interview 7, p. 17).

Similar to this respondent, another KYUK employee mentioned another epidemic the community had faced in the past, and the role KYUK played in informing the community of not just the precautions to take, but explaining the background and the reasons for these precautions, which, according to the respondents, was not available to the community from any other source.

One additional challenge the radio station faces in cases of larger-scale health issues like these is working with multiple levels of stakeholders to provide the most current and accurate information. As the central communication hub in their community, the radio station is usually approached by the various stakeholders and then has to consolidate the information and communicate it in a way that is understandable for the local community without sparking unnecessary panic. For example, a KYUK reporter shared that: "The last two weeks, there's been this big E. Coli issue that's going around. And this whole neighborhood was on a boil water notice, because they found some E. Coli somewhere in the system and they, again, they went around by hand, passed out these sort of vague statements to the residents. The residents knew they had to boil their water because it wasn't safe, but they didn't know what that meant. When something like that happens, it suddenly jumps from involvement with one person, to a small organization, which is this neighborhood and their water supply, and then it gets to the state level, you know, real fast. And then the state gets involved, so you've got these three levels of understanding, and it's your job to convey all of those together. Like, what the people are thinking, what the officials on the ground are thinking, and what the people at the state level are thinking, and combine those and really, it's your job to explain, to juggle those perspectives in front of each of those organizations" (KYUK Interview 2, p. 25).

In terms of the health issues that are being covered, besides urgent issues like epidemics, station employees mentioned a wide range of health issues they attempt to cover. The general

focus appears to be on preventative issues, where sharing information could have the greatest impact in terms of improving population health. And again, the strong focus on a cultural lens and focus on language remains.

For example, topics that came to mind immediately for the KUYI General Manager included: "Growing and harvesting the Hopi tobacco that's out here already, to the other things, diabetes, and [...] to remind people that running is a historic Hopi practice that is a benefit to the entire world, let alone, one's health. And so, we are trying to cast our net in ways that we can catch what people want to hear about health" (KUYI Interview 1, p. 15).

Interestingly, the same issues, nicotine use and diabetes prevention, were also the first two health issues mentioned by the KYUK General Manager, even though a wide range of health topics was addressed later on in the interview: "Nicotine and diabetes prevention. Public health nursing. In the past we've had — it's called the 'SAFE group' — a suicide awareness and intervention program [on air]" (KYUK Interview 1, p. 22).

The other statement regarding wanting to cover as many health issues as possible, also rings true at KYUK, according to another interviewee: "And a thing about health, too, is, it's such a big word. It's texting when driving. It's nutrition. It's emotional health, sexual health. I mean, it's healthy relationships" (KYUK Interview 5, p. 16, 17).

Of course one major reason for wanting to be broad rather than specific with health issues that are being discussed is the position of tribal radio in the communities they serve as the main or sole informant. Another KYUK employee expressed it this way: "If there's one person that needs to hear that in our community that's part of our mission, that's part of what we need to get out. And so, here the beauty is, this is a live show on AM, at this time, and it's reaching out to all the communities in the region, then if they rebroadcast it a different time or if somebody doesn't want to listen to this program, they can flip over to FM and listen to music. And then when music's on AM and it comes on over there and they're irritated, they don't want to hear or think about suicide, they can flip over. And yet, at different times of the day, you have different audiences and maybe there's somebody that needs to hear that message, whether it's popular or not. You know, somebody needs to hear it. And it may be that that message at that time is just a perfect thing to help, to save a life or to cause a better quality of life for somebody that needs

help and may not know it, or they may be affected by something who has a problem, you know, suicide, drugs, things like high blood pressure. Things like HIV/AIDS or other — You know, this region is known for being one of the highest STD [laughter] occurrences. It's preventable stuff [...] and they should be aware that this stuff is out there, and here's how you can prevent it. Whether it's blood sugar issues or obesity or hypertension. And to me, it's important that we should be thinking into the future, too. To help people so that they're — instead of waiting until it's a crisis and having to go to ER or it's too late, you're already full-blown, whatever, fill in the blank, and you're going to die in three months, to, like, by taking these steps, we can really decrease the odds of this chronic condition or whatever from developing" (KYUK Interview 7, p. 6, 7).

In focusing on prevention, there is also a strong effort being made to keep the information simple and easy for listeners to incorporate into their lives: "It's a lot of good information. Like, simple information. Like, if allergies — just different simple cures that they can do. So, I think that helps a lot out here, if they just do simple things like that and people try it and say it works so that helps a lot" (KUYI Interview 2, p. 23, 24).

As many rural Indigenous communities are affected by drug and alcohol abuse, addiction was frequently mentioned in the interviews and is a topical focus for prevention-related information. When asked whether radio in general is a good medium to address health issues, John Active responded: "Yes, absolutely. When certain stories — recently in [a coastal Alaska Native village in the region], there were some young people that overdosed on heroin. And that was a news story that we translated into Yup'ik and now we're following up, well, I am following up with a talk show that I produce along with [fellow employee], who is my co-producer for that show. We're inviting this group of people who work at the Yukon Kuskokwim Health Corporation, under behavioral health at YKHC. And so we've invited them to come in to talk about how to heal after something like that happened in the village, and they will bring other people in to talk about the effects of drug abuse — and especially heroin. I mean, that it's dangerous, that young people shouldn't take it or use it. And we're, like I said, we want to be informative to everybody. And in the early days, for example, young people used to go out hunting and elders always said: 'If you're gonna go somewhere, you tell us where you're going

and when you expect to be back. So if you don't come back, when you're supposed to be back, then we'll know where to look for you.' Otherwise, nowadays, sometimes they don't say, and they just disappear, and we don't know where to look for them” (KYUK Interview 3, p.11). And another employee shared that they “asked one of our reporters to do a story on how heroin was mixed with this other opioid. And, like, well, what is this drug, and what does it do to your body?” (KYUK Interview 5, p. 16, 17)

As alluded to in these quotes, prevention and healing are seen as communal tasks. This is true regardless of whether the issue is a physical ailment, mental health issue, or violence, as illustrated also by the following quote from a long-time KYUK employee:

“It's also a good venue — we, you know, we're good in the sense that when — For instance, 15 years ago, when HIV and AIDS was starting to become a major concern and there's need to increase public awareness of that stuff, we provide this venue, if that's the right word, for organizations to come in and discuss the urgency of their message, whether it's HIV or whether it's public safety for using life preservers when you're on the river. Or, you know, law enforcement agencies have come in and, you know, done programming in the health corporation, mental health, when there was a dramatic or traumatic experience in the community. In 1996 or '97, there was a shooting at our high school, which was one of the very first high school shootings to ever happen before Columbine happened. And there was a student and a principal that were murdered at our school. [...] When that happened, our station was then used to get the message out to people about how to deal with their grief, how to deal with this trauma that — that we faced as a community” (KYUK Interview 7, p. 7).

## **6) Culturally grounded health information**

As mentioned regarding programming in general, health information on tribal radio is deeply culturally grounded and specific to the particular location and community, for whom little to no tailored health information exists otherwise, and even if it does, it is very difficult to access for local residents from any sources besides the radio station. In addition, radio has the opportunity to communicate in Indigenous languages and follow cultural norms of communication that can be difficult to express in writing. As part of culturally grounded health

information, providing an inclusive and interactive space is important. This way, health can be addressed as the communal topic as which it is seen, and not as a very private, individual topic as it is often regarded in non-Indigenous cultural contexts.

A long-term KUYI volunteer and call-in show host shared: “I think for health the way I’ve seen it, you know, and the way I’ve heard it, house calls [with a doctor live on air] is good. But I think sometimes it goes over peoples heads and they don’t quite understand. And so it’s a program and you’ve got so much time, and I know people sometimes call in but they also hesitate to call in because they, they don’t really know how to ask the question kind of thing. So the radio is still a really good mechanism for getting health information out, but I think what I look at is the understanding by the listeners of what kind of information has been provided. So for example, the Natwani program is connected to health because it talks about healthy eating. And because we use the culture as a means of getting people to understand it we get a lot of calls during that show. [...] So, trying to incorporate, using the culture as a teaching tool. And I was just thinking about this too, to try and help motivate people or to help understand why annual checkups are so important. We have the ceremonial cycle and it’s continuous. It never ends, you know, it repeats itself over and over and over. And I guess the question of how long do you participate in those ceremonies. It’s like, it’s up to me, you know, like I’m pretty involved so I want to do this as long as I can. But one way I can do it is to take care of myself, I’ve got to stay healthy. You know, I’ve got to exercise, that kind of stuff. So I’m already thinking and I’m gonna try to be healthier for the start of our ceremonial cycles. I was thinking that maybe if we could [...] look at that as a way of doing an annual physical. [...] So if we can incorporate that kind of teaching, and it would be motivational too: ‘Okay, remember this is coming up and you want to be part of it, you know, so what better way to...’ —You know, and that kind of thing. And just use that and we can maybe do that on the radio to help educate” (KUYI Interview 4, 24, 25).

What is alluded to here was also discussed in most, if not all, of the other interviews to some degree: The need for health information to be culturally specific in order for it to make sense and be useful to the community. This was often cited as the main reason that programming, especially about health topics, has to be produced locally, even when many nation-wide programs and PSAs exist that could be aired. The stations have found that while certainly more



affordable and less time-consuming, this more generic information has too little applicability and value to their audiences for them to air it.

A KYUK gave the example of national suicide prevention content: “A national suicide prevention speech won't be able to take in the social, you know, sociological — forgive my inability to pronounce things right — but the impacts here are really different. And like the culture sociologically. The cultural changes. And you have a generation of kids that are growing up with such a change between their generation and their parents’ or their grandparents’ that sometimes the parents don't know how to — and maybe that's always been the case with the young kids.... [laughter] And, and there's this divisiveness, you know, things are rapidly changing in our society in general. [...] And the whole idea of how you go out and earn a living. You know, in the old days, you had to have a boat, you had to know how to fish. You had to know how to hunt. And now, you have these young kids that haven't gone out and participated in those things. And yet, they're living in a community where there's no jobs. And a lot of depression and stuff, I think, comes from just being disconnected” (KYUK Interview 7, p. 30).

The cultural changes addressed here affect very remote and isolated communities especially, where one would have to move a considerable distance from home and family members to take up a full-time job. In addition, life ways are changing in rural Alaska due to climate change and pollution, and hunting and fishing no longer being as feasible of a way to survive as they used to be. This leaves many young people, who strongly identify with their culture and seek to belong at the same time as they must seek to survive, and are as strongly advised to leave by some as they are advised to stay by others, in a state of confusion that could escalate into despair over a lack of viable pathways for the future. The role of tribal radio in this moment of significant shifts and changes between generations is quite fascinating, and facilitating between generations with very different lifestyles even though they live in the same place, is yet another example of translational work that tribal radio does for their audiences.

The KUYI General Manager later addressed how, in speaking about health topics on the radio, it is important to maintain a cultural lens, meaning that the very meaning of health varies by culture, and that KUYI is able to communicate health information more effectively, because they keep the broader Hopi approach to health and wellbeing in mind.

“Dovetailing between the inner wellness and the physiological wellness of a person — again, that's something that Hopi has known and as kept as a very dear component of its culture for much longer than Western medicine has been, you know, practiced here. And so that, to me, is what wellness is. And if you're able to meet those two planes, the healthy spirit and the healthy body, then we're doing our job as a radio station projecting the meeting of those things, and not having it be binary. They are not separate, they're together” (KUYI Interview 1, p. 19).

### ***Superlocal health information***

In addition to this culturally specific health programming, there is also a strong focus on the region — “superlocal” health information as the KYUK General Manager called it.

This local emphasis was brought up in several of the interviews. For example, another KYUK employee shared that often the health information on KYUK is “very specific to our region. You know, if it's a dietary thing about local diet, common in the villages, you know, how the white rice that we put into your fish soup is not traditional. It's like eating straight sugar<sup>11</sup>. [laughter] Something that simple.” (KYUK Interview 7, p. 23, 24).

The local focus remains for both health and safety information: “So, when we're doing things like, when the river [ice] is breaking up, working with search and rescue to make sure people know every day what the risks are if they travel [on the frozen river]. To make sure they know when it's not safe for any kind of travel. Same with looking at, you know, the major issues, health and wellness issues of the Delta. [...] You know, drugs and addiction, domestic violence, kind of trying to examine what are the biggest issues facing — and what the information gaps are” (KYUK Interview 1, p. 18).

Another great example of “superlocal” health information are issues related to the subsistence lifestyle. Consider the following example offered by a KYUK reporter regarding the subsistence fishing and hunting lifestyle in the Y-K Delta: “Another health story I wanna do is, most people use lead bullets [for hunting]. But there's so much information on how lead is

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<sup>11</sup> The speaker is referring to the high glycemic index and amount of carbohydrates in white rice. Because diabetes rates are high in the community, higher blood glucose levels from consuming too much white rice are a concern. Especially because white rice is available at low cost, it is very popular and residents are often warned against consuming too much of it.

terrible for your health. And you're putting it directly into your food source. And you can get copper instead or some other metal they use that is safer. But lead is cheaper. And lead is just what's used. People know it. They know how it shoots out of the gun. They know how it breaks apart in the air, in the animal. It's, like, reliable. But I know that's a challenge in any health campaign — how do you change mindsets and behavior. But making it culturally as relevant as possible” (KYUK Interview 5, p. 12).

This is a good example of health advice that would not typically be found, especially not on the radio. It is also not a particularly great risk to anyone else. Even individuals who hunt from time to time for sport and consume the meat, the lead levels would likely be negligible. However, for someone living a subsistence lifestyle and living predominantly on meat they hunted or bought from other local hunters who follow the same practices, may consume harmful levels of lead.

Another example offered by the same respondent related to nutritional advice that also needs to be tailored to what local residents know and what is available to them at a cost they can afford. The respondent said: “I think here, the thing that I would take into consideration mostly is what resources do people have available. So, like, when you talk about nutrition, for instance, you have to make it available for someone who lives in a village [in the YK Delta] and what resources are available. Like, you wouldn't say: ‘Avocados are a great food.’ It's like — Avocados might never appear there” (KYUK Interview 5, p. 9).

At KUYI, this was echoed by a reporter who said: “How I see it is my role is to get the most important topics that pertain to the community. Taking care of each other and taking care of your elders. And keeping the youth healthy. Just the main topics like that is what I try to push on air. Just really being conscious about what's surrounding us and what other things could affect us here on the reservation. So, just trying to keep up with that” (KUYI Interview 2, p. 7).

The respondent partially alludes to cultural priorities of thinking of both elders and youth first and keeping them safe and healthy, as well as the consideration of natural environment and infrastructure that was discussed in Alaska as well. While residents and radio station staff are aware of the most critical issues affecting their communities, the solutions are often not as simple due to various restraints and lacking resources, and tribal radio station staff must do a great

amount of additional research and translational work in order to present their communities with realistic, helpful, and actionable advice regarding a health issue they are reporting on.

This is true for every topic being addressed. For example: “I've been told here the public health enemy number one is water and sewer — not having access to clean water and sewer. And a doctor was telling me it was like 17 gallons of clean water a day is needed per person per village to get there. That's a lot of water. And it's [got] a lot to do with infrastructure. And it has to do with, uh, Alaska. Rural Alaska's perpetually unique, so, it's like you can't build a water/ sewer system like you can somewhere else. You're on a wetland in permafrost” (KYUK Interview 5, p. 14).

So, tribal radio stations consider both the circumstances of their audiences and their central role as informants when covering health topics. In developing programming, they are both cognizant of where, when, and how people are listening, changing audiences throughout the day, and the information most needed for certain audiences at certain times.

“It's not the kind of consuming medium that TV or print is. You know, you can't read while you're driving. You can't watch television while you're driving, you know? But we have to think about that when we're making programming. You know, we have to think, ‘What would it be like if somebody was in a boat listening to this?’” (KYUK Interview 2, p. 25).

### ***Culturally sensitive information and mental health***

While both stations address sensitive health issues that are more difficult to talk about than healthy nutrition, such as addiction, suicide prevention, or domestic violence, there was a stronger concern at KUYI around culturally sensitive or restricted information, and things that cannot be talked about on air. However, interviewees at both stations agreed that due to their standing within the community as the main informant they cannot entirely shy away from discussing even those more sensitive health topics due to their prevalence in the communities they serve.

When asked about topics that might be considered too sensitive to talk about on air, a KUYI reporter said: “Actually, we go through that daily. About just anything that we do here. [...] There's a lot of restrictions in — that go with, tie with our religion. Certain things we can't

say. Certain things we can't do. And there's certain things that happen in a certain month. So, if a month's passed that something goes on and later in the month you're not supposed to do it. So, there's certain times for certain things. [...] But some of them [listeners] realize that, you know, uncles aren't really around or any elders aren't around to talk to the younger. And this [station] is a place where they think that everyone will hear. But it's just like, to the — I guess to the religious or the very sacred societies [initiated community members who participate in ceremonies that are considered sacred and are not open to all, especially not the non-Hopi public], that's the ones that, that we can't really say anything about because you get complaints forever. But, things like that that are important [like traditional knowledge related to health], usually nobody has anything bad to say about it [when it is shared on the radio], because they don't really have a person in their household that talks to them about these kinds of topics. So, it's sometimes good for them to hear it on the air. And it gives a chance for family members to, you know, gather and listen, too” (KUYI Interview 2, p. 22, 23).

The KUYI DJ is here referring to ceremonial practices accessible only to a few Hopi individuals. Information from this context, including certain songs or information about when a gathering or ceremony will be held where, is not appropriate to share with individuals who have not been initiated and received certain teachings, who are not members of a certain clan, or not supposed to receive this information for some other reason. This is well known and respected among community members, and if this kind of culturally restricted information was to be shared on air, most likely not only those who are the authorized individuals to possess and pass on this knowledge, but also those community members who are not, but who are aware that this is generally inappropriate to share publicly, would call the station to complain. However, radio DJs do not only avoid this scenario in order to avoid audience complaints; they are also Indigenous community members themselves who would never break such fundamental rules of Hopi society.

The same question at KYUK elicited different responses. Reporters in Alaska seemed to face fewer cultural restrictions in what they could talk about on air. One explanation given was that “If they [the listeners] don't wanna hear about it on the radio, you know, they could just turn off the radio. You know? Or just walk away from it. I mean, I don't see any problems with airing

it, you know. We're just informing the public. If somebody out there doesn't wanna hear it, they could just turn off the radio” (KYUK Interview 6, p. 14).

The KYUK General Manager agreed, saying that: “We [KYUK] haven’t shied away from any issue. We've had broadcasts on suicide prevention. We’ve had — for years there was a suicide prevention group — they kinda fell apart, but, I mean, they had a show, a monthly show. Uh, domestic violence? I don't know that everyone's always comfortable with it. But we've never been called on it as long as — I mean, we have to obviously be respectful and thoughtful about how we approach any of those issues. But as long as it's done right — there can be a little controversy sometimes, but, you know, the overall sentiment I get from most of our listeners is that those kinds of shows are appreciated” (KYUK Interview 1, p. 21).

There was a recognition that some health topics could be, and often are, considered taboo. However, the importance of the issue, due to prevalence in the community, prevailed in the decision-making around programming. A KYUK reporter shared their awareness that “a lot of the health issues that we face I think anywhere, and definitely here, you know, those issues are very private — they’re taboo sometimes. So I think, like sexual health, domestic violence, talking about rape, things that are really difficult — they just have to be talked about, because here we have some of the highest STD rates. We have the highest incidents of domestic violence and sexual assault in the nation. And so, those are the things that we need to be able to talk about. And so, figuring out a way to be courageous and bring it up, but also a way that listeners will [be willing to] receive it” (KYUK Interview 4, p. 20).

Returning to an idea expressed in an earlier quote, an idea underlying the discussion of challenging topics is that the community can heal as a whole and prevent the occurrence of the issue in the future. Sharing information is thus regarded as a part of protecting the community. Another example given by a KYUK employee was: “For a long time in the early '90s, there was a big revelation about the prevalence of child sexual abuse. And it was a hot news topic for a long time. And there was a lot of people that were getting caught finally and being prosecuted. And helping our community understand that and deal with it and how to deal with it rather than just pushing it down and suppressing it. Getting these people out of our — getting them away from harming our children. And then there's other times when there was drug issues in our

community, there was other things that just really made it good to be a part of that team that brought this information out to help our community move in a good direction” (KYUK Interview 7, p. 18, 19).

With its health programs, the stations do not only attempt to bring awareness to an issue in order to aid prevention, but also to start a dialogue to reduce the stigma surrounding some of these topics: “We want to hear from people that give good advice, so could pull out of certain situations. People are starting to talk about suicide now. The parents will talk about suicide. Young people will talk about suicide. How they were thinking when they — when they tried it, and parents are talking about how it feels, how hurtful it is for them and they don't want that to other families, to live through that. But they're starting to open up. They're starting to talk more and more about this stuff. Alcoholism, drug abuse. They're starting to talk more and more about these things” (KYUK Interview 3, p. 11). And on the same topic: “When we take initiative on something, it's because there's a timely issue. So, we did a big heroin series, because, you know, we are learning not only that heroin use was growing, but we were told by many, like, they have no clue anything about heroin. Like, you know, not even the basics, not even how addictive it is or what it looks like, how it's used, or any of that stuff. So we realized, okay, there's a big information deficit here. And so, we did like this two hours, three hours worth of programming, split up, to address that, which we should probably replay actually sometime soon because it's evergreen” (KYUK Interview 1, p. 27, 28).

Juggling the information deficit in the community with the goal of breaking stigmata and motivating preventative behaviors alongside open conversation is challenging for the stations, and these ambitious goals illustrate their continued commitment to protecting their communities and advocacy on their behalf that reflects the goals of Indigenous activists at the time of the founding of the first tribal radio stations.

### ***Radio support groups***

An interesting idea that was brought up in multiple interviews is having what was called “support groups” on air. Since the stations and their airwaves already function as a community gathering space that is actively used by community members to convene and discuss even

difficult topics, foregrounding the emotional and social support aspect of these discussions: “Support groups I guess you could say. ‘Cause I know that’s — there are some individuals out there that are taking care of the elderly and sometimes it seems overwhelming to where they possibly feel like they’re alone. And at one point that’s how I felt. I was like, well, who can I talk to about this and there was nobody to talk to. So it was like, figure it out on your own. So I guess that’s possibly one subject that we can talk about is support for the support [laughter]. Just coming through the airwaves, letting people know that yes, this is — that’s what’s going on, you can do this, if you need support, you can do that if you need support. Or ‘you’re not alone’ or give a story about someone that’s actually taking care of somebody else and the trials and tribulations that they’re going through and maybe they got one day off finally. That way people know that, yes, there is other people out there doing the same thing that you’re doing. You’re not alone. And the support group could just be a radio support group” (KUYI Interview 3, p. 14).

These “radio support groups” don’t exist in this form or under this label right now, even though discussions of this nature do take place during call-in shows according to what station employees shared during the interviews. John Active hosted the Yup’ik language call-in show on KYUK and agreed with the previous quote from the KUYI employee, that holding space for this kind of exchange and mutual learning is an important part of the station’s work. He shared: “They learn a little bit about everything. Everything. The talk shows that we have in the Yup’ik language entirely, knowingly spoken, different topics. We say, ‘What’s on your mind? What do you wanna talk about?’ And they’ll come out and say what’s on their mind. Could be alcohol abuse, drug abuse, family problems, no communication with young people. They’ll talk about those things. And then other people will call in and say, ‘Well, here’s the way I handle it.’ And everybody learns from it, the talk shows. [...] And it’s very healthy for people to hear other people that’s experienced what they went through. And then people would say, ‘Hey, I went through that, too, so I wanna share.’ And they open up. And it’s very helpful and I think it’s very healthy to talk about stuff like that, because elders always say, ‘If you keep it to yourself, it’ll get worse.’ But otherwise, if you talk about it, pass it on, then you feel much better” (KYUK Interview 3, p. 11, 12).



## 7) Radio helping to encourage and improve doctor-patient interactions

In addition to providing this space for community members to discuss among each other, the radio stations also encourage and improve the interactions between community members and local healthcare professionals. This includes encouraging in-person visits, such as regular health check-ups and vaccinations, but also bringing local doctors on air and introducing them to the community, increasing trust and potentially reducing psychological barriers that might exist to seeking advice and treatment from a medical professional with a different cultural background whom one has never spoken to before.

Someone who had been involved with KUYI since its founding shared that “it's still difficult, I mean, for the healthcare community to feel connected, or be connected to the community, and vice versa. And there's still some perceptions, like, the healthcare community and the broader Hopi community, that people are just — that they don't care about their health. That they're just apathetic, or they don't wanna learn things. Or they're not proactive about their health. And then there's this perception from the general community on the healthcare system. That they don't really provide, um, prevention strategies. [...] There's also a challenge between the communication between the two communities. There's a need for advocates. You know, to help folks to navigate that system, know how to ask the right questions about their health. Most people will go there, and just take what the doctor tells them. They may not really understand — demand — like, a full understanding. Or ask what side effects are, or you know, ‘What is that?’, ‘What can I do?’, ‘Is it curable?’ You know, all of these questions that I think really help to offset the cost, long term of our healthcare system. It's an overwhelmed system. [...] So right now, we [KUYI] are claiming an educator role” (KUYI Interview 5, p. 21, 22).

Many employees offered examples from their personal lives in which they find this education to be necessary and helpful, and feel that they have a good sense of the general level of knowledge about the most prevalent health issues in the community. However, besides just giving out the necessary information, the stations also aim to empower individuals to ask more questions about their condition, medications, and treatment options when they meet with healthcare providers in person. One example of this shared with me was: “Just be direct and just ask it. You know, say ‘okay what would happen if I do this?’ Okay? Or: ‘What would happen if I

don't do this?' And I'll give you an example. I was at home in my village and I was with my aunt and the driver came to pick her up for her dialysis and my aunt said she wasn't gonna go because there was some, some kind of — I can't remember what was going on but she wanted to be there. So the healthcare worker just said, 'Okay' and she left. And so I went to my aunt and said, 'Do you understand what you just did?' And she said, 'Well, I'm not going to dialysis.' 'No, but do you understand what that means for you and your health?' 'Um, well not really.' You know? So, she thought it was okay just to miss a dialysis. She didn't understand the true importance of why she has to be dialyzed. So I got back and I called the supervisor and I explained what happened and so she says, 'Really?' I also said it's — this is probably not the first time it happened, but I don't know how the people in dialysis, how they explain to the elderly about why it's so important for you to be dialyzed" (KUYI Interview 4, p. 39, 40).

This is where tribal radio can fill information gaps, but can also function as a motivator to take preventative action. Radio station employees also demonstrated a strong awareness of the major health issues in their region and what the concerns of the local healthcare centers are: "With health this is one of the big challenges at the healthcare center and we're still talking about it. We haven't solved the problem yet, but — How do we get people to just get annual physical exams? That's the big thing and I think if this show can, if the radio can get people to understand it — and this is where I think if you had the clinical director and you had somebody from the Tribe, I'm trying to think of who that could be — but they talk about this, and we talked about it during the interview. It will really help make a big difference in people to be — create self-awareness for their own health. And they could just use the annual physical as a way to learn about themselves and say, okay, I need to do this more often. So unfortunately men are more reluctant to go to the healthcare center or to do any kind of testing, and I think that's the big challenge right now for all of us. And that would be one of the goals, is to get men to understand, but to do it in a cultural way. Meaning that culture requires that there's a balance. Women have their role, the men have their role. So if men don't take care of themselves and a family member may have a male family member that's not able to do whatever, then who is the family going to depend on? So health is a big thing for us, you know" (KUYI Interview 4, p. 20, 21).

A KYUK employee explained that one desired function of this awareness-raising is the ability for audience members to make more educated choices regarding their health: “By planting that seed of awareness, you know, people can kind of determine where they are personally and whether they should go see a doctor or not, you know” (KYUK Interview 7, p. 18, 19).

In both cases, the stance of the radio stations is very clearly pro-Western medicine, aiming to encourage listeners to seek advice, examination, and treatment from medical professionals. Both stations also cover, and place great value on, traditional knowledge and ways of healing, but aim to reduce mistrust of Western medicine and healthcare providers in general. At KYUK, a respondent shared that “some people are stubborn to go seek healthcare and fulfill their healthcare needs, especially the men I guess you could say, ‘cause I hear that quite a bit that the men are kind of — they’re stubborn or closed-minded, they’re thick-headed or they don’t see it that way, they don’t like to go to the hospital for themselves. And I wanna say that some of them are actually listening and some of them are finding out that possibly, yes, there is some elements going on and they go and question it or they’re opening up or they’re trying to open up. [...] I’m thinking that, yes, it is opening up the avenue to where people are starting to become a little bit more educated about, um, what’s happening with their bodies and maybe becoming more comfortable with going to the healthcare, going to receive that. [...] ‘Cause, you know, reiteration, reiteration. The people that we see in public, the we see as, like, leaders, our local people coming in and talking about it [on air], I would like to think that it’s helping them out, helping the other guys seek healthcare. Statistically speaking, I don’t know if it’s true or not, but I would like to say I’m optimistic about it” (KUYI Interview 3, p. 9).

The same respondent also spoke to the unique contribution that radio can make in building trust, by allowing listeners to become familiar with their voices and start to feel as though they know the person to some degree: “‘Cause you know how you hear somebody’s voice and the more you hear the voice the more comfortable you get around them? To where that maybe possibly — that it could help lure more people into that healthcare system, our healthcare system. And just hearing your voice so they’ll be more comfortable there” (KUYI Interview 3, p. 10).

Respondents at both research sites returned to the importance of language they had explained before to highlight how translating the healthcare provider interviews and call-in shows into the respective Indigenous language, or just sharing any kind of health information in their language is another important aspect of creating a deeper understanding and empower their listeners in their role as patients in the local healthcare system:

“And to have that [health programming] in the Hopi language, again, very much necessitates that what we put out has to be trusting and proper information, because it will be received in a way that is much deeper, because the Hopi language, as one of the oldest languages spoken in North America, is so direct. In Hopi, one word means one thing, whereas in English one word could mean four or five things.[...] The language has grown and matured for so much longer than English has been spoken in this realm, that when an elder hears those words, they resonate that much more deeply and clearly. And the wonderful thing we have [call-in show host’s name] as a host, is that he will take Western medicine and find if there is one, a Hopi equivalent, and either in behavior that will prevent you from needing to get on that medication, or a reminder that there are other ways of healing these things. [...] So, when a listener goes to a healthcare provider, they have a deeper understanding of what they might be asking their physician. [...] They're more educated and they can speak to their provider from a place of actually understanding it in the Hopi language, let alone, perhaps, knowing what Hopi healing might be available to them, so they can weigh that decision” (KUYI Interview 1, p. 17, 18).

### ***Informing healthcare professionals of community needs***

On the flip side, the stations also make a contribution to educating the providers so that they can serve the local communities better, because they are able to better understand concerns, information needs, and cultural practices of their patients. With high turn-over rates in most rural Indigenous healthcare settings, in most cases the providers are outsiders coming into these communities for a relatively short time and have to learn about the unique aspects of their new surrounding quickly in order to do their jobs in the most effective and helpful ways.

Speaking about the call-in shows on KUYI, a respondent said: “It's a good way of learning from the community what their needs are, needs are and wants are. [...] So, I guess I'm

a conduit... [...] I'm also on the other side, too, telling, you know, different programs that I'm aware of, like the healthcare center, and,... 'you guys should put this on the air, I'm willing to do it for you'. And then to the trial program: 'Let's get it on the air, let's go, let's tell, tell the community this, they want to know.' And at first it was kind of like a resistance that, well, you know, they're not sure and then I said, 'I know that you are trying to get out there in the community but the way you're doing is not really effective,' meaning that you have daytime sessions but guess who's there? Most of the people are working or have no way to get there. And I became aware that there's a lot of people at their work sites that are listening to the radio [meaning KUYI], too, so that was another thing that I kind of found out" (KUYI Interview 4, p. 9, 10).

Local clinics in turn use the radio stations to disseminate information for them, so this is a true partnership, working both ways. As a response to being asked about the radio as a source of health information, a KYUK employee said: "It's very excellent in that. You know, when there's immunizations, uh, 'cause they do it in certain times, you know, certain months. YKHC gets a hold of us and they tell us, 'Okay, we're gonna have this at a certain date, certain time.' And we air it on the radio. And then, you know, people in communities that really need it could come in well beforehand. We might air it maybe a week before so they, they'll know, okay, a week from now, this is gonna happen. My kid needs a shot. You know? Be immunized, whatever — what they need. So they'll be informed readily ahead of time so they don't — You know, if they're told that same day, they might not have the resources to travel. But if they were informed, they'll plan that ahead, you know, see if they could maybe catch a ride with somebody. You know, 'cause when they pull together, they're not only saving money, but they're prepared for it. If they have to stay [in Bethel, where the clinic is located] for a couple days or, you know. They'll have to take whatever they need and maybe inform somebody here if they have relatives they could stay with, you know? And um, even in really bad weather, you know, we're still working here. We're informing the public. We let them know what's going on" (KYUK Interview 6, p. 12, 13).

### *Call-in shows*

Call-in shows often came up as the most popular format for distributing health information. Even though PSAs and interviews with providers, as well as non-participatory informational segments are also used, both stations reported having high engagement with their call-in shows, and that health topics always came up in the audience discussions on air, even if no topic or theme were provided. The show hosts themselves also reported learning from their fellow community members during these live programs, and seemed to prefer them over the non-interactive segments. Discussions often center around the most prevalent issues affecting the community, and thus there is thematic repetition in the call-in shows, but this was seen as a positive: “It needs to be repeated in many different ways at different intervals of time. Because the person that wasn't ready to hear that message about how to work with your alcoholism problem, um, they weren't ready for the message then, but the message comes up again later and, and then that's the perfect time” (KYUK Interview 7, p. 18).

As mentioned above, limited access to healthcare due to lack of transportation, the cost thereof, or the cost of the medical care itself, is a major barrier to accessing particularly health information and preventative care — anything that does not constitute an urgent need or emergency. Thus, the call-in shows also provide a space where a healthcare professional is accessible even for those facing these challenges, to help them decide if an in-person visit is necessary and worth the investment even if their symptoms are still manageable, as illustrated by the following two interview quotes:

“There is a health segment and I don't know if you know about that yet, but we do have Wellness Wednesday and that's, like, you know, all we talk about is health, you know? It's like a talk show. Somebody comes on, I mean my dietician friend could come on and talk about what she knows or whatever. And so, it's definitely a focus, because we realize it is such a big issue in this area” (KYUK Interview 2, p. 27) and “By them [healthcare providers] coming on the radio, and talking about something like diabetes, um, I don't have to pay a doctor to counsel me, but it also — They can cover things in a way, or get the information out that if this is happening, if you have this kind of thing, these health conditions, then maybe you need to see a doctor” (KYUK Interview 7, p. 17, 18).

## **8) Strong trust in health information from tribal radio**

A key factor in why tribal radio can be so effective as a conduit of health information is their groundedness in the community, the direct relationship they have with their audience, and their culturally grounded programming, all resulting in very strong trust in their information by the local audience.

The KUYI General Manager was very aware of this trust placed in them and the importance this has for their operations: “A whole ‘nother reason for us to disseminate proper information is we’re trusted, because people, blessedly, will pay attention to what we say. And so, that’s something that we don’t take lightly” (KUYI Interview 1, p. 21).

Of course radio in itself has characteristics as a medium that station employees saw as working particularly well in their communities, which are more oral cultures with strong storytelling traditions and Indigenous languages that not every speaker can read or write.

“And they can also connect it [the information] to a real person’s voice. Like, a lot of people when they speak about the radio, they speak about the intimacy of hearing another human. And you are enveloped by a voice. You’re immersed in that experience. And so, like, we were running a PSA. It wasn’t produced in-house. It’s like we source it from somewhere. And it was on, like, don’t text and drive, which is health information. If you read that, that’s a different experience from listening to that. Who are you listening to? Are you listening to a male or a female? Are you listening to like a very young person? Are you listening to a teenager? Are you listening to an elder? Are you hearing it in Yup’ik? Are you hearing it in English? And how all those decisions will influence how people receive that message.” (KYUK Interview 5, p. 8)

The KUYI General Manager also spoke of the importance of integrity — station employees taking their own programming seriously in terms of following their own advice and caring deeply about the community they serve: “I think it is almost imperative of anyone that’s running any organization, [that] you utilize your own services, you believe in what you do, and are you able to, to internalize what you’re putting out. And again, if I look at my staff and volunteers while there’s something heavy being talked about on air during house calls, and I see that resonate, you know, whether it’s an elder overcoming an illness, or an issue of sobriety, and

we look at each other and we're all, you know, a little teary-eyed, or we're just silent, I know we're doing good" (KUYI Interview 1, p. 19).

Another aspect he mentioned in this interview is the positive effect of hearing a human voice, though I would add — as mentioned by the KYUK respondent in the quote above — that it matters that the voices on these stations are Yup'ik voices and Hopi voices, individuals whom audience members also recognize outside the station, in the community.

“[Radio] is already pretty powerful, because the human voice alone — devoid of image, devoid of flesh, is very appealing to the human mind, and radio will forever remain powerful because of that tactile experience” (KUYI Interview 1, p. 17). And just as before, respondents were quick to mention a great number of different health topics in the context of trust that their audience has in their information: “And if somebody's having problems with nicotine addiction or heroin addiction or fill in the blank, they can — there's a time when some people think, ‘This isn't working out for me. I need to start taking steps to correct this issue in my life.’ And that's when that voice on the radio could help them. [...] It's a real human being” (KYUK Interview 7, p. 27, 28).

Because KYUK and KUYI, like most, if not all, tribal radio stations, are quite small with less than ten paid employees, and because they are so integrated with the community — both as individuals and as an organization — community members recognize the managers, reporters, show hosts and DJs, and often know them from other contexts of life in the villages. This was cited as a key factor in why station managers and employees feel they enjoy the highest trust from their communities: “It's huge. I mean, having [show host's name] on, [...] someone who is trusted by the elder population that's listening as someone that's attempting to live his life the best he can as a Hopi man. When he translates information from an angle of provider, or from an external provider, there's a level of trust there that is much higher than just having that providers voice play over a public service announcement” (KUYI Interview 1, p. 17).

As community members themselves, and returning to the culturally appropriate operations of the station discussed previously, the very way in which reporters collect information, conduct interviews, and so on, also lead to a particular kind of trust. For example: “Actually going out there, hands on, meeting the people. Getting good connections with



everybody so you go out in the community, they already know who you are. And they ask how the radio is going or asking about — It's like, 'I know you. I remember you recorded my uncle.' You know? 'Can you play his music sometime?' Yeah. We just take things like that and bring them — try to make them feel good” (KUYI Interview 2, p. 10, 11).

This trust combined with the station's positioning as the main informant in an environment with otherwise insufficient media and information infrastructure can result in community members calling the station for information, sometimes not directly related to any recent programming, which in turn overwhelms the capacity of the station: “And [it's important to share] what resources they can use for their particular situation, because sometimes they call up here like we're doctors, too and try to ask us those questions. And we really don't know what to say. And we just refer them to the healthcare. And that's where they get runaround. So, maybe just like a, like, they could have a main central information spot. Where they can just get all that information, some good directories. And with that, too, maybe having, having someone free at that time to help them out, because when they go there, most of them [the doctors] are busy and they don't really have time to talk one-on-one. And give that individual their time. They could have somebody to be there to help consult them, one-on-one. I think people understand better in one-on-one. And especially if they have a language translator, too. That really helps, because the elders can't really understand, like, the English words. When they tell them in Hopi — when they hear it that way, then they usually understand it better” (KUYI Interview 2, p. 25, 26).

While not as explicitly expressed in all the interviews as it was at KUYI, this authentic relationship with the audience exists at both stations. Given that many station employees grew up in the local community, and all of them are current, often long-time, residents, maintaining close and authentic relationships with other community members does not seem particularly unique or noteworthy to them. But several interviewees emphasized that these relationships and interactions are of high importance to them in their work at the station: “Just being able to go out in the community into their own comfortable setting is how I do it [conduct interviews and gather other material]. Usually I get answers from them and — They don't want to leave their name or anything. But at least you get to go out and comfort them in their questions that they need and get answers for them. And for them to express themselves, because when you really go

out into the home, they don't only talk about, you know, what you went to them for, the questions. But they actually talk about personal stuff to you, too. Maybe they don't have nobody to talk to at home. When you get there they really open up. And that's just them, too, in the matter of trusting you or not. So it's just really wanting to know the person and getting them comfortable with you for them to really talk to you” (KUYI Interview 2, p. 17, 18).

Expressed in this quote is not only a culturally appropriate way to conduct an interview for the radio station, but also the idea of reciprocity, which is a Hopi cultural value, in that the reporter also aimed to help find information for the person he was there to interview.

## **Discussion**

The interviews with station leadership and employees spoke to the continued importance of the counter-hegemonic spirit that tribal radio embodied from its earliest days. We can see how tribal radio differs from other community media, both in terms of how they self-identify and how they function, and in terms of the context of Indigenous communities, where the radio station is often the main or sole informant. Indigenous peoples have a unique history and relationship with the United States and are also the only population group with collective rights recognized internationally, which is not true for any other population group with special status, such as immigrants or refugees — factors that distinguish Indigenous groups significantly from other communities whose media have previously been studied and that our understanding of community media relies on.

Returning to the research questions for this chapter, which were:

### ***Practitioner-Centered Research Questions (Individual In-Depth Interviews):***

- In what ways do tribal radio practitioners understand their stations to be similar to or different from other community media in the U.S.? (RQ1)
- What role do tribal radio’s historic roots in Indigenous activism play in its functioning today? (RQ2)
- How does tribal radio aim to improve the health of rural Indigenous communities? (RQ3)

we can now answer these questions pulling from the different themes.

RQ 1 is primarily answered in themes 1) (Tribal radio as unique and different from other community radio stations) and 8) (Strong trust in health information from tribal radio).

RQ 2 is primarily answered by 4) (The station as the main source of information), parts of 1) (Tribal radio as unique and different from other community radio stations), and parts of 3) (Language revitalization, cultural empowerment, and tribal station archives).

RQ 3, addressing health, which was a primary focus of this project overall, is addressed by a majority of the themes: 2) (Tribal radio stations as part of the community), 3) (Language revitalization, cultural empowerment, and tribal station archives), 5) (Focus on local health information and partnerships with health organizations), 6) (Culturally grounded health information), and 7) (Radio helping to encourage and improve doctor-patient interactions).

The interviews highlight multiple ways in which tribal radio practitioners understand their stations to be similar to or different from other community media in the U.S. (RQ1). Several employees mentioned wanting to work “outside of the mainstream” as a major motivation to join the station. The staff and volunteers at the station mirror the broader region, and pay attention to not just culturally grounded programming, but culturally appropriate operations, in terms of how staff interact, how funding decisions are made, and how interviews are conducted, to name a few examples. General managers also addressed how there are significantly fewer tribal radio stations on air compared to non-commercial stations serving other communities across the country. Generally, employees said that both as media organizations but also as members of these communities they feel particularly overlooked and neglected. For most employees, protecting the community from outsiders was also central. For peoples suffering the effects of ongoing colonization, often including forced removal from their homelands, a distrust and rejection of mainstream narratives only seems natural. This extends to archival materials, for which sometimes resources, in terms of staff and time for digitization and money for safe storage, are lacking. Yet, handing these materials over to national archives belonging to the United States and with that a de facto foreign nation, is unthinkable. As sovereign nations, recording, storing, and cataloging their own history and culture is a powerful assertion of rights that are too often disrespected and overstepped. Thus, housing and actively growing these archives positions tribal stations even more centrally in the community, where they function not

only as the community station and the emergency communicator, but are now also a center housing some of the community's knowledge, songs, and stories, making them a symbol of tribal sovereignty and resilience. Much of the history of Indigenous peoples, who record history in stories, songs, and other oral accounts, was often not recorded in writing and was thus easier to be erased, denied, and altered by colonizers. The radio station archives represent a collection of the Tribe's history and present, recorded orally, in culturally appropriate ways, which not only makes a significant contribution to a more accurate historical record, but allows Indigenous peoples to record and control their own history in a way that was not possible before.

While not directly addressed in the interviews, as sovereign nations, Indigenous peoples have a very different, nation-to-nation, relationship with the United States, making them fundamentally different from any other community within the U.S. Tribal radio stations are also regulated differently by a dedicated office at the FCC, the Office of Native Affairs and Policy (ONAP), whose founding is a direct result of advocacy by Native Public Media. Tribal radio stations are proud of their activist roots and maintain a counter-hegemonic orientation in their programming. While this may not be true of every tribal station, it certainly was the case with KYUK and KUYI. The strong focus on "hyperlocal" information and the foregrounding of the Indigenous culture and language in themselves make a statement to prioritizing communicative preferences and norms of the local community over listeners who may be listening online or visiting, and to rejecting not all but many of the commonly accepted American standards of production and operations. For example, for another under-staffed and under-funded community station, spending an entire day with elders to record a single PSA or turning down funds because the funder might want to advertise a potentially harmful product, like commercial tobacco, to the community, even if that means having to go off air for some time over a lack of funds, would be highly unusual operational decisions at non-Indigenous community stations. The cultural and ethical integrity of the radio station is remarkable and certainly intertwined with the personal pride many employees and volunteers feel for being a part of the station, which in turn is seen as part of the community rather than an external medium or unknown, disconnected communicator of information. Because DJs and other employees are also known in the community and often actively involved in other capacities, such as ceremonial duties, teaching classes at the local

middle and high schools, and volunteering at other community organizations, they feel that they have very strong trust from their listeners, which they perceive to be an honor and a responsibility. Overall, tribal radio is deeply embedded in the community and functions just as much as an advocate and protector as it does as an informant and entertainer. The historical, political, social, cultural, and even regulatory context in which it does this work is unique to Indigenous peoples and tribal lands.

This already begins to partially answer RQ 2: “What role do tribal radio’s historic roots in Indigenous activism play in its functioning today?” The culturally grounded operations and archives with an emphasis on tribal sovereignty are closely tied to the activist goals of the 1970s. In addition, residents of rural reservations and tribal lands continue to face some of the same challenges and injustices as they did in the ‘70s and prior decades. Infrastructure on tribal lands is severely lacking, and health inequities are the more severe than for any other population group in the country. Using their own media outlet to overcome some of the effects of this infrastructure injustice, while exercising control over their narratives, is very much aligned with Indigenous activist goals. As John Active recalled in the interview, when the station first went on air in 1971, the only way they could access news to share with the local community was to find a leftover newspaper on the daily plane arriving in Bethel from Anchorage, from which they would then read the news on air to the residents of Bethel and especially the surrounding Alaska Native Villages which have no mail service and are so remote that even Bethel can be hard to reach. This example illustrates the severity of structural challenges for a young station in a rural Indigenous community setting, and the enormous contribution that these stations make, and have made back then, in connecting their communities to the world and to critical information, thereby reducing inequity and some of its harmful effects.

What is less central to these stations today, though certainly something they do think about, is gaining national attention for their situation. Some employees addressed wanting to educate outsiders with their programming, especially since both stations stream online, but this was explained mostly in the context of educating those outsiders who work in and with the community and thus have a direct impact on local residents, or educating a wider public with the goal of reducing harmful stereotypes about Native people. Gaining national attention with the

goal of political change was not something that interviewees mentioned as an explicit goal of their programming.

According to these interviews, tribal radio stations see a significant part of their role in keeping the community safe — from environmental threats, but also from exploitation, false narratives, and stereotypes. While certainly more pronounced in the '70s, this still includes protecting Indigenous communities from the U.S. government. Not only in terms of keeping the archives on tribal lands and restricting access, but also in terms of providing information. For example, several respondents at KYUK reported that the times during which hunting and fishing is allowed for Yup'ik subsistence hunters and fishermen can change quickly, and those who hunt or fish outside of the allowed time slots could be sent to jail. However, for those who are out hunting or fishing, accessing information can be challenging to impossible outside of KYUK, whose AM signal they can receive even in the remote villages and surrounding rivers or hunting grounds. In sharing this information quickly, residents are kept safe from going to jail over accidentally breaking the law, for lack of knowledge of a sudden change. Other examples of ways in which the station aims to protect the community were shared in the interviews, and it is evident from the interview data that protection and advocacy remain central to the missions of tribal radio, though perhaps in different ways now compared to their early days.

Regarding RQ 3: “How does tribal radio aim to improve the health of rural Indigenous communities?” much of the information that was shared specifically about health-related programming can only be understood in conjunction with the data on how the stations understand themselves, how they are positioned within the community, and how their listeners interact with them.

Tribal radio stations are deeply embedded into their communities, to a degree where it was compared to a traditional learning space that enjoyed the highest respect among community members; where the information shared would not be questioned. Tribal station employees felt proud and honored to work in the station, not just for what it provides to the community in a practical sense, but also in terms of the social status that the station enjoys as an educator and a cultural space. Using the respective Indigenous language is also central to this positionality, and was discussed in terms of cultural empowerment, but also with regard to health education.

Sharing health information in the Indigenous language is not only easier to understand for the older generation who learned English as a second language, but also generated stronger trust in the information. Many station employees involved in Indigenous language programming feel that their language is more clear and precise than English, and that it is therefore easier to communicate clearly, which is important when it comes to health information. Given the mistrust in U.S. institutions and governments, and sometimes Western medicine itself, being able to listen to health information in their own language has the potential to make listeners more receptive to it and more likely to engage in discussion, which the station employees have also observed.

Because most tribal stations are short-staffed and under-resourced, with little possibility to hire a reporter specializing in health issues or to research such topics in-depth themselves, many, including KUYI and KYUK, rely on partnerships with local health centers to produce health-related programming, such as PSAs, expert interviews, and call-in shows. These partnerships also further introduce these healthcare centers and their employees to the community through radio, which can help break down barriers and mistrust. The radio station often functions as a translator in their health programming — both literally, translating some topics into their own language, but also figuratively, translating jargon and complex issues into simple language fit for radio, a task that station employees are much better versed in than most medical doctors. In deciding whom to bring on air from the medical and wider expert community, experience working with Indigenous peoples is required. The KUYI General Manager shared that he turns down those who may be experts and offer to speak on air about a topic, perhaps in conjunction with a recent book release, but have not had any experience working in the context of an Indigenous community. The expertise itself was not questioned in this instance — who is or isn't granted speaking rights on tribal airwaves is about showing a commitment to and a relationship with the community whom they will be speaking to. Again, this decision-making exemplifies the self-understanding of the radio station as a protector of their communities, and that not just the best or most useful information must be selected for sharing, but also the best suited or most trustworthy speaker, and that further, potentially harmful outsiders must be kept out of the community in order to prevent further exploitation.

The interviews highlight how important it is for tribal radio stations that the health information they share be culturally grounded. The stations do not like to share generalized, nation-wide programs, which would be available at a lower cost and less effort, but rather produce content that is highly specific and applicable to residents of their particular region. This is partly due to their region being so unique, remote, and lacking infrastructure, so that much of the nation-wide programming would not be very useful to their audience, but it also has to do with the station's commitment to producing and airing culturally relevant information, especially when it comes to health topics, which can be more sensitive. In addition, the stations recognize the infrastructural limitations of their listening audience, in terms of rising healthcare costs, lack of public transportation, limited access to certain foods like fresh vegetables due to both cost and availability, and the circumstances of a rural and often subsistence lifestyle. Where other community stations are embedded within other media and infrastructure environments, tribal radio stations are isolated and operating as the sole source of much of the information they share for their local audience.

Given this standing and importance as the central source of information, both stations aim to address a very wide variety of health topics. As mentioned in previous chapters, Indigenous communities, particularly those in rural settings, are also disproportionately affected by a number of health issues, ranging from chronic diseases such as cancer and diabetes to mental health issues like depression and suicide. All of these and more were mentioned during multiple interviews, and for all of these rates are much higher among Indigenous peoples than any other population group in the country. However, the stations do not just focus on these health issues due to their prevalence, but also because these issues are the most preventable, meaning that accurate and applicable information can have the greatest impact in reducing their occurrence.

What is noteworthy about the mental health programming in particular is that the radio stations were described not just as informants, but as supportive community gathering spaces, sometimes even referred to as "radio support groups." This is another factor that speaks to the unique space that tribal radio stations occupy within the community, and the extremely high trust placed in not just information shared by their reporters and DJs, but also in the organization as a whole. Seen as a space where the community may gather and where otherwise very challenging



and sensitive topics can be discussed, the stations fill yet another gap, as such spaces may otherwise not exist or not be accessible for community members. Thus, thinking about tribal radio as a community medium, they are functioning as much more than an entertainer or an informant — they are also archives as discussed earlier, and additionally serve as gathering and support spaces.

Tribal stations not only make an effort to reduce stigma around certain health topics, but also aim to translate health information and motivate listeners to visit a healthcare provider and seek professional help and advice. While information about traditional healing, local medicinal plants, and so on is valued and shared on tribal radio, at no point is this information seen as in conflict with what is commonly referred to as “Western medicine,” meaning professional healthcare providers educated in a medical field at a university. In fact, the stations try their best to encourage their listeners to seek advice and treatment from such a healthcare professional. One of the ways in which this is accomplished is by connecting the importance of regular health checkups and screening with cultural and familial obligations they know to be important to listeners. Inviting local healthcare providers on air is also done with the intention of reducing mistrust and making an introduction between these professionals and the community.

The translational work being performed here, goes beyond — and sometimes does not involve at all — translating between English and another language. Rather, it involves translation from jargon to more widely accessible language, and a less tangible but equally important intercultural translation between different value systems. This latter aspect is not unlike what Aitken (1976) described regarding translation from science to technology — one more theoretical, one more applied — in which different value systems are at play. He points out that “information that is generated within one system exists in a particular coded form, recognizable by and useful to participants in that system” (p. 18,19). He goes on to say that “if it is to be transferred from one system to another [...] it has to be translated into a different code, converted into a form that makes sense in a world of different values” (Aitken, 1976, p. 19). This is the kind of translation that tribal radio practitioners accomplish — a way to make information make sense to their communities. Especially regarding health, not much information is produced specifically for rural Indigenous communities, and thus translation is necessary in order for the

information to be useful at all. PSAs and health advice that work well in urban settings or non-Indigenous rural towns, need to be redone and adapted in order to be useful to a Yup'ik subsistence hunter and his family, or a Hopi person living on the reservation with very limited access to many of the resources that much generic health advice assumes to be easily accessible. Tribal radio is aware of the limitations, unique strengths — such as running being an important part of Hopi culture, considered more than simply ‘exercise’ though of course it has the same health benefits — and cultural norms of each perspective, so that they are uniquely positioned to do translational work.

While not part of the original research question, the interviews also revealed that tribal radio stations do not only share health information with the audience, but also educate the healthcare providers about community needs. Sometimes this is done out of a general sense of concern, or because someone who works or volunteers at the station also has ties to a local healthcare organization, but often this is also a result of audience members turning to the station with questions they cannot answer. Multiple respondents shared instances of listeners calling the station with a specific health-related question, perhaps related to their prior programming, that was beyond the station employees' expertise. In some cases, instead of only referring callers to the local clinic, they share the answer to the question more widely — on air — assuming that if one person has this question other listeners might as well. In doing so, the station is also sharing valuable information about the community's informational needs with the health clinics.

One goal tribal stations have in sharing health information is to empower their listeners to make their own educated decisions about seeking healthcare. In keeping with their values of self-determination, on the individual and the collective level, station employees want to allow their listeners to decide whether or not they should make the, often significant, effort to travel to Bethel (in Alaska) or Second Mesa (in Arizona) to see a doctor.

Overall, health is a central topic for tribal radio stations. A broad variety of health topics were brought up during the interviews, and in every single interview was health brought up as an example, prior to me specifically asking for health-specific information or examples.

Radio station employees and volunteers are acutely aware of the very strong trust placed in them and the information they share by community members, and do not take this lightly.

There is generally a strong sense of responsibility and accountability to the community among station employees, which informs every aspect of their work, including how health information is shared.

Given all the factors discussed in this chapter that set tribal radio apart from other community radio stations and their neglect in media research to date, community media theory needs to be expanded, or Indigenous media studied as a completely separate instance of media. Just as policy research and practice is only now beginning to treat tribal lands as its own separate category from rural areas, media research should also recognize the unique standing and situation of Indigenous peoples. Assuming that they can be included and find themselves in other, broader categories like “rural,” “community,” or “local” is not only inadequate for our understanding of the topic under study, but also does Indigenous communities a further disservice.

The following chapter addresses the audience perspective on tribal radio, what these stations mean to the listeners, and what they learn about health from tribal radio, to further characterize in what ways this medium is unique, what role it plays in the 21st century, and how it may be able to help reduce the severe health inequities Indigenous communities experience.

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## CHAPTER 4

### **The Audience Perspective of Tribal Radio as a Community Medium and Health Information Resource in Rural Indigenous Communities**

In this chapter, I discuss the audience perspective of tribal radio, based on the data from 7 focus groups of 90-minute length conducted in Arizona (4 focus groups) and Alaska (3 focus groups) with groups of local Indigenous residents who regularly listen to their station, KUYI or KYUK, respectively. In total, 53 individuals participated in the focus groups across both locations. A wide range of demographic identities were recruited in terms of age groups, gender identities, occupations, education, and so on, as outlined in the first chapter.

While a particular focus of the study is on tribal radio as a source of health information, and this was heavily discussed in the focus groups, this qualitative audience study also revealed other functions of tribal radio in rural Indigenous communities that merit further discussion and are of importance for our understanding of its functioning as a health information resource. Speaking directly with audience members further revealed some less expected benefits of tribal radio for population health in addition to imparting health information. While a quantitative study, particularly an intervention test, as is common in public health and education, could have better measured to what extent a particular radio program can improve knowledge of a certain health topic, these other benefits would have likely been missed in such a study. Understanding a wider range of roles, benefits, facilitators and barriers of tribal radio in the community and as a health information resource allows for more applicable recommendations for the stations, and a more complete picture of how tribal radio can be characterized in media research.

This chapter first considers some of the literature on the role of community radio in language learning and preservation, and radio used for health information — in a global context,



because more research on the topic has been conducted outside of the United States, particularly in developing nations.

Focus group data is presented organized by the major themes that emerged from the analysis, and the three research questions that guided the audience portion of this study are answered one by one, clearly outlining which of the themes speak to which research question.

Not only did audience members have a lot of specific recommendations of health topics they would like to hear more about on tribal radio — which I have passed along to each station in a final report immediately after the focus group analysis was concluded — but the focus groups highlighted the multifaceted translational work that tribal radio does, and the intercultural facilitation, which ultimately benefits population health.

Given how severely understudied Indigenous media and their audiences, as well as rural Indigenous health education are, this study of an audience perspective is a start to filling a significant gap within the literature. From a practical point of view, this audience analysis can aid stations in the improvement and further development of their health programming, and healthcare providers who serve rural Indigenous communities better understand how local Indigenous media are used and how they can and should collaborate with them. In addition, a study like this, of rural and remote Indigenous communities and their media use, can benefit media development researchers and practitioners, who often work with communities facing similarly challenging circumstances with regard to lacking infrastructure, access to information, remoteness, difficult topography, and little research to draw upon.

### **Community Radio, Development, and Language Revitalization**

Community radio has been successfully used for development worldwide since the early 1980s, when more and more community radio stations were started in developing nations, and when development work had learned that a more participatory approach is generally more successful than the one-way educational approach used in years prior. Community radio also allowed for a more participatory and horizontal communication with larger audiences than what was previously possible, with only centralized, national radio stations, or no media at all in some rural areas (Myers, 2009).

Community radio has been so successful in promoting social change and development largely because it allows for programming that is highly focused on the local, on issues relevant to a specific location and community, that is much more engaging and applicable to them (Dagron, 2001; James, 2007). In addition, engaging known and trusted community members in production and airing voices that sound familiar in language, accent, way of speaking, and perhaps the person themselves, also makes community radio particularly effective for development, as well as its commitment to dialogue and serving the community long-term (Rolls & Narayan, 2008). In this way, community radio creates a sense of identity and belonging among listeners, bridges language barriers, and creates a virtual space for community members to gather, discuss, and connect with each other (Media Institute of Southern Africa, 2003; Siemering, Fairbairn, & Rangana, 1998).

Today, community radio remains heavily used in development work, even in areas where ICTs are available. Radio is still widely used in many developing nations. According to a 2009 International Development Research Centre (IDRC) of Canada report, all of the most reliable media use surveys available have found that radio remains the most widely used medium across the African continent, reaching the largest geographical area and audience compared to newspapers, TV, or Internet (Myers, 2009).

For Indigenous radio stations around the world, preserving their languages, which often don't have many active speakers left and are threatened by extinction, is a key objective (Browne, 1998). Some scholars, particularly linguists and anthropologists, have presented as a dilemma the fact that Indigenous languages are ancient and many do not have words for more modern concepts and items. To them, Indigenous languages being used on a mass medium like radio, is on the one hand great for their preservation, but on the other hand worrisome to their "purity." For example, Browne (1998) phrased it this way:

"If indigenous electronic media hope to restore or preserve the purity of their languages, aren't they defeated before they begin, at least where the worlds of technology, medicine, perhaps sports, and possibly societal problems, are concerned? Does any truly alternative indigenous term stand a chance when majority culture media quickly and broadly establish the 'appropriate' terminology? If the indigenous media seek a compromise

solution by borrowing Western terminologies and ‘indigenizing’ them with prefixes, suffixes, and pronunciations, what then? Should that become a common practice, how much of the ‘true’ indigenous language remains? Granted, all languages change over time, but the mass media seem to possess the capacity to bring about such change more rapidly and more comprehensively than any older media — bards, poets, singers, traders, etc. — ever were able to do.” (Browne, 1998, p. 2)

To this concern I would answer that based on my understanding after completing this study, it is not the goal of tribal radio to preserve their languages as a pure relic of history, frozen in time, but rather to continue speaking them as living languages that are useful for communication in the 21st century. Commonly, as Browne (1998) states, either new words are added to the Indigenous language or the English word is used. New words added to the Indigenous language for younger items and concepts are often an interesting and quite literal description of the item or concept, such as the Diné Bizaad (Navajo language) word for computer, “béesh nitsikeesi” which literally means “metal that thinks on its own” (Endangered Languages Project, 2011).

However, it is more common that the English term is simply used for such concepts, also because these newer words are not as well known to many speakers. Given the prevalence of English and American media all over the world, those anglicisms even occur increasingly within languages that do have their own existing terms for the same concept. From my perspective, maintaining languages as useful is more important and more in line with the missions of tribal radio stations than preserving their languages in a way that academic linguists or anthropologists would recognize as pure or “true” as Browne says (1998, p. 2).

This concern seems to relate back to the general debate over the “traditional” being opposed to and incompatible with the “modern.” However, culture is constantly evolving and new technologies are used as means for cultural production in negotiated and not absolute ways. As Buddle (2005) points out regarding urban First Nations radio stations in Canada: Radio broadcasters and listeners are defining “neo-traditional versions of Aboriginality” (p. 7). In addition, the public spheres tribal radio stations create are critical to sovereignty and local democracy (Buddle, 2005).

In her report about KUYI, Cara Dukepoo, a long-time volunteer at the station, also underlines that the concepts of tradition and technology or modernity in itself are by no means antithetical and that the goal of tribal radio is to preserve Indigenous languages as living and evolving, not as artifacts frozen in time. She states: “Through Hopi Radio, we reaffirm our respect for tradition by preserving our language and culture in a contemporary context” (Dukepoo 2013, p. 22).

Of course there is also more to a language and its preservation than only the words themselves. This matters particularly for an oral medium like radio, as opposed to print media, which are also used to preserve and teach Indigenous languages, but have limitations compared to audio. The tone of voice of the radio show host, accents, pace of speaking, use of pauses, intonation, and so on, are all important to the use of a language and what it really has to offer compared to other languages — and also allows radio listeners to “place” the speaker geographically and often socially (Crisell, 1994).

Preserving Indigenous languages is also important in terms of preserving ways to express different ways of thinking about land ownership, for example. Research with First Nations radio in the southwest Yukon region of Canada found that using radio to share oral histories and using Indigenous languages to reaffirm the Indigenous peoples’ relationship with the land offered a unique opportunity to counter the rhetoric of the State used in ongoing land claim disputes with Indigenous people who do not agree with those concepts of property ownership in the same way (Nadasdy, 2003). Native radio, and the counter-narratives that could be more widely shared with the help of it was and remains important for tribal sovereignty, which in turn is tied to the preservation of Indigenous languages and cultural practices (Moore & Tlen, 2007).

### **Community Radio as a Source of Health Information**

Community radio is heavily used for development around the world and health education is a key focus. There is evidence from different countries and projects that community radio is well suited and effective for health education, particularly in rural regions.

In Zimbabwe, for example, a community station hosts two weekly call-in shows, each in a different local Indigenous language, with a medical doctor in the studio to answer questions,

fittingly called “The Doctor on Air.” Focus groups with listeners found that listeners of all different age groups appreciated the program not only to learn about health in general, but to address specific concerns or symptoms they had. Some mentioned not being able to afford the consultation fees to meet with a doctor outside of this radio program (Mano, 2005).

Similarly in Bali, focus groups conducted with listeners of health programs aired by a community station in a rural village showed that the audience was very proud of their community station and highly receptive to health information and advice shared through radio. The researchers further note that a participatory approach to health programming was also conducive to its effectiveness (Waters, James, & Darby, 2011).

A pretest-posttest study with control group conducted on radio theatre for health education in rural Nigeria found that radio theatre programs were highly successful in increasing knowledge and promoting healthy behavioral intentions. Radio theatre programs covered a range of health issues from HIV/AIDS and other STIs to malnutrition (Sofowora, 2008). 89% of rural households in the study who listened to the programs said their knowledge of the topic increased, while 78% reported they felt more motivated to engage in preventive behaviors after listening the program (Sofowora, 2008, p. 84).

Even when health education was not explicitly the goal, or such programs designed on purpose, health topics were brought up naturally, simply because many rural health communities experience health concerns and do not have many resources to address them. One example from South America is Maya youth using their community radio station to discuss teen pregnancy and drug addiction, prevalent concerns for youth in their community (Cherofsky, 2015).

An intervention study conducted with rural, Indigenous communities in the Peruvian Amazon, which focused on a participatory radio program on feminist reproductive health, found that Indigenous Peruvian women were eager to participate in interactive radio programs, such as call-in shows, around women’s health issues, even when these topics are typically not publicly discussed in this culture (McKinley & Jensen, 2003). The women in the study viewed the radio program as an opportunity to voice their goals and practices regarding reproductive health, which they have otherwise found to be ignored (McKinley & Jensen, 2003).

Radio dramas, a format often used in development broadcasting, have been found to also be highly effective for health programming in a recent study with Inuit First Nations communities in Canada (Racicot-Matta, Wilcke, & Egeland, 2014). The mixed-methods study applied the Extended Elaboration Likelihood Model (Slater, 2002) to study the effectiveness of culturally relevant health messaging around healthy eating, and found a strong focus on cultural traditions, as well as trained actors, to be most important for engagement and identification with characters, and thus the effectiveness of the radio drama intervention as a whole (Racicot-Matta, Wilcke, & Egeland, 2014).

## **Results**

This section presents the results from the focus groups, ordered by themes. Results from both study locations are presented together, not separately. The study is primarily concerned with tribal radio as a health information resource for rural Indigenous communities, thus most of the themes and this chapter focus on this. However, it is critical to understand the overall role that the medium plays in the communities and the other functions that it serves. The focus groups offered valuable insight on these other functions of tribal radio as well, which are presented first in this chapter, followed by the more health-specific themes.

The audience perspective was studied on the basis of the results from three focus groups conducted in Alaska with KYUK audience members and four focus groups conducted in Arizona with KUYI listeners. Each focus group lasted 90 minutes, and I led all of them, with the help of a local assistant in Alaska, due to the fact that I had no prior experience visiting or working with this community, whereas I did have prior experience working at Hopi. I purposefully recruited a diversity of participants in terms of age range, gender, and education, and conducted mixed focus groups, as outlined in Chapter 1.

All focus group discussions were audio recorded with permission from the participants and transcribed verbatim by a human transcriber. Any names as well as other identifying information were removed from the transcripts. Focus group data was analyzed using *Atlas.ti* software, taking into account the context of the conversation and the interactions between

participants. In the analysis, 64 individual codes were identified. The most frequently assigned codes, meaning the topics most frequently brought up in discussion, are:

- 1) Health information topics recommended to the radio stations by the listeners
- 2) Tribal radio creating community
- 3) Tribal radio creating awareness of health issues
- 4) Having no other source for local information besides the tribal radio station
- 5) Addressing sensitive health topics on the radio
- 6) Youth involvement and representation on the radio
- 7) What makes the tribal stations unique and effective
- 8) Community-specific and cultural information
- 9) Tribal radio as a learning space for the community
- 10) Accessibility of health information

While these codes were the most frequently assigned, they do not necessarily hold the greatest weight in the analysis overall, as using quantitative approaches in qualitative analysis would be misleading and incomplete. To induce the overarching themes from the 64 individual codes, frequency as well as group agreement, liveliness of discussion, and importance of the topic or issue communicated by the speaker and the group, were all taken into account. From this analysis, ten themes emerged, which each represent multiple interrelated codes.

The ten themes of the seven focus groups conducted at both study locations are as follows:

- 1) The role radio plays in the community for information and entertainment
- 2) Cultural information and Indigenous languages on the radio
- 3) The station as an integral and trusted part of the community
- 4) Culturally appropriate communication and the radio instilling cultural pride
- 5) Creating community locally and for those who have moved away
- 6) Radio as the primary or sole source of information for audience members

- 7) Health topics listeners have learned about from the radio
- 8) The radio as a space to discuss mental health, trauma, and other sensitive health topics
- 9) Culturally appropriate health information and raising awareness of health issues
- 10) Radio programming improving healthcare interactions and barriers to achieving this

The first six of these themes help explain how and why radio matters to the residents of both communities, and how it functions as a medium from an audience perspective. The latter four themes address health information shared on the radio specifically. Of course even if not focused on health, the first six themes also help us understand how tribal radio functions as a source of health information.

In this chapter, each theme will be discussed in greater detail, with participant quotes as examples and to examine the details of what was shared in the focus groups.

## **1) The role radio plays in the community for information and entertainment**

### ***Radio as a source of information in general***

“Everybody has a radio” (KUYI Focus Group 1, p. 11) may be the clearest way to state the centrality of radio as a medium in rural Indigenous communities. This spontaneous response to the role of radio given in the first focus group hosted in Arizona came after a short moment of silence, at a question whose answer seems so obvious to local residents — of course radio matters, of course it is the central medium, and it is the one medial space that unites the community, first of all because it is the only one the vast majority has access to and frequently uses.

The ubiquity and centrality of radio was brought up in all of the groups in some way. A respondent in Alaska said that “They listen out there. You know, even if they don't listen to the radio all the time, they hear bits and pieces. And that's what's unique about KYUK and this region, it's a hub center for what we communicate” (KYUK Focus Group 2, p. 22).

Radio was mentioned specifically as more omnipresent than computers or the Internet, which for many people in richer media environments might represent this kind of communication “hub center” or gathering space, such as social media: “Motivation is key. As



long as its being said [on the radio] then everyone is going to be listen. That's why the radio is very important, especially because everyone's got radio. No one has computers just like she has stated [referring to another respondent], and they are hard to come by. So if everyone has a radio — which everyone does have a radio, they are in their cars, they are in their homes. So, I think they have more radios than they have computers still these days, so.” (KUYI Focus Group 1, p. 13)

Even for those who may have more access to Internet and other types of media besides radio, the radio is still extremely present, even if only because family members listen frequently, and the same station is on in stores, workplaces, the school, in the car, and any other place a radio can be played. “I use it specifically for information. Well, because my parents listen to it every day, you know, and I'm like, okay, when they, whenever they get up, that's the first thing that comes on. But I find it useful for information, too, like just things that are going on in the community” (KUYI Focus Group 3, p. 1).

Even though this person has other choices to access information, not only does she still listen to KUYI by proximity and by chance, but in doing so does find value in the unique, local programming that would be hard to find any other place, including online.

Older participants appreciate the information also as reminders: “When they're talking about maybe some information I [have] forgotten. Wakes up memories” (KUYI Focus Group 1, p. 7).

Particularly interesting is also that some understand the station as expressing their own personality, even though this person is not a volunteer and their interaction was limited to occasionally calling into radio shows. In fact, this respondent saw his own personality represented in the diverse programming on KYUK, perhaps also partly because the radio giving access to a variety of information also allows for subsequent in-person discussions with other community members, particularly because it's so likely that many will have listened to the same program: “I love KYUK, because it's a basis for my expressive personality. They have talk show hosts, they have a talk show in Yup'ik, in English, and it's usually a kind of topic for everybody in the community — maybe it's for voting, or - it's very efficient, you know. It's an information center where we all learn from what's going in our community, in the village, or Bethel, or the

state and they're very informant on what we need to hear whether it's weather-wise or news. And, like if there's gonna be a blizzard, or you know, fall weather. So it's also about safety” (KYUK Focus Group 2, p. 2).

On the note of safety, a Yup'ik respondent in another group also returned to the idea brought up in earlier chapters, that radio blends well with rural work routines (Craig, 2009), which was met with enthusiastic agreement and stories of the great lengths to which subsistence hunters and fishermen in rural Alaska will go in order to stay connected to the KYUK signal: “Respondent 2: Because it's not only Natives at fish camp or in the wild, it's all of us here. But I like that KYUK's signal can reach that far. We actually got a car battery with a radio right there. Group: [laughter] Respondent 2: And that's our radio at fish camp. Respondent 3: Everybody has to catch onto like radios that get their power from the sun or something.” (KYUK Focus Group 1, p. 20).

Another aspect this speaker is getting at is the diversity of the local community, particularly in Alaska, which is Native Alaskan to a vast majority (over 80% of Bethel residents and 90-100% in the surrounding Alaska Native villages (Data USA, 2018), however local Yup'ik residents strongly identify by their village (of origin or residence or both) and throughout the interviews and focus groups highlighted a strong awareness and respect for other residents of their region, whether Caucasian American, European immigrant, or otherwise. Of course many of the non-Yup'ik residents of rural Alaska work in professional positions otherwise unfilled and are thus hard to ignore. They are often teachers, doctors, nurses, pilots, engineers, and so on. Recognizing that, the first group in Alaska expressed wanting to have even more languages on air than the two, in order to make all residents feel included in the social space that KYUK creates: “Respondent 2: Because first they'll do English, and then Yup'ik. Respondent 3: They do it both in Yup'ik and in English. Respondent 2: But I think they should do all languages here, because we're all a mixed people in this town [Bethel], so it'd be nice to let everyone know in a certain language, you know? So we're all up-to-date as one community” (KYUK Focus Group 1, p. 6).

***The importance of tribal stations functioning as an independent, non-profit, public medium***

Audience members are not only aware that their tribal station functions as independent, non-commercial, public media, but also expressed in the focus groups that this is very important to them and leads them to trust the information more than they would if it was commercial radio (though there isn't any commercial radio stations available in most of the wider region that residents could compare it to locally). The listeners perceive the station to be closer to the community and more interested in their wellbeing than a commercial station would be.

“Respondent 3: You know, it's not as commercial as it's public, you know, you don't get a lot of — I think it's more tied to the community. And you don't hear, you know ... opposed to the commercial radio, where there's bad influences within commercial radio with the shows that they have in the morning. Like, they're trying to find out who's cheating on who, or, it's like bad gossip. Respondent 1: Yeah [laughter] Respondent 3: Because that can infiltrate to the kids, you know, when they're listening. Here we don't have that, that's not, you know, the issues that they want to bring up, so I think that in the morning, it's a really nice start, because you have that traditional sound coming out. You hear the language” (KUYI Focus Group 4, p. 2).

It's interesting that here the “traditional sound” that comes out of the radio into the home is conceptualized partly as the language itself, and certainly the voice of a known and trusted speaker who has a familiar accent, but also in terms of the content that is seen as more wholesome and positive than the pop culture “gossip” that is discussed on commercial radio (and actually many other non-commercial stations as well, but apparently not on tribal radio where this is seen as violating cultural norms).

In another group a respondent shared that in their view “It's more geared towards an audience than other public radio. What's good is they don't have commercials” (KUYI Focus Group 2, p. 10) to which other respondents reacted affirmatively. KUYI actually does use some limited underwriting as part of its funding, but it might be that because those ads are mostly local, they might be perceived more as information than ads.

Another aspect valued by listeners is that pretty much anyone can become involved at the station as a volunteer. This is true at both KUYI and KYUK. After some training, volunteers can host their own shows, which are often talk shows and/or participatory call-in shows, and seem to

be quite popular with the audience. In addition, whether or not they themselves participate in volunteer programs, listeners appreciate the fact that these exist and are open to anyone (with some basic requirements). One person who doesn't volunteer at KYUK shared that: "And actually they [KYUK] got this thing too, where you can volunteer, you can have your own talk show, you can have your own radio show. And they train you over there and you can sign up and be a talk show host or radio station person. So they actually give you a chance to be a part of KYUK, and share the news and play music and just experience how they work, rather than just hearing it on a radio you can experience that" (KYUK Focus Group 1, p. 4).

There is also an awareness among listeners that the stations make an effort to remain independent, including from their own tribal government, and this was something valued by listeners: "Respondent 2: And it's really — It's a good thing, too, because we don't have the Tribal Council coming over and saying, 'Hey you have to say this.' Or, 'Hey you have to say that.' Respondent 3: Yeah. Respondent 2: Or, you know [laughter] 'You guys are going to be on today, but you're off tomorrow.' Or, you know, stuff like that. So, I mean, that's a good thing." (KUYI Focus Group 2, p. 15).

However, another respondent in the same focus group shared their concerns that this independence might be threatened by funding concerns: "Respondent 3: I think they need to explore other options too. 'Cause of their funding. [laughter]. Respondent 2: Yeah. Respondent 3: It sounds like it's really hard for them to operate. And you can't have volunteers forever. So, I think there are good things if you got money from the Tribal Council. Or if you got money from, you know, the State. Of course, there's restrictions, but, you know, weigh out those pros and cons and see if it's worth it. Because, first, there's financial stability" (KUYI Focus Group 2, p. 15).

Another Hopi focus group discussed the same issue, and respondents there agreed that the station's independence from tribal and State governments was important to them: "Respondent 1: Yeah I agree that is very important that it is not tribal owned. I mean, or by the federal government, because there is a lot of politics going on now. We don't get the — I mean to me it's just good that it doesn't have the political involvement in there. Respondent 3: "Yeah. I think that's really good, because then you don't have these one-sided stories or influence from the

Tribe. You get to hear what's actually going on instead of just the main side of somebody's story” (KUYI Focus Group 1, p. 9).

### ***Variety of music and other programming on tribal radio***

Many respondents at both sites mentioned the variety on their respective radio station both in terms of music and informational programming as a major strength. A KUYI listener shared: “Respondent 1: I like it ‘cause it plays all kinds of different genres first of all. [...] I think one of the best things about it is that we're not stuck in one genre. We're all over the board and can hear a folk song and then a classical song. [...] And then it gives everybody else around our community a chance to experience other types of culture and their music” (KYUK Focus Group 1, p. 2). Other participants in the same focus group agreed, contributing other examples, like: “Respondent 4: And then when they put Gospel songs they do it every Sunday or Tuesday. I like that. Respondent 3: Mm-hmm [affirmative], yeah. Respondent 4: Mm-hmm [affirmative]. Respondent 2: And they actually let local people play music there, too. Which I always had pretty much fun with that. There was, like, someone there just this morning with a guitar playing something. Respondent 3: Mm-hmm [affirmative]” (KYUK Focus Group 1, p. 3).

The variety of genres and music was often brought up alongside the central importance of the station as a source for local information and its cultural specificity right away in every group, as one of the aspects listeners appreciate about their tribal radio station. For example, when asked what they like about KUYI, one respondent opening the group discussion said: “I would say the focus on the culture and the music program. You know, it’s alternate and, I don't know, just different types of music and stuff” (KUYI Focus Group 3, p. 14).

This was echoed in another KUYI focus group, adding that the diversity is not only entertaining, but allows listeners to expand their horizons and learn about different genres and with that cultures, both domestic and international, that they might not otherwise be exposed to: “[I like] the variety of the different genres, because, you know, you can listen to all country, okay, but it's like, sometimes you're not in the mood for that, or rock, or whatever, but it's playing different types throughout the day. It's not just one set type of music. And for me, I was like, ‘Wow, I've never heard this artist before or this song.’ and it kind of like, helps me learn

different, other types of music, ‘cause you know, I like all kinds of music, I don't just like one particular kind, you know. I think the only one is like maybe heavy metal is the one that I didn't really get into, but, other than that I pretty much like just about any kind of music, you know. Not just like, the vocals, but they have instrumental types. And they have different, other Tribes’ music that they bring in, too.” (KUYI Focus Group 4, p. 3)

Given the wide variety of musical genres, station DJs know they need to prepare listeners for whichever piece they will play next, as it may be unexpected and quite different from what was played before. The majority of both station’s programming throughout the day is not organized by genre in different themed shows, though these do exist as well, but the majority of programming is varied throughout the day simply based on what a DJ selects or what new local material might be available. Thus, DJs make an effort to introduce musical pieces in a way that provide some context, prepare the audience, and maximize the educational dimension of their entertainment program in alignment with their mission.

As mentioned in the previous quote, Indigenous music is a focus and there is a conscious effort being made to not only support indigenous artists by playing their music, but also expose audiences to Indigenous music from other Tribes — both traditional songs and contemporary pieces from across all genres. This was mentioned as important in most of the focus groups, especially at Hopi, where the station seemed to have a stronger focus on this than KYUK in Alaska. Another example is: “Respondent 1: A thing I really like is the different Native music that they play. Respondent 2: Oh yeah!” (KUYI Focus Group 2, p. 13)

In terms of non-music programming, listeners not only appreciate a variety of the types of information shared, but also the variation in formats themselves: “I like [it] because of variety. I mean, like one minute there's music, the next minute there's, you know? The overall variety. So you never know what to expect when the radio turns on. [laughter] It's something totally different than anywhere else, because, you know, in the lower 48, you turn on the radio station, you know, it's gonna be country music. You know, it's gonna be rap music. So here it's kind of cool — they were doing some kind of comedy, drama thing today. [laughter] And sometimes I'm just like, ‘What are they talking about?’ And then you listen to them and you're like, ‘Oh it's like a play. [laughter]” (KYUK Focus Group 2, p. 2).

When asked if this element of surprise could also be problematic in terms of some listeners becoming confused and not having this kind of patience mentioned here, to eventually discover what kind of program is currently on, and just turning the radio off, the group continued: “Respondent 1: I don't think anybody would turn off the radio. Respondent 4: I think KYUK’s sense of variety is good. You know, KYUK’s sense of variety program that whatever comes it's what's going on with that community or this community or that area. So we all do, we talk about it together.” (KYUK Focus Group 2, p. 10)

Even when probed further about potential downsides of this aim to cover as many musical genres and programmatic formats as possible, listeners doubled down on their open-mindedness, the importance of variety and learning something new, and also a recognition that even if unfamiliar to them, a certain topic, radio play, or piece of music might be important for someone else in the community and thereby matters to everyone. This latter quote might also be alluding to the varied radio program providing more opportunities for local residents to get into conversation and discuss something new they have heard, or what they liked or disliked in recent programs, since they vary significantly more than programs on commercial stations playing just the best selling music over and over.

Partly, this diversity stems from both stations’ commitment to community input, requests, and volunteers, which is also recognized and valued by the listeners: “Respondent 2: That's what I love about it, it gives everybody a chance, not just specific people. And that's what I love about KYUK. Respondent 3: And what I love about the volunteers is that they have a specific thing to do, but they always seem to have a lot of others and I think that's cool. Respondent 2: Mm-hmm [affirmative]” (KYUK Focus Group 1, p. 4).

Volunteers at both stations run their own shows ranging from talk shows to call-in shows to music-only programming, and could be in English or the respective Indigenous language. Some respondents regretted that, partly due to reliance on volunteers and partly due to general financial constraints, some prior programs no longer exist: “They had games, talk shows, really in-depth. And even if you're not participating you would learn a lot. But a lot of, a lot of those programs have been dropped, because they don't have the money to release that they used to have in the past” (KYUK Focus Group 1, p. 3). This also speaks to an awareness in the audience

of the some of the financial struggles the stations face operating as a non-commercial community station.

KUYI also broadcasts *Native America Calling*, a live call-in show happening every weekday 1-2pm EST, which is produced by Koahnic Broadcast Corporation, a Native-operated media center located in Anchorage, Alaska, and is broadcast online, as well as on about 70 community and tribal radio stations across the U.S. The shows focuses specifically on issues pertaining to Native Americans and Alaska Natives, and facilitates a conversation between an expert and the audience (Native America Calling, 2020). *Native America Calling* was mentioned in all of the KUYI focus groups, and any KUYI listeners who were aware of this program and listened to it had a positive assessment of it and were in favor of continued broadcasts of it on KUYI: “Respondent 4: I like that *Native America Calling*. Respondent 2: Yes. Respondent 4: That’s really informational” (KUYI Focus Group 3, p. 3).

Other participants agreed that “With the *Native America Calling* you can hear program from other communities around that are Native.” (KUYI Focus Group 1, p. 8) And “Respondent 2: I like *Native America Calling*. Respondent 3: Mm-hmm [affirmative]. Respondent 2: That's always good (KUYI Focus Group 2, p. 3).

## **2) Cultural information and Indigenous languages on the radio**

I opened the focus groups by asking what some aspects and programs are that listeners like about their respective station, followed by what they feel makes their station unique or different from others.

Some aspects mentioned include that “it’s specific towards this community” (KUYI Focus Group 1, p. 7), “the focus on the culture and the music program” (KUYI Focus Group 3, p. 2), and “they're our calendar, our reminder” (KUYI Focus Group 2, p. 1).

Other participants shared more emotion-centered responses, saying that “It’s very personal to me. It hits me personally, you know.” (KUYI Focus Group 1, p. 7), simply “makes me feel good” (KUYI Focus Group 1, p. 7), or even “love and connection, I guess. Especially connection with the old people.” (KUYI Focus Group 1, p. 7). Listeners spontaneously naming “love and connection” as something that makes their station unique is a statement to the



immense trust listeners have in their station, and how strongly represented they feel in the programming and by the station employees themselves. This is related to the appreciation for the volunteers and for the presence of KUYI (in this case) reporters being present in the community to collect materials for the archive, live broadcast different events, and so on: “I think it’s cool that they are volunteering, because it takes a lot of time out, too, you know. And just maybe just few hours that they do, you know, just that little time it gives information out to the people. So that’s important. Just that little time that they donate is still important” (KUYI Focus Group 1, p. 10). Someone else referred to KUYI’s event coverage, saying that they appreciate “their community involvement. I mean, they’re everywhere and they broadcast different activity days, like I know they do Veteran’s Day and stuff like that. Just that they’re all out there in the community. So they’re bringing it to us — maybe some of us can’t attend for some reason or another or work. We can hear stuff like that and we’re still involved with our community by hearing that” (KUYI Focus Group 1, p. 7).

### ***Indigenous languages on the radio***

The use of the respective local Indigenous language on the radio was extensively discussed in all focus groups, and certainly is very important to the listeners. The data on Indigenous languages on the radio is presented here for each location separately, because of the volume of data on the topic, and the particularities of each language that are brought up by participants.

#### ***KUYI Audience***

Immediately, the threat to the Hopi language was discussed in the groups. The Hopi Tribe has been making a conscious effort to strengthen their language for a while, with language classes and immersion programs in Hopi schools, language classes for community members, and of course significant integration of the language into KUYI programming. The Hopi people, both speakers and non-speakers, are very much aware that their language, like most Indigenous languages is endangered.

Respondents in the first focus group opened the discussion by sharing that: “Respondent 2: I think it’s very important for them [KUYI] to keep speaking the language for our people and our children and our generation that is not really picking [it] up now. Respondent 5: I think that’s important in the radio station, because we need to keep our language going in our Tribe, because, you know, it’s going down nowadays ‘cause a lot of the younger generation don’t know how to speak it. But then doing that I think it helps the younger generation and also it helps the elderly to understand what’s going on, because some will — don’t really pick up the English words” (KUYI Focus Group 1, p. 3).

This idea was also expressed in this group: “Respondent 2: And maybe because we’re losing the language, maybe they [KUYI] can help. Respondent 3: Yeah. Respondent 2: Whether it’s the Hopi Word of the Day or... Respondent 5: Exactly. Respondent 2: ... or maybe some time devoted to words. Respondent 5: Like, ‘Phrase of the Day’ maybe. Respondent 2: Storytelling. You know? Respondent 5: Yeah. Storytelling. Respondent 2: Just anything for learning of the language” (KUYI Focus Group 4, p. 16, 17).

Some respondents also noted the different dialects that exist in different Hopi villages, and being motivated by hearing Hopilavayi on the radio to practice understanding the different local dialects and perhaps to begin speaking the language more in daily life: “I think it’s good. I mean for me, I can understand Hopi, but I’m not fluent in it. I don’t speak the language, Hopi, often, because I think I’m self conscious, because I get tongue-tied or how to phrase the word, you know, how to do a sentence, you know? I’m hearing it up here in my head, but when it’s time to actually say what I wanna say, it doesn’t come out the way I want it to. But listening to that, it helps you, like, learn more. And even the different dialects from the different villages, because we don’t all speak the same dialect, you know. Some speak faster or slower. [...] If there was a word I didn’t know — but I could understand what she was talking about and it makes me learn it more, it seems like” (KUYI Focus Group 4, 19).

Another focus group also addressed not just the accents, but another Indigenous language spoken by some on the Hopi Reservation: Tewa, the language of another Tribe closely related to the Hopi people: “The language part is good, because, you know, there’s Tewa and Hopi, and, my grandpa was Tewa, but when he passed away, that kind of faded away ‘cause we’re not around

people that really talk it a lot. My dad talked Hopi a lot, and you know, that was one thing he always told us if we don't know it, then don't ask. Because, 'you had all that chance to learn when you were little.' 'Cause he was a snake dancer and he would never share anything with what's going on up there with us. And, you know, you find that out yourself, you know, or go ask your aunts. But, that's one thing I like about them [KUYI], too, is because have it in Tewa and in Hopi, and then they even have like a little game thing. But, [redacted], my brother, has been sick so he hasn't been doing the Tewa one [volunteer radio show]. That's what I miss, you know, hearing him on the radio and saying the words and you're standing there trying to pronounce it. And then I write it down, but I just laugh, but I at least try to say it [laughter].” (KUYI Focus Group 2, p. 9).

This speaker is referring to her brother, one of the Tewa speakers, who are much fewer than the Hopilavayi speakers on the Hopi Reservation, hosting a volunteer radio show which incorporated the Tewa language to some degree, but discontinued for health reasons. During my research visit and as of right now, to my knowledge, there is no Tewa language programming on KUYI.

Since many people listen to KUYI at home together with other family members, they said the Hopilavayi programming also helps facilitate further discussion and learning among family: “And then like for me, I have to ask them [parents], because I don't understand Hopi. So I'm like, 'What are they talking about?' you know. And they just laugh at me, because then they're like, 'Well, he said this and this and this.' [laughter] There's this one DJ. When I first heard him on the radio, I told my parents, I said, 'Can you go over there and tell him to slow down?' [laughter] Because he talks Hopi, but it seems like it's real fast, you know. But I like to listen to him anyway. I don't know what he's saying, but I still like to listen to him. But, yeah, I have to ask them, you know, when they're talking Hopi, like 'What are they talking about?' It's just my, you know, my cultural part that I'm lacking right there is I don't know how to speak Hopi or understand it” (KUYI Focus Group 3, p. 9).

Some listeners felt so strongly about the importance of the language that they felt this programming should be continued and expanded regardless of what audience members may want, or whether they say they like this programming or not: “I think that the station — You

know, you're gonna always get that question of, are you meeting the needs of your listeners. But I think for some topics, especially for language, [they should] just [be] going full force and not trying to figure out what's gonna please the listener, because in the end you're getting the full exposure of the language, regardless of from what village they're from. And it may just do the opposite: Making the listeners pay more attention, because they're trying to figure it out, you know? And kind of putting the pieces of the puzzle together” (KUYI Focus Group 4, p. 20).

Others highlighted the presence of elders on the Hopi Reservation who grew up speaking only Hopilavayi, learned English later in life, but still prefer and better understand the Hopi language: “I think that [KUYI’s Hopi programming] is pretty good because you’ve got the elderly out there and sometimes when you try to communicate in English, you know, they don’t really understand, so it’s good that they have people speaking the language and interpreting it for us. Not only that, but it’s good for our children in school, it’s kind of cultural advocacy and they help with different topics. They have these different healthcare professional coming in. It’s really good; they listen to it everyday at school. And not only that, but they’re singing the songs. It’s a way to learn” (KUYI Focus Group 3, p. 3, 4).

Some non-speakers or current Hopilavayi learners feel that the Hopi language programming was a little overwhelming and would prefer more language programming that has the distinct goal of teaching the audience, perhaps through focus on just one word or phrase and incorporating it throughout the day. “Speaker 3: Well, on the cultural side, maybe it's good when they talk Hopi and they go back. But maybe just focus on a word a day. Speaker 2: Yeah. Speaker 4: Yeah. Speaker 3: And then the DJ uses it throughout the day. So you know the people hear it over and over and it could be health related, it could be — Speaker 2: Just anything. Speaker 3: But even if it's just basic, it will help people learn just one word a day” (KUYI Focus Group 2, p. 35).

### ***KYUK Audience***

Just as in the Hopi focus groups, the Yup’ik participants also immediately brought up the threat to their language and how critical they believe the radio to be in preserving the Yup’ik language: “Respondent 1: It [KYUK] has always been bilingual. Interviewer: Mm-hmm

[affirmative], yeah. Is that important to you? That it's not just English? Respondent 1: Yeah. Respondent 4: Very important. Respondent 1: Yes, yes! So that our language won't — our language is getting lost. Not English; English is expanding everywhere" (KYUK Focus Group 3, p. 11). Again, there is a strong awareness of the threat to the language, and an even stronger desire to preserve and to use it, so that hearing the Yup'ik language on the radio is very important to the KYUK audience.

There is also a lot of pride connected to the Indigenous language and to being a bi-lingual community, which is reflected on the radio: "The first wonderful part is we're bilingual, and they [KYUK] do let us be bilingual, which is unique, because in other places you don't — you know what I mean, they don't have that" (KYUK Focus Group 2, p. 2).

The Yup'ik language programming is again equally important to the non-speakers and important to reflecting the Yup'ik cultural identity: "Interviewer: Do you think people appreciate the bilingual programming even when they're not speakers? Respondent 1: Yeah! I do. Respondent 2: And if that wasn't a component, it would feel very wrong." (KYUK Focus Group 2, p. 3) It's an interesting choice of words to say that English-only radio programming would feel "very wrong" even to those who don't or only partially understand the other language. This says a lot about how integral the language is to cultural pride and self-understanding, and that wanting to hear the language on the radio is about more than just wanting to improve language skills, or not understanding English as well.

Others highlighted the inclusion of the Yup'ik language in call-in shows as a matter of accessibility: "Respondent 4: And I think most of the time they cover it in Yup'ik, because the villages are mostly Yup'ik people and a lot of these ideas [they have] are wonderful and it's different from like somebody from Bethel or Anchorage or you know, big city. We get to work those things out, we talk about it on the radio. Respondent 2: And then they have Talkline. I don't know how long it is, but where they just, I mean, anybody can call in and talk about wherever they are. Respondent 1: Right. Respondent 4: Mm-hmm [affirmative], yeah. Respondent 5: It works, definitely. Respondent 2: Yeah" (KYUK Focus Group 2, p. 9).

This conversation is both about the radio signal reaching remote villages, listeners from there being able to call in and participate alongside residents of other villages and Bethel and the

most city-like environment in the area (often referred to as “the city” even though by most standards it would be characterized as a small, still very rural town), and about inclusion. The idea that “these ideas” from remote village residents “are wonderful” highlights a desire and appreciation for diversity of thought on the radio, and wanting to include everyone in the area in conversation via the radio.

Similar to the Hopi audience, the Yup’ik audience is also concerned about elders who don’t understand English well, and the importance of the Indigenous language programming for them: “And then the hunting and fishing closures<sup>12</sup>, if it were done in Yup’ik. Interviewer: Is it mostly in English right now? Respondent 4: It happened quite a few times for this older man in his eighties. He didn’t know he was not supposed to fish. If fishing times were announced in Yup’ik, you know, elders, some elders that's all they do is speak in Yup’ik, you know? Interviewer: Mm-hmm [affirmative]. Respondent 4: He said he didn't know that the fishing was closed. He had to use a translator. Interviewer: Did they only have it in English on the radio? Respondent 4: Um they had radio, but he said. Interviewer: It was only in English? Respondent 4: It wasn't announced in Yup’ik when and where they can hunt and fish” (KYUK Focus Group 3, p. 25).

From the station employees, I had previously learned that fishing and hunting closures actually are announced in Yup’ik, however, this could have either been a more recent change, prior to this anecdote taking place that the respondent is referring to, or it could be that not all of these announcements at all times of the day are covered in both languages. The Y-K Delta in Alaska still has many monolingual Yup’ik speakers, perhaps one of the highest proportions of monolingual Indigenous language speakers in the nation. While monolingual speakers still exist at Hopi as well, this seems to be a stronger concern and motivation in rural Alaska.

Those who are fluent in the language also hold a lot of pride in this ability, and are respected by others in the community. Several Yup’ik speakers in the focus groups expressed their pride in speaking the language, and the role that KYUK’s Yup’ik programming plays in their self-concept and identity. One example is this quote: “Respondent 5: For me, I guess, you

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<sup>12</sup> Time frames during which certain animals cannot be fished or hunted, sometimes just a time of the day that can change on short notice.

know, I'm fully Yup'ik, I understand Yupik — it's my language. [...] I used to have it good, when I grew up, I started, you know, talking Yup'ik in little ways. I might have been taught from my grandma or grandpa. So, I've been listening to the radio, understanding the Yup'ik. You know, it's a harder language. If you don't know [it], how would you even understand what they're saying?" (KYUK Focus Group 1, p. 7)

Aside from establishing his status within the discussion group, which included men of similar age from other villages who may never have met before, this statement is also expressing a sincere concern for those in the KYUK audience who don't understand Yup'ik, and imagining that they might be quite lost. However, this concern was immediately refuted by the rest of the group, who highlighted KYUK's commitment to not only using, but teaching the language: "Respondent 2: They're good at teaching, putting on new words. Respondent 5: Like, talk about how the weather is and what not. Respondent 1: And [they] always have this one — because I don't know how to speak Yup'ik — but they always have this Word of the Week in Yup'ik and I think that's pretty interesting, because you get to learn a lot of new other words" (KYUK Focus Group 1, p. 2).

Another focus group also discussed how cutting the Yup'ik language programming would be unacceptable to both fluent speakers and those who are trying to learn: "Respondent 4: Yes, it wouldn't feel right, I mean, we started to partake — I grew up listening to bilingual radio. I thought everybody had that. I went to college, and I was like there's no Yup'ik on the radio over here! [laughter] Like, yeah. Respondent 3: I don't speak Yup'ik, but I enjoy listening to it, because it enhances my awareness of the community, you know? I mean, even though I don't understand what they're saying, if it's done in English and then in Yup'ik again, I can start to pick out little things. I mean, I wouldn't be able to repeat the next day maybe, but" (KYUK Focus Group 2, p. 3).

Similar to the Hopi focus groups, the Yup'ik groups also brought up different local accents, and wanting to hear different Yup'ik accents on the radio, which can be quite different from each other: "Respondent 1: Oh there's a difference between how we communicate in Yup'ik. There's Central Yup'ik talk and then there's coastal area communications and then there's a Nunivak style of speaking that's kind of different. So which will be picked in order to

communicate here on KYUK? Interviewer: Yeah, yeah. I think a lot of that, too, might depend on what volunteers they have and where they come from and what they speak. Respondent 1: Mm-hmm [affirmative]. KYUK is placed in an area many speaking in Central style Yup'ik. And then can they — from another village that's like, the coastal area or Nunivak, which is an island, when they don't translate we sort of can't understand them" (KYUK Focus Group 3, p. 10). This speaker is expressing a desire to hear more Yup'ik accents on the radio — though the entire KYUK area is in the Central Yup'ik language region<sup>13</sup> — but also a concern that some Yup'ik dialects are so different from each other that speakers from different regions couldn't understand each other easily. The question that is expressed here, of which dialect will be picked to be spoken on KYUK, even though that seems like quite an obvious choice, as it is located in the Central Yup'ik language region and that is what the vast majority speaks, highlights again the desire for equal representation and for including everyone in the community in the conversations on KYUK.

### ***Culturally appropriate communication on the radio***

Culturally appropriate communication on the radio is very important to listeners, and extends beyond using the Indigenous language or addressing individuals properly. It also included things like adjusting communication styles to the season: “Respondent 2: Yeah. And they respect the times, the seasons, and stuff like that when you're supposed to play music, when you're not supposed to play — Respondent 3: Certain times. Respondent 2: Yeah. So, that's really good too about that. Respondent 3: Yeah” (KUYI Focus Group 2, p. 8). Other group members explained further: “Respondent 3: You know, the winter is for stories. Respondent 4: They used to have it in the winter, because of the scheduling. To respect the tradition, you know, we can't — Respondent 2: Oh, yeah. That's the thing about the storytelling, it's only for certain times of the year, the season. Respondent 4: They have different guests come in and do Hopi storytelling [on KUYI]. Respondent 5: Yeah. Respondent 4: And cut out other things. [...] It's quiet time. Respondent 3: Yeah, it's like quiet, there's no, you know, crazy rock music going on. Respondent

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<sup>13</sup> Besides General Central Yup'ik, which is the most widely spoken dialect with about 15,000 speakers, other main dialects of Yup'ik are Norton Sound, Hooper Bay-Chevak, Nunivak, and Egegik. (University of Alaska Fairbanks Alaska Native Language Center, 2020)



2: Mm-hmm [affirmative]. Respondent 3: Yeah. Respondent 4: Yeah.” (KUYI Focus Group 2, p. 17). There was strong agreement between the listeners that this adherence to culturally specific rules about forms of communication and activity that are appropriate to a certain time of year for one do not go unnoticed and are not taken as a coincidence, and are also important as a form of respect and cultural integration of the radio.

In Alaska, KYUK listeners spoke to a more general way of speaking and communicating that is unique to the Yup’ik and that they find to be reflected on the radio, including unusually long pauses for radio, a generally level amount of volume and voice (e.g. no surprised screaming, yelling, overexcitement, which can often be heard on U.S. commercial radio), giving everyone time to respond, not interrupting, and so on. One group explained it this way: “Respondent 4: And we're very, very soft-spoken. Yup’ik and Cup’ik we're very soft spoken. I'm sure, I mean I've met people when I travel all over and some of them are — if you're not brass and if you're timid like us they think we don't know much. [laughter]. Respondent 1: What she’s talking about is actually called the ‘Quiet Way.’ Respondent 4: Mm-hmm [affirmative]. Respondent 1: So it's called the ‘Quiet Way,’ and — Respondent 4: We practice that. Respondent 1: And somebody said if you hear the elders, and elder is talking, only he will talk. Respondent 4: Mm-hmm [affirmative]. Interviewer: And is that reflected on the radio? Respondent 4: Mm-hmm [affirmative], with respect, yeah. Respondent 1: Of course, of course.” (KYUK Focus Group 2, p. 3).

It seems obvious to the KYUK audience that they find the ‘Quiet Way’ that they identify with reflected on the radio, in terms of how people speak on air. This is also not restricted to only the Yup’ik language programming, and thereby not a function of the language itself, which has very different characteristics from English, but interestingly, is something that the audience saw reflected across the entirety of KYUK’s programming.

Both examples highlight very different ways to communicate in a culturally appropriate way — according to time of year and according to a general mode of speech across languages. This is quite unique and interesting, as communication styles on community radio have previously been studied in terms of voices, accents, and languages, but not in terms of communication patterns and programming changing during different months according to

cultural mandates, or according to an entire philosophy of being that affects communication patterns, such as the Yup'ik 'Quiet Way.'

To the listeners, culturally appropriate communication also includes sharing culturally specific information, not only in terms of "hyperlocal" information, but also in terms of reminders of how to be a good person, according to their Indigenous cultural values:

"Respondent 3: I like to have those little commercials [PSAs], like, about integrity or sharing, like those things that you need to remind people how to be. Respondent 5: From a Hopi perspective. Respondent 3: Yeah, from a Hopi perspective, you know, integrity — something that will encourage people like us" (KUYI Focus Group 1, p. 28, 29).

### ***Youth involvement and representation on the radio***

Involving youth on the radio and hearing young voices on the air is very important to listeners at both locations. KUYI has a partnership with local schools to teach radio classes, which earns them additional respect and appreciation in the community for providing opportunities to children and teens living on the reservation. Both KUYI and KYUK also have internship programs, and accept teens as volunteers at their stations as well.

Regarding KUYI, listeners in the first group shared that: "At one point they did try to start a program for the younger kids in elementary school where they were learning about radio and communications and stuff like that. So that was another way of getting even the younger kids involved and introducing them to another whole area that's different from anything else." (KUYI Focus Group 1, p. 6). And later in the same group: "Respondent 2: I don't know if the High School kids are still doing the radio thing, anyways, that would be a good way of getting our kids to — like, have them do like a little commercial [PSA] about the suicides, stuff like that, which is — there is kids out there that, you know it could happen to. Respondent 3: There are already. Respondent 2: Drugs and stuffs like that so maybe they can put that on their shows and then even the health, like you're talking about the health stuff and they can, you know, motivate the kids to get healthier, just like that. Respondent 3: Getting them involved by having them produce those commercials [PSAs] maybe" (KUYI Focus Group 1, p. 28).

It is quite remarkable that the first topic suggested as a topic for a youth radio show is suicide. For one, this reflects the severity of the teen suicide crisis in rural Indigenous communities and the high level of awareness among local residents, but also the trust placed in, and perhaps responsibility placed on, youth to not just partake but to lead critically important conversations. Just as the great respect for elders, there is great respect for youth in Hopi society, and trusting them to speak to one another and be an integral part of addressing the difficulties they face as a demographic is a sign of respect, not disengagement of other demographic groups.

Listeners also enjoy hearing youth on the radio, saying that “I enjoy having our children on there too. And they speak in Hopi what they learned or they sing a song and I enjoy hearing that. And questions of the little kids maybe” (KUYI Focus Group 1, p. 6).

Many listeners would like to see more programming not just by youth but created for the youth, because there is so little alternative for them, and radio is seen as a good medium for learning: “I think bringing back some of the children shows would be a good thing, because again school starts and the students on the bus don't get that connection with things that we don't really have in terms of younger programming for students out here. So, I think bringing some of that back would be nice. Because they're on the bus for such a length of time” (KUYI Focus Group 4, p. 2).

Another group echoed this: “Respondent 3: It's a way to communicate to your little ones, because I was just telling, talking to my fifth-grader about why it's important what they're [KUYI] talking about. Respondent 4: Yeah. While they are growing, they'll remember. I remember what my elders told me, I still remember” (KYUK Focus Group 3, p. 17). Others in this group also said that KUYI should use their Facebook page more actively in order to communicate with youth who are using social media actively.

Generally, youth-centered programming of any kind is very popular with the audience. There were many comments made similar to this: “I would like to see more things for children. I know they used to have that Shooting Stars program. And I happened to be at work Saturday, and it came on, and I was like, oh wow, I didn't know they still had this on the air, you know. I mean, I helped a couple of times with that, reading stories, you know. And my daughter did and so I would like to see some more things for children” (KUYI Focus Group 3, p. 7).

Speaking about health in particular, many shared the idea that when children and teens hear health-related programs on the radio, for example on long school bus rides in the morning and afternoon or in the home, they will discuss the topics with their peers and educate each other: “The best mediums for health education are our children. Because, we know that as little kids, they don't ever forget what they learned because they participated, they carry it with them. And they're very eager to educate their peer groups” (KYUK Focus Group 1, p. 11).

Listeners in Alaska shared similar ideas and anecdotes regarding health programming for youth. Some participants were also actively involved in youth programs that might offer opportunity for collaboration with KYUK in the future: “I'm glad that you bring that up because I'm currently working on this project, kind of did a project earlier this year regarding this thing. But um, I had, I'm working on like this essay contest for the youth of our region to kind of show and tell us what living healthfully means to them” (KYUK Focus Group 2, p. 18).

In Arizona, such collaborations already exist, particularly between the Hopilavayi program at the high school and KUYI: “It's good, because the school that I'm employed in as a [redacted], we have the Hopilavayi [program]. And they go back on the broadcast and even to record it. And then, use it to their advantage to the student and teach them like that, you know, like listen how she said it. They'll explain to them and some of them know Hopi, some of them don't, you know. But even with that language barrier they come together and it's very helpful, because it gives out topics and information, you know, that they can be aware of, they can find interesting. So it's helpful. I mean, like I said, we have that Hopilavayi program with the radio and it's very good, you know. They listen to it and it helps the teachers out a lot, too, to do their cultural part” (KUYI Focus Group 3, p. 11).

Generally when discussing reaching the youth with health-related messaging, everyone immediately suggests collaborations with KUYI or KYUK, because they are seen as the most effective and appropriate medium, even though several respondents also mentioned that social media is as popular with the local youth as it is elsewhere (though access may not be as ubiquitous and reliable). Many examples were given for health topics aimed at children and teens, from mental health concerns, to drug and substance abuse, to relationship topics and healthy eating. Whenever residents were aware of local programs that exist to address any of

these issues, they suggested that the program collaborate with the radio station: “I was thinking about the youth tobacco program that we have out here in Hopi. That should be one of the fundings that should help the radio station because they're trying to advocate for children not using tobacco. But they're not going out of their own box, too. At least go to KUYI and say, ‘Hey, we’ve got this and that in place. Will you be able to work with us?’ You know, ‘cause I see a lot of those programs, but where are they? Who are they talking to? ‘Cause they went to Albuquerque [major city in New Mexico] and then a couple of times they've come back to forward what they learned. But who are they trying to let know not to smoke?” (KUYI Focus Group 2, p. 17).

This quote also illustrates that for residents not directly involved in a certain program, it may be something they have heard the name of, but if it is not discussed on the radio, it seems invisible to them, and they may not have another place to easily learn about the program, other than actually attending their events or physically going to their office or location. This particular speaker also appeared frustrated that not more information had been shared on the radio about this program and interestingly felt that it was the program’s responsibility to approach the radio station, not the other way around.

The same group later returned to the idea also expressed earlier, that because tribal radio is everywhere in the community, they have immense power to share messages, including about health topics, that will eventually be remembered: “Respondent 3: It goes back to targeting audiences. Like, in the morning. You can bet every school bus has KUYI on. What topics do those kids hear? Respondent 2: Mm-hmm [affirmative], yeah. Respondent 4: Oh yeah. Respondent 3: And they hear it every single day. When they keep hearing it, it'll sink in at some point” (KUYI Focus Group 2, p. 38).

### ***Cultural information and traditions***

Though much information related to cultural traditions, ceremonies, teachings and so on are often confidential and not intended for the public, or even restricted to certain tribal members, audience members trust their radio stations to discern what is and isn’t okay to be

shared on air, and would actually like to hear more programming about the traditional knowledge of elders.

“And then for, like, the teachings, you know, the culture and the respect and, you know, the ways we were taught, like, preserving our heritage and all of that.” (KUYI Focus Group 2, p. 5).

But aside from preservation in the radio station archive, listeners also want to hear at least some of this information, that is alright to share, on the air for everyone in order to learn:

“Respondent 3: More elders speaking. For you know, people are doing wrong stuff. Interviewer: Are you thinking about a specific thing that elders could be talking about, like do you want them talking about anything or like politics or health or ... Respondent 3: So, [Yup’ik word] more of that, [same Yup’ik word]. Respondent 1: Um, areas where we should know and understand and be told for our understanding. Interviewer: Yeah, sorry what does the word mean? Can you translate? Respondent 1: [Yup’ik word]? Interviewer: Yeah. What does it mean? Respondent 3: Instructions. Respondent 1: Mm-hmm [affirmative]. Interviewer: Oh, like teachings? Respondent 3: Yeah. Yeah” (KYUK Focus Group 3, p. 28).

Wanting to hear “more elders speaking” is a topic discussed at both locations. KUYI listeners in Arizona mentioned that: “Respondent 1: What I haven't heard lately are those Hopi history pieces, that used to — you remember those? Or like what time of the day it is and then they'd explain what you're supposed to be doing at that time. I haven't heard those of late. Respondent 2: Oh, like before the news? Respondent 1: Yeah. Or it just tells you what time of day and what you should be doing, or what they, what they were doing [traditionally/historically]. I haven't heard those. Respondent 2: Oh, yeah, the month? Respondent 1: Mm-hmm [affirmative]. The months, too. [...] Respondent 2: It's like there are elderly pieces that you hear every now and then, those are really nice. You know, they're talking to the younger generation. Respondent 5: Yeah. Yeah. Respondent 2: And, it's sad, you know, some of it is sad to listen to, because that's — But it's telling us, you know, the younger generation, how we are. [laughter] Respondent 5: Yeah. Respondent 2: And how, you know, how it used to be back in the day” (KUYI Focus Group 3, p. 11).

Participants are expressing a sadness over some traditions and ways of living, or even the knowledge about how life used to be for Hopi or Yup'ik people, are getting lost, and they see the radio as one of the main conduits of this information. Listeners pay close attention to the voices of elders on the radio, much as they would if an elder was speaking to them in person. Even though some of the elders on the radio might talk about how traditional ways are getting lost, making the listeners sad, or might criticize the younger generations for their ways of life, listeners said they would not turn the radio off, but would respect the elder and their knowledge by listening and accepting what they have to say.

Both stations have particular shows dedicated to Native music and talk or call-in shows in the Indigenous language, which often have elders participating, that offer an opportunity to share this kind of information. One Yup'ik focus group shared: “Respondent 4: Well, I like the talk show, it's on Mondays at ten, the Native talk show, I like that. Because it lets me learn a little bit more, what the Natives used to do long ago, yeah. Interviewer: Mm-hmm [affirmative]. What about the shows in Yup'ik, when they speak the Yup'ik language? Respondent 4: That's the one. Respondent 5: Yup, yeah. Mm-hmm [affirmative]. Interviewer: That's the one you're talking about? Respondent 4: Yeah” (KYUK Focus Group 1, p. 1).

For many these radio shows sharing information about cultural traditions also help them feel more included, especially if they didn't grow up in the community but now live there, or have a mixed background where they may not have learned all the cultural practices they now want to participate in: “Respondent 4: And then like, why do we celebrate it? I mean, like why are we having this as a , you know — Respondent 2: Holiday? Respondent 4: Yeah, but then she started telling me [on the radio show]. I said, ‘Oh, okay.’ Respondent 2: Uh-huh [affirmative]. Respondent 4: ‘Cause I come — my mom's not from here, she's from the Mexico. Respondent 2: Yeah. Respondent 4: So I'm stuck with this trying to be a Hopi and then trying to be a Laguna and [laughter]. Respondent 2: [laughter]. Respondent 4: And it's like — Respondent 3: And they talked about it today, what the holiday was about. Respondent 2: Yeah. Respondent 4: Yeah. And I said — and my daughter gave me her paper from school and so I started reading it and what it was about. And I said, ‘Oh,’ I said, ‘Well okay now I know.’ [laughter]” (KUYI Focus Group 2, p. 6, 7).

There is an interesting generational disconnection here that radio can help bridge. Some of the traditional knowledge of the elders is being lost, which the stations are aiming to preserve in their archive and re-teach on air. The younger generation growing up on the reservation or in an Alaska Native village and going to school there will often learn some of this information, the language, songs, and so on, in school, but much of the middle aged generation can be lost in between, aiming to learn from both the generations before them and their own children. This programming on the radio can help facilitate conversations between parents and children, and can make people feel a little more integrated and secure in their own culture.

Of course the concern about culturally sensitive information that is not to be shared on the radio did come up in the focus groups. This was a much stronger concern for the Hopi participants than the Yup'ik participants. Perhaps noteworthy in that regard is that the Hopi people have significantly more interaction with tourists, researchers, and other non-Indigenous visitors, possibly heightening their awareness of the risks of oversharing or making certain things accessible to outsiders, which then become impossible to control and may be misused, leading to further exploitation of the Tribe.

One concern addressed in that regard was about announcements regarding times and places of ceremonies or dances taking place, out of fear that uninvited and disrespectful outsiders might attend, which has been a problem in the past for the Hopi Tribe: “Respondent 3: What's good is they don't share things like, ‘Oh there's a dance that's open to —‘ Respondent 2: Yeah. Respondent 3: They stay away from that stuff” (KUYI Focus Group 2, p. 1).

And regarding information itself, many listeners at Hopi agreed with what this speaker shared: “I think there are some things that are just for the Hopi. That we wouldn't want to share with everybody else alright. [...] You know, there's things that they [KUYI] don't share with everybody. You as a Hopi person learned that as you grow up with your grandfathers and your fathers and its passed down from generation to generation, and you don't want to be sharing that with everybody else and that's where I was bringing up again the sensitivity of what you really want everyone else to know, so maybe keeping it language-based just because that's Hopi knowledge” (KUYI Focus Group 1, p. 8).



One idea brought up here is that perhaps even though KUYI is streaming online and is widely accessible, including to tourists in the area and so on, that some of this more sensitive information could still be shared on the radio if it was kept only in the Hopi language. Given what a complex and sophisticated language Hopilavayi is, there are very few outside speakers and there is no way right now for non-speakers to easily translate Hopi into English or another language with online tools or a dictionary. While a dictionary has been created in the past, the Hopi Tribe has strongly opposed its publication and made an effort to buy any remaining copies to prevent circulation and public access.

### **3) The station as an integral and trusted part of the community**

Tribal radio is deeply integrated into the local communities, and is regarded as a member more than an outside source or group of community members enjoying some form of greater power or gatekeeping function. Several quotes suggested that tribal radio enjoys such strong trust that criticisms can be made there even of the most respected members of the community, and that those criticisms will be accepted — within reason, of course. One example is the following exchange from one of the Yup'ik focus groups: “Respondent 3: But it [KYUK] is for everyone, even if your elders do some stupid stuff out there, tell them, stop doing that! Group: [laughter] (KYUK Focus Group 3, p. 28).

It is quite remarkable that this speaker suggests that KYUK is in a position to criticize elders and that this would be tolerated by listeners (“stupid stuff” here refers to risky or non-ideal behaviors health-wise, which was the topic of discussion at that point in the conversation). Especially in Yup'ik culture, criticizing elders or telling them what to do — and especially to do so in such a direct way as this quote suggests — is very inappropriate and considered disrespectful. The laughter from the group here suggests that while certainly communicating surprise about the statement, there was no real shock, anger, or outright disagreement from others. It appeared as though the group was in agreement with the general sentiment that the station does have the social standing and respect to be able to criticize an elder — almost situating the radio station on the same level as an elder socially and in terms of its role in the community. The group appeared to laugh at the exaggerated way the respondent expressed the

idea of criticizing elders (suggesting they, too, sometimes do “stupid stuff”), knowing that it would never be said this directly on the radio, and trusting KYUK to find the appropriate wording and framing for such criticism.

### ***Local Information on tribal radio***

Listeners depend strongly — in most cases entirely — on their tribal radio station for local information, regarding events, programs, job opportunities, vaccination clinics, school closures, flood warnings, weather forecasts and so on. Every focus group at both locations gave several examples for ways in which this kind of local information shared on tribal radio is essential to them.

Some quotes speak to the role the radio plays in shaping activities within the family: “And I like my kids to get involved in different activities and that's what helps me as a parent, too. So it's fun. I mean KUYI is really — overall, it's totally an awesome station.” (KUYI Focus Group 2, p. 1)

Others referred to them helping to uphold community bonds, e.g. by announcing birthdays on air, which is done on both KUYI and KYUK, and is an extremely popular program at both places: “And they had the birthday show and then, you know, it’s a small community that everybody knows each other so you know they find out it’s their birthday, you know” (KUYI Focus Group 1, p. 3) This group later also brought up the community calendar, highlighting local events, which came up in discussion in all of the focus groups. For example: “Respondent 2: Community calendar's good. Respondent 3: Mm-hmm [affirmative]. Respondent 4: Mm-hmm [affirmative].” (KUYI Focus Group 2, p. 1)

About this, one respondent in a third group said: “I think it would be helpful to have their community calendar accessible when it’s not being aired, on like a web page, like on their Facebook page or their web page. And I think they need to reevaluate how much they put on their community calendar. Because I know before, it used to be a lot more informative. But now I notice that they really shortened it, to where if you do not know what the event is, you don’t know what they're talking about” (KUYI Focus Group 3, p. 22). It was surprising to me and some station employees that when respondents said they would like the station to reevaluate how

much air time is devoted to the community calendars, they actually wanted more time to be devoted to this program, and that they liked having as much detail as possible about each event. Listeners do not want any local programming to be cut or shortened.

In Alaska, respondents also mentioned the birthday announcements, called Birthday Line, and across focus groups, this was an extremely popular program that was frequently used for birthday announcements, so that the program can take a long time, which no one seemed to mind.

“It's fun to hear a birthday line, because you can hear a lot of your relatives on there. So, it's always good to hear who's birthday is, you know, because sometimes we forget our families' birthdays. So, it's good to hear, you know, a shout out or a ‘good luck,’ you know? And it's keeps our communities kind of like together, like with birthdays and holidays. And they're really good about announcing like fundraisers they have in different villages, like the berry festival down there. It's a good way to keep the whole Alaska updated, the rural, tundra people” (KYUK Focus Group 1, p. 1).

Other types of local information listeners found valuable included: “Respondent 2: Crimes — They're good about crimes, and lost and found, you know, that's helpful. Respondent 3: Mostly they talk about that on Fridays at ten; they give the people information of what's going on in the town, that one. Interviewer: Like, community events, kind of? Respondent 3: Yeah, yeah. Talk show I think that's what it's called. Respondent 2: Yeah, or if you're struggling, you can go here and get free clothes so you can stay warm, you know? Or just, you can go, well, they already do that here kind of, where you can go have something to eat and stuff. And the kind of stuff they help you with. Respondent 4: Or if they don't have Medicaid they might be struggling to get to a clinic without transportation” (KYUK Focus Group 1, p. 22).

Interesting here is the emphasis on information about locally available social programs like soup kitchens or organizations providing free clothing and medical transportation to those who need it — which is a significant part of the population in rural Alaska. Already lacking transportation and in most cases Internet, those low-income individuals would be completely cutoff from information about programs available to help in their situation if it wasn't for the tribal radio station.

Given the crime statistics of Bethel, Alaska, which are far above the US average, information about crime came up as essential in every focus group in Alaska, while it was only tangentially discussed at Hopi. Because crime is mostly covered as part of the news program, many respondents mentioned local and world news in the same vein, saying that KYUK provides them access to news that they otherwise wouldn't have, but also provided enough background information to allow everyone to understand complex political situations from very different cultural and environmental contexts: "KYUK news gives me good information about what's going on in the world today. And the crimes, you know, crimes against the communities is rising, and I like to keep up-to-date on it. You might have to keep up with what's going on. Why is this going on? Why is this person doing this to this kind of person? So that's the reason why I like to listen to the KYUK and keep up-to-date, see what's going on in the real world. Interviewer: Yeah. Do they do a good job in covering the news, like in a way that makes sense? Respondent 5: Yes they do. Respondent 2: Mm-hmm [affirmative]" (KYUK Focus Group 1, p. 5).

Several respondents shared this interest in not just hearing news coverage about something happening in the world, but really wanting to understand why, and learning about the wider context of the event. Generally, both audiences have a very strong intellectual curiosity, and are interested in learning about a variety of topics and learning as much as possible about it, without finding such in-depth programs on the radio to long, monotone, or boring. This might have to do with the radio already being understood primarily as a source of information rather than primarily an entertainment medium, so that the audience expectation is to learn from the radio, not just to be entertained with music and only short informational segments that change topics frequently.

Another key aspect regarding local information were school closures, school bus delays, and other such information, that most parents in the focus groups said they had no other way of accessing, not even online. It also seemed to be understood that local residents are getting this information from the radio, and that sharing such announcements with the radio station was the best way to reach those who need it.

"Respondent 4: For me it's good, you know, for the school buses in the winter time. You know, they only turn it on for about two hour delays. That's really why I listen to it [...] — the

reports they get for the schools, you know? Respondent 2: It's real helpful, yeah. The delays, and what's gonna go on” (KUYI Focus Group 2, p. 1). Very similar statements were shared in all other Hopi focus groups, including: “Well, now that I have my grandson with me, you know, it's good to know about the schools, like if they're going to be closed or what's going on in the schools. But I mainly use it [KUYI] at work just to help pass the time. [laughter]” (KUYI Focus Group 3, p. 2).

For Yup'ik listeners, school closures and school buses were less of a concern, as most of the rural communities do not have school buses (or paved roads), but other forms of local information were mentioned there as being both important and desired as part of the radio program: “And I would like the court house information also. Because when I was translating for the courthouse, I was the only one translating in[to] Yup'ik and the prosecutors were trying to have me translate for them and I wouldn't, because public defenders were paying me nothing.” (KYUK Focus Group 3, p. 22).

### ***The radio station as a community space***

The radio stations function as community spaces, where local residents can convene (on air, not in person), discuss, learn together and from each other. According to the respondents in the focus groups, this is encouraging and empowering, and helps foster and strengthen real, off-air relationships. It is important to listeners that everyone is represented on air, elders, youth, individuals with particular experiences and knowledge, those fluent in the language and those wanting to learn. It is understood that problems must be addressed as a community, and that if someone has a particular concern they would like to hear addressed on the radio, then it should be covered, because something that matters to one community member thereby also matters for the group.

In Alaska, an elderly participant shared: “To me, knowledge is power, whether you're a child, parent, grandchild. Knowledge — we need to, whatever we learned we need to pass it on to our younger generation. And KYUK is it. And with the health, part of the health is the growing up of all these generations. So that [more programming with elders sharing knowledge] would be wonderful” (KYUK Focus Group 2, p. 21). Another Yup'ik group also stated wanting

to hear more programming not for but by the local elders. This programming does currently exist, and Yup'ik elders do speak on air, but many listeners would like to see more of these kinds of programs: "I wanna hear more elders speaking [on the radio]." (KYUK Focus Group 3, p. 8). It is essential to listeners that everyone is present and adequately represented on tribal radio.

Radio programs also created opportunities for such intergenerational learning in the home, as the station is so heavily used and by different age groups, so that a shared media experience and knowledge base is created among locals: "Sometimes I have to explain to my parents, you know, because they'll be listening to it and they don't understand something. And then we'll get into this big long discussion. But they're like, you know, they're older, so they think differently. They're more, not in the modern — like, they probably — because my mom never lived off the reservation, and I have. So I'm familiar and all with the outside world. But at home, when they're listening to the radio, like, they'll be talking about, like, the *Native America Calling*, they'll be like, 'what's that,' you know. And then I'll explain to them a little bit, if I know, I'll tell them. Then they kind of get an idea of it. Well, you know, we don't know what they're talking about. So we get into our own discussion about what's happening, discussed on the radio. But I don't know that it's like that for other elderly people, you know, that they're able to understand what's really being discussed, you know. I just know my parents, but for them, it's good, I mean, that they listen to it, because they know what's going on. And if they don't know, then they'll ask me." (KUYI Focus Group 3, p. 9).

Interestingly, one Yup'ik participant referred to the interviews or other programs like call-in shows that KYUK hosts that provide opportunities for knowledge sharing as "mentorship" rather than simply information sharing or an interview. Mentorship suggests mutual respect, a two-way interaction, and a longer-term relationship than a short radio program. In small, tight-knit communities, of course listeners are more likely than in other environments to have real-world interactions with the radio DJs and anyone interviewed or otherwise speaking on the radio, but some of the reason for this perception of information sharing on the radio as "mentorship" also lies in cultural expectations around respect and teaching as a long-term process, not a brief interview without further interaction or responsibility.

“What I try to see is mentorship from different age groups, from elders to people who are actually doing those jobs where they're a doctor, or health aide, or therapist, or nutritionist, or pharmacist or, you know, different titles of where you come from, where they can incorporate and be models for people who are starting out, because they're our future, we're not gonna do that for them. They're gonna have to do it themselves. So we have to teach them, the younger generation” (KYUK Focus Group 2, p. 19).

This emphasis on intergenerational learning was emphasized equally by the Yup'ik and Hopi audiences: “Talking about work, we also listen to it at work, and we have the seniors there, and they're the ones that are really listening to them and then it's — they start having their own little discussions about things that they're hearing on these programs or else they'll start asking questions. But those interviews, I think are something that really interest them. Of course the music and everything else, but the interviews — I'm seeing that they're having little side discussions or talking about things that relate to them or family members” (KUYI Focus Group 4, p. 5). This quote illustrates both the earlier observation of radio starting and supporting conversations among listeners, as well as this aspect of shared learning and mentorship.

### ***Strong trust in health information on the radio***

Truly remarkable about tribal radio is the very strong trust placed by the audience in health information shared by these stations. Learning about health topics is often negatively affected by confusion and distrust, for example in doctors who most of the time are outsiders and don't establish long-term relationships with the community before moving away and accepting another position elsewhere. In addition, many distrust governments and institutions that have failed Indigenous communities over and over, and are doubtful of other media outlets which may be spreading health information that is at best irrelevant to remote rural communities and at worst is false, leading to more confusion and less-than-ideal health behaviors. In environments where infrastructure is severely lacking, poverty and unemployment rates are high, and transportation is a significant obstacle for many, maintaining ones health through exercise, eating nutritious foods, getting regular health checkups, addressing mental health concerns and so on, is extremely difficult and much less accessible. Everyone on tribal radio understands the needs and

circumstances of the local population and can offer more practical, useful advice and support, but tribal radio as an institution is also the most trusted when it comes to information, including about health.

One important factor creating this extraordinary trust is that the radio DJs are known locally, and that most of them belong to the respective Tribe (and in many cases speak the Indigenous language and have a recognizable accent when speaking English): “Well, I think because the DJs, the people who are usually on are Hopi, too, so it’s really relatable. And you feel like, you know, because if there — if it’s a person from the city, which I feel like they have a different kind of talk, so like, I don't know, they talk differently. And so, some people don’t trust that. Or, you know, they have more trust within their own community, you know. And so relay that information to somebody who they might know, or you know, and some of those people who are DJs you know. A lot of people know them. And so, it’s more, I don't know, trustworthy” (KUYI Focus Group 3, p. 8).

Generally, if information is shared on KUYI, listeners trust that the information was vetted, and is accurate and trustworthy: “Respondent 5: You know it's reliable if it's on KUYI. Respondent 10: Yeah. Respondent 7: Yeah. Speaker 8: Definitely” (KUYI Focus Group 2, p. 6).

A lot of this trust stems from how relatable the DJs are, and their understanding of the communities’ interests and needs. The people running tribal radio stations, working on air and behind the scenes, are seen as fellow community members and not as gatekeepers or individuals patronizing the local population: “A lot of it [KUYI programming] is good. Like, when they get the old people to talk [on the radio] and teach like that, and just the common people, you know. The common people, the volunteers, that's what I really look at. You know, they're great people, they're not really highly educated in anything, and they're able to talk to us on our level, where we are at. Where we can understand” (KUYI Focus Group 2, p. 5).

Because the tribal radio DJs are also well-known community members and the radio is generally trusted for information, many audience members develop the feeling to be part of a conversation, perceiving radio as a lot more of a two-way medium than it usually is, even outside of the actually interactive call-in shows: “KUYI is — I can't complain about it. [laughter]. I'm



happy — I'm happy that somebody talks to me. I talk to them, too, even though they can't hear me [laughter]" (KUYI Focus Group 2, p. 8).

This example of an imaginary conversation between the listener and the radio DJ exemplifies a level of closeness and intimacy between the DJ, the medium itself, and the listener, which contributes to the strong trust in the information that is shared in that imagined exchange.

#### **4) Culturally appropriate communication and the radio instilling cultural pride**

For many, tribal radio played an important part in their feelings of cultural pride and awareness of their heritage, which many described as being part of their self-esteem and self-concept as an Indigenous person belonging to a particular Nation and smaller community within that, such as a village. The radio stations also often highlight achievements of community members, often connected to cultural practice and traditions, that instills pride in local residents but that they would not have known about if it wasn't for the radio: "They did a wonderful job with this school program. They did a program where they [students] worked with people on houses, how houses are built now as opposed to 20 years ago, as opposed to 50 years ago. And seeing how change affects our environment. And I thought that was the coolest thing, and they did [covered/broadcast] it on the radio, and they went to Anchorage to compete, and we over here won against Juneau! And all those other huge places and we're just a small community like this!" (KYUK Focus Group 2, p. 7, 8).

Another group, also in Alaska, discussed how tribal radio does not only raise their own self-esteem regarding their cultural identity, but can also help combat stereotypes that others may have against Indigenous people, or particularly against residents of rural Alaska villages. Respondents here express an admiration for those on the radio who are not easily intimidated and who refute misconceptions about cultural knowledge being somehow less valuable or relevant as a standard Western higher education: "Respondent 6: We're really benefiting [from KYUK] and I really like it, we really listen and participate. The benefits from listening to them are countless, really. But, even then I still always say, we still need to do more. But they take on [topics regarding] the Indians here, and the North Border, the lower 48 and other parts of the world. They're not intimidated and like a lot of times we are intimidated. Interviewer: You mean

intimidated to ask for more information, or intimidated in terms of ... Respondent 6: Intimidated like, I mean, first of all, we used to be labeled as being not smart, being not able to make decisions, which is untrue. But if you, when we study that, uh, when you pay tribute to Indian cultures and then like even young kids go to being smart kids who know their culture and the value of that is, I mean, the knowledge of 10 PhDs. [...] And so I always have to tell people, man, if you guys would shut up and listen to the kids, in half an hour you can learn so much. Or then we all learn a whole lot more, too” (KYUK Focus Group 1, p. 6).

In the KYUK focus groups, there was only one participant who felt that conversations on the radio can become too negative, and that some like to complain, however, the speaker was also laughing, so this may have been amore playful comment rather than a serious complaint. Someone else was quick to refute that as a downside, saying that radio should not be a gatekeeper who would try to keep more negative things off the air: “Respondent 7: I mean, everybody talks on the radio and often they’re like “blah, blah, blah, blah [angrily]. [laughter] Respondent 5: To me that's wonderful, because we need, you know, voice, we need a voice” (KYUK Focus Group 2, p. 3). To Y-K Delta residents, KYUK is the medium they feel is giving them this more public, more far-reaching voice and representing truth rather than an overly edited or selective version.

## **5) Creating community locally and for those who have moved away**

Respondents who had spent time away from their home community and listened to KUYI online said it “feels like you're at home again.” (KUYI Focus Group 1, p. 3). Other members of the group agreed with this sentiment: “Respondent 7: Yeah. Feels like you're back home when you hear the — especially with the music and the different songs that they play, traditional songs. You get to hear that and sometimes you're not able to come home all the time so, you hear those songs and it helps you to remember everything out here. Respondent 3: Yeah, it gives you a chance to hear stuff going on back home.” (KUYI Focus Group 1, p. 8)

Tribal radio provides a direct connection to the home community in terms of staying up to date on events, local news, hearing familiar voices, Indigenous languages which are difficult

to find spoken elsewhere outside of the community, and cultural references and ways of communicating that only an insider would notice, recognize, and value as a marker of belonging.

Others highlighted the value of tribal radio as an educational resource for those who live on the reservation now, but grew up elsewhere and did not have the opportunity to learn a lot of the cultural traditions, songs, ceremonies, and so on that they now aim to, or sometimes are expected to, participate in: “Respondent 6: Some of that information about holidays and what’s going on, that’s good, too, for some of us who didn’t grow up out here. Respondent 1: Mm-hmm [affirmative]. Respondent 6: And who are kind of like outsiders, I guess. It helps us to understand the culture and our own traditions. And, you know, the people and stuff like that. Because I mean, I was raised in — or I’m supposed to come from a family where, you know, they’re supposed to do this, and this, and this. But I don’t know that; they don’t share that with me. And sometimes I feel... Respondent 3: Left out. Respondent 6: ... yeah, left out, or afraid to ask them, because maybe they don’t want to share that, or they’re too busy, or whatever. So, it’s good to hear it from, you know, all these other people. And, you know, stuff like that. Respondent 3: Yeah. Respondent 6: It’s good information, for me” (KUYI Focus Group 2, p. 3).

Another participant in this group agrees with the main speaker here, and appears to share this experience of having grown up or having spent significant time off the reservation, in the city, and now, having returned to Hopi, feels left out and disconnected, and relies heavily on the radio to bridge these perceived or actual gaps of knowledge and social belonging. In this way, tribal radio makes an important contribution to community cohesion and cultural preservation.

Even those who live on the reservation often lack transportation to local events and rely on radio coverage to benefit from local events and activities. As one Hopi Reservation resident shared: “What I like to listen to is when they have remotes, live remotes of events. Because a lot of us can’t travel to attend them or we’re out of town. Like the Health Summit, or they had the Money Symposium. They had basketball games, or just events, other events that they have covered. I like listening to that, because it feels like you’re there, you get to still participate, and you get to hear what they say. Other things I like, again, the football games. And I like that they have it in Hopi, too, because you get to learn new words that they say, like when they’re running after the ball, or whatever. You just hear the excitement in their voice and it feels like you’re there

with them and even if you don't understand, you still understand what they're saying. So that's what I like and try to visualize.” (KUYI Focus Group 3, p. 4).

And again in this quote, the Hopi language is brought up again and the respondent suggest learning the language better through the sports coverage on the radio, for example, because it's easier to follow along and get the general sense of what a statement or a word means based on what the listeners can tell is happening in the game based on background noise, intonation, and volume or excitement in the speaker's voice.

This focus group also brought up the programs KUYI does at the Hopi high school, in conjunction with the radio and broadcasting classes they help teach: “Respondent 2: Another thing is when they have high school student broadcasts. Respondent 1: Oh, yeah. Respondent 2: From the high school” (KUYI Focus Group 3, p. 1). Listeners of all ages enjoy this programming, and particularly parents feel more connected to their children's life at school through these little soundbites transmitted live from the high school.

A Yup'ik focus group brought up different examples, expressing the same idea: “Respondent 7: Also, when they were doing like, before the vote and stuff when they go and have all the people go and talk at the Cultural Center. And I hear everybody had their radios on for that, to hear what everybody's opinions were. Respondent 4: Well yeah, mostly like a information base, that's what KYUK does for us, because we can't go on the phone and, ‘Okay I'll call Kongiganak, or I'll call Aniak, or I'm gonna call Fairbanks,’ or you know? It's like we're so far apart, [it] keeps up connected, as part of this — I mean, our whole state; [we] have the hugest state in the United States” (KYUK Focus Group 2, p. 4).

Tribal radio also creates community locally, primarily through the call-in shows, which are an audience favorite at both locations: “Respondent 4: I like the radio talk like that's on Fridays. Interviewer: The talk show? Is it the one where you can call in? Is it the one in the Yup'ik language? Respondent 4: English. Interviewer: Oh, it's in English. Oh, the Yup'ik one is Wednesday, I think. Respondent 4: I think's on Mondays. Interviewer: Oh, Mondays, yeah. Respondent 1: KYUK has it on Fridays, the English talk line. Interviewer: Yes, right. Respondent 1: And then on Mondays it's Yup'ik talk line. Interviewer: Okay. Do you like the Friday one? What do you like about the show? Respondent 4: The English call-in radio talk shows any time it

comes on I always listen to it. Interviewer: What do you like about it? Respondent 4: What other people have to say. Usually they talk about their hometown. They could talk about bootlegging, or liquor stores, or anything that comes to mind in their community. Interviewer: Yeah. So it could just be anything? Respondent 4: That affects everybody. Respondent 1: [They] talk about anything. Interviewer: Do you like the call in shows, too? Respondent 1: I do. I don't [ever] miss them. [laughter]" (KYUK Focus Group 3, p. 3).

This was echoed at Hopi, also emphasizing that call-in shows are popular, have many participants, and that listeners enjoy hearing from many different local residents, from different villages on the reservation, and sometimes Hopis who have moved away from the reservation altogether: "You hear different callers from all over the place on that show" (KUYI Focus Group 1, p. 8).

Tribal radio is particularly effective and critical in reaching the elderly in the community: "I think that [more health programs on the radio] would be beneficial, because a majority of the listeners are elders that stay home and listen to the radio mostly throughout the day. They say they don't have the television sets, so they rely on the radio" (KUYI Focus Group 3, p. 15, 16).

However, other groups, both at Hopi and in Bethel mentioned that it's not just elders who heavily rely on tribal radio, though they might rely on it even more and for different kinds of information than other groups. Tribal radio was often described as the most obvious first place to go with a concern or a question, including situations where in other communities one might first think of the local police department, the health clinic, or directly contact a private person, respondents in this study would first contact the radio station: "Respondent 4: Plus if you lost your dog, or your puppy, or your wallet, I mean, that's the first place you go. You hear it on the radio, and then everybody knows your business. 'Did you find your wallet?' or 'Did you find that?' [laughter] Respondent 8: Or 'You have a package at UPS! [laughter] Respondent 4: And then 'Did you call that person? They asked you to call them!' [laughter] It's on the radio, their number. That's funny. [laughter]" (KYUK Focus Group 2, p. 12).

By being so ubiquitous, the radio station becomes part of structuring everyone's day and telling time: "Respondent 1: That's the only station we listen to. Respondent 4: Yeah, that's the only station we *can*. Respondent 1: You can't catch anything else, so you're listening to it all day.

Respondent 4: [laughter] Respondent 1: Then you know what time it is. Oh, it's this time, because this [radio program] is on." (KUYI Focus Group 3, p. 3).

At Hopi in particular, the morning show is very popular, which focuses on Native music and is run by popular co-hosts who speak Hopi on air. Early mornings also have particular cultural relevance in Hopi society, where a focus on the culture and a general positive tone and use of humor are valued even more than they might be for radio shows occurring at another time of day: "Respondent 6: That's why I like listening to the radio in the morning on the way to work, because the DJs in the morning are so positive and they're goofy and they make you laugh and they remind me to drive slow and careful and smile. Respondent 1: Smile at everyone you meet. Respondent 6: Yeah. Say hi" (KUYI Focus Group 1, 21).

#### **6) Radio as the primary or sole source of information for audience members**

Given infrastructural and financial limitations of both communities and their residents, which reflect a common situation across rural Indigenous communities, the tribal radio station is a central medium and a vital source of information. There often isn't even another radio station, or, if there is, it is a religious station that for one doesn't share the local information that tribal radio provides nor does it have Indigenous language or culturally relevant programming. Participants in this study expressed that they actively avoid the religious radio stations broadcasting in the area and that they also don't like commercial radio they might listen to whenever they visit the nearest cities or travel otherwise.

Listeners emphasized that their local tribal station is often their only choice to access information and local programming, however, while brought up in a humorous way, it wasn't talked about with resentment or regret. Instead, it was important to audience members to emphasize to me how much their station means to them and that while they had some suggestions for improvement and additional programming, they deeply appreciate what their tribal stations are already doing for them.

At Hopi, participants shared that "I listen to it, or if we're in the car, that's the only station we get on the radio. So like, it's that or nothing. [laughter]" (KUYI Focus Group 3, p. 26) and

“The radio and the newspaper are the two main sources of getting information out to the community. So, it’s important, very important to us” (KUYI Focus Group 1, p. 11).

Respondents at Hopi said KUYI is their main source of news, and choosing not to listen to KUYI would be synonymous with choosing not to be informed: “Respondent 11: But out here to me the radio it's like you have to stay on top of the radio station so that — that way you'll get your news. Respondent 8: Yeah. Respondent 11: So it's up to you whether or not you listen [laughter]. Respondent 8: [laughter]. Respondent 11: But it helps keep me informed with everybody out here, you know? I like to volunteer myself to do different things” (KUYI Focus Group 2, p. 3).

This speaker also refers to opportunities that the radio provides for individuals to help and volunteer within the community based on information from KUYI. Others rely on it more to plan and organize their day with information they say is not available to them anywhere else: “Respondent 5: Well I like to use it for — my main purpose is in the morning I would snow days and stuff. Respondent 1: Oh ya ya ya. Respondent 5: School cancellations. Work cancel or job cancel, roads close and that kind of. Respondent 2: Bus Service. Respondent 5: Yeah. Lady 1: Yeah. Respondent 3: Yeah, the shuttle and the school bus. Interviewer: Yeah. Would there really be another place to go where you would find all that? Group: No. Respondent 3: Not locally, no.” (KUYI Focus Group 1, p. 1, 2).

Listeners at KYUK agreed, and also added that radio is important not just for elders, but for young people, teenagers, who they said have not much to do in the local community and not many easily accessible sources of information, about health, for example, besides the radio: “Interviewer: So to get health information to younger people, teenagers and maybe even kids, do you think they will listen to a doctor on the radio? Or maybe somebody their own age? Respondent 4: Probably both. They have nothing else to do but listen to the radio. And talk in their level of understanding” (KYUK Focus Group 3, p. 15, 16).

### ***Locally specific information***

Of course tribal radio is important for local information. This is true not just in terms of programming specific to the local culture, or health information relevant to the particular

environment and lifestyle, but also relevant to safety, specific needs of rural Indigenous communities, events, resources, and so on.

A Yup'ik participant shared this example: "If I'm from my village coming down here [to Bethel], we use a short cut so we can save gas. 'Cause if the tide is too low we go through the Yukon river to get to Bethel. And some areas are like dangerous to go through if you don't know what areas to avoid" (KYUK Focus Group 3, p. 27). So local village residents rely on KYUK for information allowing them to reach the town in the safest and most cost-effective way.

Cost was a factor for many, that often precluded not just Internet access, but smartphone and computer ownership and left only the radio station as a source of information: "Respondent 3: You know that weather and Yup'ik talk show and all that. Respondent 6: All that information is given through KYUK. Interviewer: Yeah. Do you listen to it more or do you also use the [KYUK] website for news? Respondent 3: I don't go to those areas 'cause I don't have enough money to buy computers. Interviewer: Yeah. So mostly radio? Respondent 3: Mm-hmm [affirmative]." (KYUK Focus Group 3, p. 1, 2).

Other Yup'ik audience members, who do have access to a smartphone, also appreciated KYUK's online information, particularly when the radio signal wasn't available, which suggests that they still prefer listening to the station wherever the signal is available: "Respondent 4: I think it's really neat that they have a website, because even if we're berry picking or moose hunting and we can't pick up you know, the waves from the tower, whether we're in the mountains and out there hunting, we could check the KYUK news anywhere over cell phone" (KYUK Focus Group 3, p. 7). Of course that's provided that there is a cell signal and with that data access via smartphone, which also becomes quite costly very quickly, particularly in Alaska. There can also be weather-related outages, which is what this speaker is referring to: "And I like KYUK because it's, it's an information center, not just a center for the region, and not only that, but I know that they go to other places, other states, and participate even internationally. They do that which is good because it keeps us updated if we don't have a phone or the phones are down, with KYUK at least we can do messages, and also I like it for the fact that it does some health education. But like I said, there can be improvement on that" (KYUK



Focus Group 1, p. 1). This speaker also mentions a lot of other examples, highlighting the idea of the station as the “information center.”

Listeners at Hopi also liked a program specifically focusing on local job opening announcements, which they said no longer exists in this format: “And I know before they had it designated on Fridays or the weekends would be the one place to have it [job openings]. Like Saturdays, they'd have the employment notices. And then Sundays would be a concert. Like they had the, what she was saying, they separated it, so Saturdays was when they had all the concerts and then Fridays, or Sundays, would be where they have all the employment. So they kind of separated it, just for those days” (KUYI Focus Group 3, p. 23).

At Hopi, a separate organization runs the Mobile Internet Van mentioned in a previous chapter. It is reliant on small grants and travels from village to village to allow residents free use of a computer, access to the Internet, printers and scanners, which can be used in any way residents might like, from applying to jobs and doing homework to researching information to playing games and chatting online. Staff members are always present to help with the equipment and also keep an eye on potential non-allowed activity that might endanger the grant funding, such as use of the equipment to do anything illegal. Because those who need this service most obviously don't own a computer or have Internet access, the location of the van on a particular day, as well as its opening hours are announced on KUYI. One listener who is also a user of the Mobile Internet Van shared that these announcements are essential to their Internet access: “I mean, I only listen to the music every now and then, but that's not really why I listen to it. You know, it's like something that my parents listen to, but that's just their entertainment. But mine is mainly for information. You know, like, when that mobile van comes, to be able to — that WiFi mobile — to get on the Internet. So that's what I use it for” (KUYI Focus Group 3, p. 1).

The audience in Alaska also particularly appreciated news from other states and abroad, as many stated feeling particularly isolated living in Alaska and particularly in the rural regions at the West coast of the state: “I like that they cover down states, too, because then you know what's going on way past home. Kind of like, we're getting international news. I think they [KYUK reporters] actually even went to Greenland before” (KYUK Focus Group 1, p. 7).

### ***Safety Information***

Besides these specific examples for types of information that listeners need and appreciate, a common theme in all of the focus groups, and another reason to listen to tribal radio as much as possible, is the local safety information shared. While this type of information is covered and appreciated at both locations, it was particularly appreciated in rural Alaska, where the environment is more extreme in many ways, and threats from floods, thin ice, snow, and so on are more imminent. In addition, a majority of the KYUK audience lives a subsistence lifestyle, fishing, hunting, and berry picking, and is reliant on KYUK's information about the weather, hunting and fishing closures, and other information that will allow them to fish or hunt not just successfully but safely. Often the safety information also relates to travel from the villages to Bethel and back, since Bethel has the health clinic, the grocery store, government offices, a small University of Alaska branch campus, the employment office, and other key locations that don't exist in the village and that villagers need to travel to to access. Since there are no roads this travel needs to take place by plane, which is too expensive for most, by boat, which is the most common means of travel, or by snow machine, sometimes across the frozen Yukon river, which is a shortcut that saves gas, but is only safe when the ice is thick enough, something that is announced on KYUK.

In addition to this kind of environmental safety information, of course KYUK also covers crime and other local threats. One incident mentioned by many and particularly remembered by the local community is a school shooting that occurred at the Bethel Regional High School in February 1997: "I think they're doing a good job already, because, well for one, for example, they need to warn the public to stay away from so and so or like I remember one time there was a shooting at the high school and they had emergency warning for people to stay away from the high school" (KYUK Focus Group 3, 22).

Travel safety is a major concern to the KYUK audience: "Respondent 7: Or if there's a big hole in Bethel and that's right behind a corner. Respondent 3: Oh yeah. Respondent 7: So, you better be careful if you go or you'll fall in that hole. I mean, if you're on a snow machine. Or you even have cars on the [frozen] river too. Group: [laughter] Respondent 3: Yeah, that's my

favorite time of the year! Is it time to go driving yet, on the river? Respondent 7: You could drive to Akiak. Or you could try Aniak. [laughter]” (KYUK Focus Group 2, p. 14).

The same group later also brought up wanting more weather forecasts on KYUK, as they cannot access them elsewhere, but need to plan their travel several days in advance due to the unique environment in the region, and having to travel by boat: “Like [a] three day weather forecast. You know, Bethel’s the hub for, you know, all the other villages. They need more weather forecasts, like three or five days. Because you’re traveling. And around the fifth of the month, you know, people come get their benefits, their food stamps. And they come to Bethel by boat. They [KYUK] could do more weather forecasts. Depending on how long they want to stay in Bethel because they have to get back to the village. Instead of one day, they should do like three days [weather forecasts], you know, people go berry picking, go hunting, and come to Bethel by boat” (KYUK Focus Group 3, p. 30).

In addition to more weather forecasts, another recommendation in the group was to announce more boat travel advisories on KYUK: “Well, I think that the river here is a main source of travel, you know? Like in the winter if they could announce, you know, where the danger of ice is. Recommended don’t travel by boat for safety. Because a lot of people come to Bethel by boat. And then they only have a boat, it’s in the newspaper but not on the radio” (KYUK FG 3, p. 26).

Another Yup’ik group also wanted to hear more safety-related PSAs on KYUK, especially for youth: “Respondent 1: What she’s talking about, when I was a kid the things that she’s talking about we had in Akiak and I remember learning — I remember to this day the ‘stop, drop and roll.’ That would be good for kids to show them how to help themselves in those situations like fires or drowning, things like that. Respondent 2: There was — one of the things they do in hospitals is like having safety tips. Or, I don’t know if they’re weekly or monthly, but that would be a cool thing to do [on the radio]” (KYUK Focus Group 2, p. 7).

Later in this group, someone else brought up that they would like to see more partnerships with the local fire department and healthcare center for safety information and PSAs in particular: “Like if there was bad water in certain areas of town and then they talk about health issues that are going to affect you in certain areas in Bethel and they’ll tell us whether it’s a road

condition, or a water haphazard, or, I mean, they have professionals from YKHC [Yukon Kuskokwim Health Corporation] that talk and people [from KYUK] like sit with them, like from the fire department, or you know, everybody like pitching in what they need to inform us about, like, safety” (KYUK Focus Group 2, p. 6).

Safety information was not discussed as much at Hopi as it was in Alaska, but it was mentioned in several of the groups. One example is this respondent, also referring to travel safety: “I enjoy how they announce, like if there's a water break, you know, roads close they're giving that information before you go there, things like that. So I really listen to it a lot” (KUYI Focus Group 2, p. 4).

### ***The radio stations providing information online***

Both radio stations also have websites and Facebook pages, where they share primarily news and important updates. While respondents primarily listen to the radio and don't use these online resources that much, they are aware that they exist. One thing that was highlighted as important by some of the respondents was that these online spaces are run by the radio employees that audience members know and trust, the same individuals that are on air or run the station behind the scenes: “Yeah, they actually have website you can go to to, which — it's everything on there. And a Facebook. Straight down to the people that run it” (KYUK Focus Group 1, p. 3).

The website and social media presence was seen as secondary to the on air radio program. One respondent suggested that social media could be used to enhance the listening experience, for example by using social media collect questions for future on air call-in shows: “And then, you know, seek out some individuals. You know? And ask the question, put it out there, because they have in the social media with, you know, Facebook and Twitter and whatever ... You know, they could be using that, for that media portion to post those questions and get some feedback and then possibly get some call-ins [during a radio show] from that. [...] And then everybody's not just kind of, you know, wondering what's going on and actually having to listen to half of the show before they can ask a question. So, they can, you know, do that preview before and get better call-ins for that” (KUYI Focus Group 4, p. 29).

Several respondents at both locations also mentioned that they would like to have access to downloadable content online, which does not currently exist on the station's websites (and would increase their web hosting costs and likely take additional post-production time):

“Respondent 3: I think something that would be nice is since they have the streaming and then also their website, it would be nice if you know, they're recording that, and they're downloading it to their website, that way if you miss it, then you maybe can always click on that link and then be able to download that that specific show. Respondent 1: That's what NPR does. Respondent 3: Uh-huh [affirmative]. It's the same way with *Native American Calling*. So you're able to pick and choose what may be more relevant to you as a listener” (KUYI Focus Group 4, p. 13, 14).

Generally, listeners wanted to see online spaces used in a way that enhances the on air radio program, and in no way saw online resources as a potential replacement for radio. Rather, online resources were seen as further helping traditional radio programs thrive, even among those in the audience who do have Internet access and might otherwise be seen as users looking to replace radio with online information and resources, but this study found that this was not the case at all.

### ***Health Information Accessibility***

Regarding health information, respondents emphasized the accessibility of it on tribal radio. But to listeners this did not only mean the accessibility of radio as compared to Internet or print media, but also the accessible way in which information is presented on the tribal radio station in particular: “And knowing that its accessible you know. Anything that's on the radio, ‘Oh okay I heard that.’ Not only in English and also in my Native language” (KUYI Focus Group 1, p. 13). “I heard that” alluding to health information being easy to understand and memorable, particularly if covered in both English and in this case Hopi.

Nutrition-related health issues, such as obesity and diabetes are prevalent on the Hopi Reservation, which of course has to do with the very limited access to healthy and affordable fresh foods on the reservation. Respondents said they would like to see more in-person events take place on the reservation, addressing healthy cooking and eating habits, and that the radio station could also play a vital role getting this information out to reservation residents. One

person shared: “I think the way the radio station could play a role in that aspect is by getting the information out there to people without knowledge and maybe getting them to come together at one time, maybe involving Natwani [traditional agriculture] programs for farmers and stuff like that and having the area where they can meet and get all that information. And then letting the people know when those meetings or those different events are gonna happen, and then they can show them how to do those different types of dishes, how to prepare them, and where you can go to get these different plants and different types of food. And the whole process of doing that is promoting a healthier eating within the community. That's where the radio station could get involved and start bringing more of that information” (KUYI Focus Group 1, p. 16).

Audience members at both locations said radio programs about health are generally easier to understand, more memorable, and more trustworthy than health information from print sources, like fliers, pamphlets, brochures, and so on. Books were not mentioned in comparison to radio, but access to books is also difficult in communities without public libraries. Audience members are a lot more likely to encounter pamphlets and fliers at the healthcare center and other central places in the community, and therefore use this as a frame of reference for other media through which they receive health information. This comparison was often brought up by the participants, not by me, such as here: “Interviewer: Do you think the radio would be good for health — Respondent 4: Mm-hmm [affirmative]. Respondent 3: Radio would be good. Respondent 2: I think pamphlets, I mean — Respondent 4: Pamphlets you already get it in the hospital. [laughter] Respondent 2: Yeah. People just kind of look at them and then throw ‘em. Respondent 4: Yeah” (KUYI Focus Group 2, p. 18).

There was general agreement in all of the groups that health information on tribal radio is easily understandable, and respondents also appreciated the interview segments and call-in shows with experts — medical professionals, researchers, and so on: “I think that's really unique for KUYI, because I've never heard that program anywhere else. And it's just a fairly new complicated topic [diabetes], but then the way they're presenting it to the community, it's really easy for them to understand, because they can relate to it. And we're fortunate to hear it on air, to hear it from these individuals, especially an individual who teaches at Cornell or ASU, I mean, these really top universities and they're talking to us and telling us about research. This is stuff

that you don't learn until you're in graduate school" (KUYI Focus Group 3, p. 5). This respondent spoke with pride of the guests on KUYI and the reputable universities or other types of institutions they come from. Giving an interview on KUYI is equated with making an effort to speak to the Hopi people directly, and is appreciated as such, particularly because there is a sense of being forgotten and not getting enough resources, including the attention of experts with a genuine interest in helping the community.

In Alaska, health information that is helpful immediately, especially to those out fishing, hunting, or berry picking, is particularly appreciated, and radio is the primary source used to find this kind of information: "I think radio health care information is very helpful, because like I said [for] a lot of the people in the villages surrounding here it's kind of limited [access to health information and care]. They could be at fish camp, they can learn how to, you know, clean their wound better, or you know, look for signs to know like, 'Hey I heard on the radio, that this is what's spreading around and this is what that is.' Or 'This is what you can use for medicine,' you know? It'll be a good way to just put out information to help better your health, so we're all healthy. [...] Or if they tell, 'Oh you could use Crisco on a burn,' and something like that. Then you can like, take care of yourself anywhere you are, because you heard it on the radio" (KYUK Focus Group 1, p. 9).

The lack of access to health information in the villages that is addressed by this Yup'ik speaker was echoed in some of the Hopi focus groups. In this example a respondent explains resources they have gotten to know in the city that do not exist on the Hopi Reservation, and the radio bridging some of this gap: "I don't know if they ever address anything like that at the healthcare center, but I know in the city, you can actually call, you know, like your health insurance. There's a nurse that you can call. And she'll tell you, you know, what your resources are, where you can go. If you need to go, you know. But out here... And I always wonder why they don't have a — Because when you try to call over here to the ER, they'll tell you, 'Oh, you have to come in,' or you know, there is like nobody there where you can actually ask a question and they'll be able to tell you. Like oh, maybe you can wait 'til tomorrow or they'll tell you, you know. I know from being in the city, that you can call and if your child is sick, just to ask, you know, well, the temperature, you know. If they're having these kind of symptoms, they'll tell you

what to do. They'll tell you well, you know, 'you need to go to the ER right now,' or 'maybe just try this first and if it doesn't work, then go.' But they don't have anything like that up here." (KUYI Focus Group 3, p. 20)

Especially regarding health issues that can be scary or intimidating to talk about, respondents preferred learning this information from the radio because it's a real human voice, not written information without a real connection to another person: "Well especially on cancer because, you know, cancer is my biggest fear that I ... you know, I like to ... You can read it in books, but I want to hear it from people who experienced it. 'Cause my grandpa, they all had cancer on their side of their family. And I want to know, you know, how — You can't prevent it, you know, and but just how — just on those topics, you know. When you go to the hospital, sure, they give you all those pamphlets, but you want to hear it from somebody's mouth and not sit there and read, you know? And I try to imagine that person [who wrote the pamphlet], how they would sound, you know, how their voice is" (KUYI Focus Group 2, p. 23). It is interesting here that the respondent is seeking a real human relation with whomever is imparting health information, and if the information is shared in written form, they still try to imagine how the person's voice would sound, and who they might be. This shows a great need for a form of direct relationship in order for health information to be accessible and relatable, which explains in part why radio is so popular for health information, even the most sensitive topics. Individuals in other cultural contexts might prefer to read about this kind of information rather than hear it on the radio, as reading feels more private and less interactive or direct. For this rural Indigenous population, the opposite is true.

There are also concerns around receiving outdated health information on the reservation or in other rural Indigenous communities, and that tribal radio provides up to date health information that can otherwise be difficult to access: "Respondent 1: In words that we don't understand or that some other people don't understand. Because I learned it through books and libraries. The thing I learned about the libraries is that we're given second hand informations. That is already, like already over and done with and they have new information. It's too old information. Interviewer: Okay. But you said earlier the radio is giving up to date information on this? Respondent 1: Yeah. Mm-hmm [affirmative]" (KYUK Focus Group 3, p. 21).



While this respondent did not refer to a specific health topic in this case, what is expressed here is a similar generalized mistrust in information from unknown sources with no personal connection also shared in earlier groups. Radio, and particularly tribal radio, is preferred as a source of health information over print media in particular, which are the most common alternative local residents encounter. Partly, this is due to the stations knowing their audiences so well that they are able to present the information in a way that is accessible, including using Indigenous languages. The other part explaining the preference for radio for this kind of information is the fear around common health issues in the community that respondents expressed, and not just the trustworthiness of a human voice, particularly a familiar one, but the sense of empathy that listeners perceive from another person speaking to them directly about these important but intimidating topics. A good example of this phenomenon is the respondent saying that when reading print materials about a health issue and treatment options, they try to imagine what kind of person the author might have been, and specifically what their voice sounds like. Individuals here try to imagine someone saying the information to them in person that they are reading, and aim to establish some sort of connection with this person that way, which of course will not work as well and be a lot less satisfying than attempting the same with a radio DJ. Information in this case is not neutral. It is less a matter of information from other sources or shared via other media being too confusing, technical, or irrelevant to the region, and more a matter of the expectation of a genuine personal connection with anyone giving advice on something as important as health, or anyone sharing knowledge about an issue that strongly affects the person and their family members.

Previously, participants at both locations repeatedly expressed how important it was that the community addresses their biggest issues together, as a group, even if some of those topics are sensitive, personal, and difficult to talk about in front of others. Dealing with the major health (as well as social and environmental) challenges as a community rather than a set of individuals was described as a necessity, not a preference. It seemed inconceivable to participants that these matters should be addressed only on an individual level, and only discussed in private. The radio was seen as the space that allowed for the community to gather, discuss, and share knowledge, and even those who said they had never actively participated in a call-in show or otherwise been

on air described these radio programs as the community addressing important issues "together" and "as a community," including themselves as active participants even though technically they were just listening in.

## **7) Health topics listeners have learned about from the radio**

### ***General community health needs***

This study was not limited to a particular health issue for two main reasons: One, because there is so little prior research on the health information needs of Indigenous people in rural areas generally. And secondly, because the existing research on general health concerns for the Indigenous population suggests that a great number of health issues are of very serious concern — from mental health and suicide to a long list of chronic diseases to addiction, many of these occurring at higher rates and with worse outcomes than for any other population group in the United States (Gracey & King, 2009; King, Smith, & Gracey, 2009). Rather, interview and focus group questions were intentionally open-ended and asked respondents to speak about "health" broadly, so that respondents were free to bring up whatever they see as the most important health issues facing their communities and define health in a way that is consistent with their cultural knowledge, not in a way pre-defined by a non-Indigenous researcher. Indeed, when asked what health topics they want to learn about on the radio, participants listed a wide variety of health issues they saw as equally important and that they wanted their station to address. One Hopi group simply responded to the question about desired health topics for radio with: “Respondent 4: Maybe all of that. Group: All of it. Respondent 2: All of it. Having life style things. Respondent 1: Prevention. Respondent 3: Yep” (KUYI Focus Group 1, p. 19).

The general needs in terms of actual healthcare and information, for example about prevention as mentioned here, are great, and many respondents referred to the lacking healthcare infrastructure in their community, and difficulty accessing not just information but services when needed. Several individuals saw this as something the radio station can and should address. As mentioned earlier, trust in the tribal stations is so strong that they are seen less as investigative reporters informing about lacking healthcare systems, but rather community advocates who could affect real change: “Also, I would like to say that what would be nice, too, would be for

KYUK [if] they go through some villages, they ask the people, ‘How can we step up our game with clinics?’ Because some of the villages are — their workers are not there to make people healthier. There was my baby that had the flu, he had 104.7 [fever]. And here the nurse is on call, and I called her, he could have died but [the nurse said] ‘Oh I’m on my day off, call the, call YKHC [healthcare center] in Bethel and let them help you.’ I mean, what kind of service is that for healthcare for infants? So, I think it’d be nice to have some of the people [from KYUK] travel out to the villages and talk with the Native people, to see how they can better their clinics to be more efficient to keep the communities more healthy and as one. And hire more people that are there to keep you alive” (KYUK Focus Group 1, p. 14).

Respondents were also highly aware of differences in insurance coverage in their community and additional complications and healthcare needs a lack of health insurance creates. This focus group later suggests this as a topic for radio, a quote that appears later in this section. “Respondent 4: People don’t have insurance or Medicaid or anything like it. Respondent 2: Yeah, mostly the non-Natives. There’s a lot of tension, you know, because health coverage is, it’s very mixed over there. Some people have free health insurance, some people don’t. I wish there was a way that we can all just have it be free. We don’t need to pay no health insurance, you know? It’d be nice” (KYUK Focus Group 1, p. 23).

Overall, these populations, in rural Alaska, on the Hopi Reservation, and in most other rural Indigenous communities across the country, are dealing with severe health issues on a large scale, complicated by lacking infrastructure in all areas and not enough "people that are there to keep you alive" as the respondent above so aptly worded it. In this situation, tribal radio becomes this entity that truly is there to do whatever they can to help people stay alive, through the power of accurate, timely information and connection when feelings of abandonment and isolation prevail.

### ***Health topics recommended by listeners for the radio stations***

A variety of health topics were recommended by listeners for their tribal station to focus more on. A summary and explanation of these recommendations was included in my written reports shared with both radio stations. In the focus groups, I examined not only for which topics

respondents had the greatest information needs, but also which topics they saw as most appropriate — or inappropriate — for radio as compared to other media. In addition, this qualitative study and in particular the focus group format allowed for a more nuanced discussion and understanding of which topics may be regarded as too sensitive for on air discussion and why, and what it means to Indigenous listeners to cover health topics in a culturally relevant and appropriate manner.

As mentioned previously in other quotes, in comparison to other media, in particular print, which were the most readily available aside from radio, radio was strongly preferred for health information: “Interviewer: So do you think that radio in general is a good source of health information? ‘Cause, there's TV and there are websites, or you could read about health, they have all the pamphlets and things at the hospital. Respondent 4: I just put them in boxes and that's one of the things, you know, I think if they had more health topics on the radio. Interviewer: That would be good? Respondent 4: Yes. Respondent 1: And then like about boils, too. You know what I am talking about — boils? Interviewer: I've heard other people talk about it, so I know a little. Respondent 3: It's like steam baths” (KYUK Focus Group 3, p. 11, 12).

While there are many specific recommendations reflected in this section, a general sense among local residents at both locations was that as much health information as possible should be covered in radio programs, about as many topics as possible. In particular, respondents expressed a preference for a positive framing with an emphasis on prevention, but that no topic is taboo per se. This respondent at Hopi shares this view, and further explains that some may be too embarrassed to ask certain health-related questions in person, and that radio can more easily mitigate this barrier: “It could be on any topic. Like, you know, we have a lot of diabetes out here. So, they cover that, you know. What to look for, what the symptoms are, how you should become healthy. How you can lower your blood sugar by walking, running, or just exercise. And, you know, changing your eating habits and stuff like that. And to me, I don't think anything is too personal. Because somebody out there might want that information and if you're looking at sensitivity on certain subjects, then, you know... That person might be too embarrassed or scared to ask about it. But if they hear it on the radio then they're like, ‘Okay. That's what it is’” (KUYI Focus Group 4, p. 21, 22).

Two of the focus groups at Hopi also specifically brought up teen pregnancies as a health issue that was important to them and that they want to hear about on the radio: “We have a lot of teen pregnancies too. And to some people, that's a touchy subject, too. You know? But to me, I think that's good [to address], because these kids have to learn it from somewhere. I mean, you're not encouraging it and to me you're helping them, you know. We don't want that for them. We want them to maybe, go on get an education, whatever. Make something of this as they'll not be having kids so young, you know? And maybe some kids listening, they might not get that at home from their parents or grandparents or whoever they're with. You know, they don't know who to go to. And that would be good information for them” (KUYI Focus Group 4, p. 24).

The other respondent addressing this topic shared: “Respondent 3: I think they need to focus on teen health, too. Because I haven't really heard anything about teens, you know, just things that can happen. Like teen pregnancy and stuff like that. I haven't heard anything on there about it. Respondent 6: Yeah. Because they do listen to that [KUYI] at the high school. Because when I've gone there several times, the radio is on in their cafeteria and that's what they're listening to, is the radio station” (KUYI Focus Group 3, p. 18).

Health issues affecting the younger generations, and health information specific to them was very important to both Hopi and Yup'ik audience members, and all of the focus groups expressed in some way that they would like to hear more of this kind of programming on their tribal radio station.

As one Hopi participant shared: “I think in terms of the health-related — I hear a lot of elder issues and I hear male and female, but I don't hear too much on the children's [health]. They do have a section I think it's during health — in terms of the health calendar, like immunization, when it's time to go back to school, then they'll touch base on those things, but in terms of other issues that may happen along with children's health, you don't hear a lot of that. So, I think those are areas that they need to pay attention to” (KUYI Focus Group 4, p. 4).

In Alaska Native villages, drug and alcohol abuse were mentioned more often as issues affecting the local youth: “Because it shows that we have really, really smart kids, really smart. I mean, like, they're doing great. And then, so you have marijuana and we don't need that. But then you also have the heroin and other drugs. I mean, it means you get a better high on top of that

alcohol. I personally know that, the community was high the whole time, and that's something that's very, very, preventable” (KYUK Focus Group 1, p. 13).

This respondent mentions that they are speaking from experience, dealing with some of the ramifications of extensive drug and alcohol use from a young age now as an adult. At the same time, the speaker strongly believes in the preventability of substance abuse, and the role tribal radio can play in this. As expressed here, youth are not seen as at fault for substance abuse, but rather as victims of it. The fear here is of course for their health and safety, but also for the lost potential, as these "really smart kids" as the respondent emphasizes, are lost to the community as active and functioning members helping to move the community forward. So, again, tribal radio becomes more than an information point; it becomes a community advocate, an integral part of the community's resilience and way towards a brighter future.

Some respondents also noted that programming aimed at younger generations would need to be produced and presented in a way that speaks to that demographic more than the regular programming on tribal radio. One respondent explained: “You're serving the adults, but I don't know how many of the kids intentionally listen to that, and these health related topics, really should impact the kids as well. So I think it would be interesting to somehow get information from them because they're more impressionable, and they're younger, but in order to reach them, you have to be a lot more creative about how you give that information to them, so it's not real dry. If it's dry, they'll just turn it off. But, that would be of interest to me to try to get the kids somehow, get programming in there for them. Like in the mornings like they're talking about, having something like that, going in and put that information in there. Prevention is really important when they're younger. And I would see that as being a focus” (KUYI Focus Group 4, p. 15).

When respondents were asked what kinds of health topics they wanted to learn more about, youth often came up first, but also a great number of other topics. None of the focus groups needed time to think about an answer, but called out an often long list of health topics with no hesitation. For example: “Respondent 4: Cancer. Respondent 3: New mothers. New fathers. Respondent 5: Diabetes” (KUYI Focus Group 2, p. 22).

Sexual assault was also brought up on multiple occasions by participants at both locations. This respondents doesn't name it directly, but is referring to the risk of sexual assault, especially when under the influence of alcohol, and wanting more radio PSAs warning youth of those risks in particular: “Respondent 7: Or through alcohol, when a person is passed out, who knows what they're receiving from another individual. Those things. Interviewer: Yeah, so maybe PSAs or a reminder or a warning of kind of dangerous behavior, like you're saying related to alcohol? Respondent 7: Mm-hmm [affirmative]” (KYUK Focus Group 3, p. 18).

A Yup'ik focus group named sexual assault directly, and also provided another example, related to diabetes, to highlight the kind of framing they would like to see for those more difficult topics, which is positive and hopeful, featuring testimonials of individuals who are successfully managing, or have overcome the health issue in question: “Respondent 1: See, they have different topics, domestic violence, sexual assault. Respondent 2: Oh yeah. Respondent 1: Diabetes... Respondent 2: Well that's hard. Respondent 1: I was talking about how I won socks [on a radio show]. [laughter] So I was like aww. [laughter] Respondent 2: I went on the radio and I was talking about how my son helped himself from being almost diabetic, to you know, where he started being active and, I told him to join an activity, and he skied down Mount Alyeska! And I was like, ‘Oh, I can't believe you did that! I'm glad you're home.’ [laughter] I mean, that kind of stuff” (KYUK Focus Group 2, p. 1).

The diabetes prevention example given here is something that was of great interest to many respondents, not only in terms of the topic of diabetes, but the wider issue of managing chronic disease. This respondent speaks about the challenge of adjusting daily life and managing fear after such a diagnosis. Being so strongly trusted and well integrated, as well as an established community gathering space, the radio station can help with both useful information, but also emotion management and structuring the day with a routine. Two respondents at Hopi shared this conversation: “Respondent 4: And then another thing is, you know, health issues like cancer, like there's not a cure for it, you know. See how your life's only going to change. But how you can go on. It's like a chronic — where you know that your life is going to be like that for the rest of the time. You know, and you just have to accept it, dealing with those kind of things, you know. Respondent 2: That's how my mom is with fibromyalgia. She's kind of like the

doctor says, you know, that there's no cure for what you have. You know, how do you deal with something like that? As the person dealing with it and that's the family you know, that's something you have — Like I know that my mom's not going to be with me for a long time and it's really difficult sometimes. But at the same time, I know it's part of life. Respondent 4: Yeah. Respondent 2: And, you know, how are you going to handle it, and just stuff like that” (KUYI Focus Group 2, p. 28).

In the long list of recommended health topics for the radio, what most recommendations had in common is a focus on prevention and a generally healthy lifestyle, as well as management of chronic disease. Respondents preferred learning from others' lived experiences, and said that audience members usually actively participate in health-focused call-in shows. Short and simple PSAs were also appreciated and specifically requested, as listeners found those particularly memorable. Two Yup'ik respondents shared: “Respondent 1: Yup'ik people are mainly talking in, calling in, and talking [on call-in shows]. And then if they set up sort of like in the health information areas, maybe a different time and date, I mean different time of the week. Something like that. Respondent 4: The reason I say there could be more health information [on the radio], you know, my doctor told me, if I don't take my diet, I would come out diabetic. If that kind of information were on the radio, you know, people wouldn't be diabetic or have obesity. PSAs and examples or like, yeah, PSAs. How to prevent becoming a diabetic or how to not be getting obesity or dying from heart attacks and strokes” (KYUK Focus Group 3, p. 14).

Later on in the same focus group, the same two speakers brought this topic up again when others mentioned some health-related PSAs they had previously heard on KYUK. The topic they said they wanted to hear more radio PSAs about were: “Respondent 4: Diabetes prevention, obesity, you know people being fat. Respondent 1: [laughter] Respondent 4: A lot of people. Well, it's the truth. Respondent 1: [laughter] Well, that's funny, but then it's important also. Respondent 4: That's how my father passed away, because of obesity. Respondent 1: Mm-hmm [affirmative]. Interviewer: Yeah, it can lead to heart problems — Respondent 1: And cancers. And like, in the health area, I like to know everything about health” (KYUK Focus Group 3, p. 5).



An important quote here is "I like to know everything about health" which echoes what other participants at both locations expressed earlier: A need and an openness to information about any given health topic. The issues affecting local residents are numerous, the need for information great, residents primarily rely on the tribal radio station to access it, and while some topics are seen as more difficult to address, nothing is considered truly taboo. Here, the emotional challenges associated with discussing complex, scary, and highly prevalent health issues are recognized, however, the awareness of the need in the community is regarded as more important, and information is seen as inherently good, not threatening.

Nutrition was another health topic of widespread interest. With diabetes and obesity being widespread issues, often because of low household income and lack of healthy, affordable food options, listeners appreciated any information the radio could share about healthy eating in a way that is realistic for local residents. A Hopi focus group engaged in this discussion: "Respondent 8: And prevention stuff like, okay, say you're going to the Cultural Center [restaurant], and you got a choice of Hopi beef [a dish that comes with frybread] or a salad. You know, what's the difference? Do you know what's all in that frybread? And, you know. Respondent 4: Yeah. Respondent 3: 'Cause it — you don't think about that stuff when you're making these decision. Respondent 4: Mm-hmm [affirmative]. And then nutrition. They should have a nutritionist on the radio. 'Cause we haven't had one down here for a while" (KUYI Focus Group 2, p. 39)

Similar to this focus group, the topic of nutrition generated lively discussion in other groups. The desire to hear from experts was commonly expressed, and many wanted to learn how to make better decisions within their possibilities. Like many respondents, this Yup'ik respondent brought up wanting to learn about healthy eating in the context of diabetes prevention, a huge issue in both the Yup'ik and Hopi communities: "Health issues like diabetes, like what she's saying, how to prevent" (KYUK Focus Group 2, p. 4). In another Yup'ik focus group, a respondent recommended for the radio program: "Respondent 2: And share, and share more healthy, uh, what they call that? For food like... Interviewer: Like recipes? Respondent 2: Recipes, healthy recipes" (KYUK Focus Group 1, p. 18). Recipes are something that most people in a different environment with reliable infrastructure and reliable, affordable Internet

access routinely find online, but for Yup'ik residents of rural Alaska it is another information topic for which they rely on their tribal radio station.

It was noteworthy that when the more challenging topics were brought up, that are often considered sensitive and difficult to talk about, Yup'ik participants in particular disagreed that this is the case, and that no topic is taboo for tribal radio. In their view, the most difficult topic are the most important to be addressed, and they trusted tribal radio to find an appropriate way to address those issues that would not be offensive or otherwise disagreeable to local residents. In this example, a Yup'ik respondent corrected me when I made the assumption that the topics they recommended are challenging to address: “Respondent 3: Today I think it's mainly — Here’s what I think is three big problems. One is alcoholism, and drugs, and suicides. Interviewer: Well, those can all be difficult to talk about, do you feel like it would be a good topic for the radio? Respondent 3: They're not difficult to talk about. Interviewer: Okay. So you think it might be — Respondent 3: It's only what makes it difficult, when they're [the people speaking about it] making it difficult. Interviewer: Okay, okay, yeah. Respondent 3: But, kind of like every talk show I listen to, over the radio, alcoholism always comes up. All kinds of drug addiction come up, and suicide. And those problems are getting worse and worse and worse and we need to talk about it” (KYUK Focus Group 1, p. 13).

Some other recommended topics are highly specific to the region, such as “Chewing tobacco.” (KYUK Focus Group 3, p. 18), which is very popular in rural Alaska along with other chewable local plants. Respondents who frequently use those were still unsure about the risks involved, and how they use of chewing tobacco compares to smoking, something they had heard more about regarding the risks.

A topic particularly recommended by Hopi respondents, though it also came up in Alaska, is caring for the elderly, individuals with special needs, chronic disease, dementia, and so on. This topic was recognized as challenging to address by Hopi respondents, but highly relevant to many local residents: “Respondent 2: I think a topic, too, that is kind of difficult is people with, like Alzheimer's, or dementia, stuff like that, that's been, I mean ... I've never had to deal with anybody [affected] and now my grandmother got it. And it's like a-whole-nother thing. Not only the person and how to take care of them but yourself as well, because that totally would

drain out somebody. Respondent 3: And if you have a professional in there. Like if they're talking about Alzheimer's, but had someone like in there to talk to the people. Or 'you're going to be okay,' you know. 'It's going to be hard, but you'll be okay.' You know, that kind of. Respondent 2: Yeah. Or even if you have, you know, somebody who can go in and you see, I guess somebody who can tell you signs and you know, what to look for. Respondent 4: Somebody that experienced it. Respondent 2: Yeah. Or even as just in general, you know, if you see signs of this, you know, this is how you could work on general puzzles and do this to keep yourself young. And you know, I just recently learned that you have to, in order to keep your mind at a really good age, I guess, or mindset, that you have to let it totally shut down. And you have to let your mind rest. And get that real, good deep sleep. So, I was like, 'How the heck do you do that?' [laughter]" (KUYI Focus Group 2, p. 29).

This discussion expresses a number of things speaking to the radio formats Hopi participants prefer. First of all, there was general agreement that this topic is important, interesting, and appropriate for radio. Secondly, the idea to invite a professional on air, something Hopi listeners are used to from KUYI, was met with agreement. The second idea, also brought up earlier in the context of diabetes prevention, to feature individuals with direct experience, was also popular among participants. Most wanted to see both perspectives included in a radio program, and this seemed to be true regardless of the health topic. Given that Hopi respondents did find certain topics difficult to talk about, especially in this public forum — something that was not true of Yup'ik respondents — hearing from another Hopi person with direct experience of a health issue might serve to mitigate some of the fears surrounding it, as well as being more in line with cultural norms around learning from experience and solving problems as a community rather than individually.

Other Hopi participants, some with direct experience and some without, were also concerned with the mental health and overall wellbeing of the caretakers in such situations, and recommended this as another vital health topic for KUYI: "Respondent 3: Another thing, you know, would be, like she says, those caretakers, the people that take care of, you know, the disabled, and that. How important it is, you know, for them to take care of themselves. Because we took a course on that, like how you as a caretaker, you know, like, neglect yourself and you're

the one that — you know. [laughter] It's very important for that person that you're caring for. All these different health issues, you know, that are overlooked. Respondent 4: I think that they would need somebody to kind of help them, lead them on their way. Because they're just fresh out of the box, and they go take care of somebody, family, but they're not ... They're all confused on what to expect. What happens when they don't take their medicine on time? [...] And I think that things like this should be brought up on the radio for, you know, the ones. Just something, you know, to help them along the way” (KUYI Focus Group 2, p. 22).

An idea shared in a Hopi focus group was to address the more emotionally and conceptually challenging topics with the help of specific examples that are less overwhelming and easier to follow: “Respondent 1: But I would approach the hard topics with, something smaller. Like, for example diabetes, you know, that's a huge topic. But if you want to talk about foot care? I remember hearing one time a question, um, they were questioning IHS [Indian Health Service] people [on the radio]. This lady was all upset because they took their grandpa in for an ingrown toenail. Respondent 4: Oh yeah! I remember that. Respondent 1: And they wouldn't do it. Well, why? And it all goes to the diabetic foot care. Is this what happens if, you know? So catch them with something like why can't grandpa's toenail be, you know, addressed? And then get into those things. And at more the local level. The grassroots” (KUYI Focus Group 2, p. 24).

What the respondent is getting at with "catch them with something like [example]" and then naming a more specific topic that is part of a larger health issue likely is the idea that interest must be generated for a more challenging topic, where greater psychological barriers exist for listeners to engage with it. As exemplified by another respondent in the group actually remembering this specific story, this more narrative format with local relevance might also be more memorable for listeners than a general, high level discussion of diabetes.

Even during some of the focus groups, a few respondents offered personal testimony to provide an example and make their point, which was always met with respect and interest from the rest of the group. One example is this discussion on alcoholism: “Respondent 9: I think alcoholism, too, is a big — Respondent 3: Yeah. Alcohol. Respondent 9: We need to really bring that up a lot more. All that, you know, so and so is an alcoholic. I'm an alcoholic, and, you know,

how to deal with, you know those who are alcoholics in our family. But even, you know, how to help support them. Respondent 3: Mm-hmm [affirmative]. Respondent 9: And how to, you know, say, 'Hey.' It starts with them of course, but even the long-term effects. Like, I drank so much when I was younger I have memory problems. Or, you know, I know people who were younger than I was and they drank, and they're still drinking and, you know, I think about how it affects their bones. Respondent 4: Yeah, and we don't know. Respondent 2: Yeah. A lot of people don't know that. Respondent 4: Yeah. Respondent 9: They think, well I'm strong now I'll be strong later. But it's not like that, it's the actual, the reversal of that" (KUYI Focus Group 2, p. 36, 37).

This kind of personal narrative offered in this group discussion is an example of what several respondents said they would like to hear more of on the radio. But also as is exemplified here, the person with direct experience can be a powerful voice in urging behavior change and often bring up the most interesting questions, but may not actually have the answers. From this perspective, the interest and the willingness of the audience to hear both testimonials and expert advice on any given health topics, appears to be what would be most effective. Some respondents highlighted why both perspectives are needed from the other end: Sometimes expert advice can lack local relevance or simply be too technical to be useful on its own. Tribal radio in this instance does translational work, bridging the two perspectives that are requested by listeners. Listeners are very aware of this translational work done by the radio station, and value it as one of the key functions of tribal radio, particularly in the health realm.

One example is this quote from a KYUK audience member in Alaska: "Respondent 1: That medical terms, terminology about medicines. And words that are only used by doctors. Interviewer: Explaining it? Respondent 1: Yeah, explaining it. Explaining it to the public where — as they understand it" (KYUK Focus Group 3, p. 20).

The same idea is expressed in this excerpt from a discussion at Hopi: "Respondent 1: 'Cause sometimes if you get professionals in there, and they talk too high. And then you don't understand. Respondent 4: And you're like 'Huh?' You're all — Respondent 1: Yeah. Respondent 4: 'Cause that's how I get sometimes [...] Respondent 1: Or things like right now [in the summer], why is it so important to stay hydrated? What happens to the body when you're not drinking water? And, you know, it could lead to death. But why people are always telling you to

drink water? ‘Cause a lot of old people don't like to drink water ‘cause they have to get up and go to the bathroom. But why is it important? You know” (KUYI Focus Group 2, p. 25).

The translational work being done by tribal radio that is being recognized and requested here by audience members extends beyond explaining medical jargon to more procedural types of information; why things are done certain ways by medical professionals. Better understanding medical processes and the context within which healthcare professionals work, might be a factor in increasing trust in healthcare workers, who are often cultural outsiders, by the local residents. There were several topics brought up as confusing by participants. One example brought up a few times is prescription medications, why they are prescribed in certain amounts, which can become addictive and how, and so on: “Respondent 4: And then another one [topic] there isn't [on the radio], why they only give you a certain amount of medication. Respondent 3: Oh yeah. Like, yesterday I took [redacted] over there like and they only gave him 12 pills. And they're supposed to last him like, for two months, like, until his next appointment. And you know these kinds of things. They're, like, setting some people up, you know. [laughter] There's people that really need it and then the ones that are abusing it [prescription medication]. Respondent 2: That don't need it, yeah. Respondent 4: You know, those kind of issues” (KUYI Focus Group 2, p. 26, 27).

Another good example of more procedural health information respondents said was needed on tribal radio was concerning dialysis: “Respondent 4: And I think that one would be good, too, if they could talk about on the radio station about dialysis. That's a real bad — Just recently was so sad coming and tell her that you know, somebody that was younger than me, you know, is going to go to dialysis today, you know. We start today, and I like got all choked up, because you don't know why. And if it's the way we treat our body. But it's us that did it, you know. And I think that dialysis should be one of the topics too. A lot of women are getting it and you know, we're just sitting here tomorrow you know, who knows who might need it. And that's one thing that I mean, you know. ‘Cause my dad passed away from that. Respondent 7: And if you had like a community member in that group, like when that person gets strong enough maybe he will tell people, ‘Don't do what I did. I ate too much, you know, I did this, I did that.’ It's, dialysis isn't good, you know. Respondent 2: Yeah. That kind of stuff is real

powerful. Respondent 4: And I kept telling, you know, well before he was talking to us, telling us, you know, that he was going to go to them [dialysis], I said, ‘You can beat it. You can beat it. It’s in what you eat, and it’s what you take in’” (KUYI Focus Group 2, p. 36).

Given the prevalence of both addiction and diabetes in both communities, the topics in themselves are not surprising. But it is interesting that respondents want to learn about more than prevention or management, but also about the medical protocols and procedures relevant to these common health issues. Respondents reported a lot of confusion about not only the illness itself and the risk factors, but in particular the medical procedures involved in its treatment. Because those issues are common, it is likely that respondents have heard quite a bit about treatments like dialysis, even if it does not affect them, and have questions, or that those actually affected themselves have lingering questions that have not been addressed, perhaps because doctors are under a significant time pressure and don't have adequate time to explain, or because patients don't ask further questions in that particular setting that they then take home with them and hope for the radio to address at some point.

### ***Health information on radio call-in shows***

Call-in shows are very popular with tribal radio audiences in general, and this remained true for health topic coverage. Respondents explained that both people in the community, or on the reservation, and those listening online, who have moved away, call into these shows. Both stations, like many other tribal radio stations, also have programs with guests, often a healthcare professional, that are open to direct questions from the audience. Regarding those, a Yup'ik participant shared: “And so more like [redacted] indicated earlier - maybe you will learn it from the listening public that you will start building information, for us to acclimate to. So, that was, uh, what I remember of ‘Call The Doctor’ you know? Instead of the doctor telling me what I am supposed to do, there was a that interaction between the public and the real live person on the radio that was very helpful” (KYUK Focus Group 1, p. 10).

Similar to the Hopi participants quoted in the previous section, Yup'ik participants also brought up wanting to hear from both healthcare professionals and community members with direct experience, in this case specifically in the format of a participatory radio program. This

excerpt from a KYUK audience focus group is an example: “Interviewer: And would you like to hear that from a doctor? Like, when you turn on the radio and you want to learn about diabetes, do you want somebody telling you maybe where they say, ‘This happened to me, or I almost had diabetes, but I didn't develop it because I changed my diet and here is what I did.’ Or do you want to hear from a professional, a doctor who's like ‘Here's what it is.’ Respondent 4: It could be both ways, it could work both ways. Interviewer: Both ways? Do you kind of agree with that? Respondent 3: I agree. Respondent 1: Yeah. Respondent 6: People that are successful, or succeeded in preventing diabetes. Respondent 4: Many years ago, maybe eight years ago, I was told if I don't take my diet, I would become diabetic. Respondent 1: Maybe you should go on the radio and share that story! And then also there was this information that we got [on KYUK] about how long alcohol stays in our system. Seven years is a long time for it to stay in our system! I was like, wondering, ‘huh?’ That's not right. That shouldn't be right. And if the doctors can talk about those areas, like how long alcohol stays in our system or how long marijuana stays in our system. Or what are the most dangerous [recreational drugs] to use, like opium and heroin” (KYUK Focus Group 3, p. 14, 15).

KYUK listeners also said that while KYUK does have health-focused call-in shows that they find very valuable, they wish that there was more of this kind of programming, and that they would participate if there was: “Interviewer: If they talk about health topics, do you think people would call in and ask a question, or is that too — Respondent 1: Yes. They do. Respondent 4: I would think so, because they don't have enough of it. Respondent 1: Mm-mm [negative]. Interviewer: Oh, really? Respondent 4: They don't. Interviewer: Do they need to do more on the radio that's health related? Respondent 1: On KYUK it's mainly like, YKHC [Yukon Kuskokwim Health Corporation, operating the local clinic] workers being involved with the community and they sort of get into it and tell us what we can get into and that stuff. And then if there's more time for more health topics, yes. Respondent 4: I agree with her. If they had more topics on health, you know, people would call in more” (KYUK Focus Group 3, p. 4).

Respondents in a different KYUK focus group also said they would like to plan ahead calling into radio shows about health topics. They shared some recommendations for how they could imagine KYUK allowing for more planning on the audience's part: “Respondent 1: I think



it would be good to do like the PSAs and then some of the interviews, and then later on, ‘Oh we're gonna have this time for you guys to call in later.’ I think that would, that would be — Respondent 4: Yeah, I agree with her. Respondent 1: It's more people to get involved to hear about the subject. And then — Respondent 7: You have to get the information out first. Respondent 1: Yeah, to get their minds thinking to go and actually sit there and go ‘Oh okay I want to call in at this time.’ Respondent 4: Mm-hmm [affirmative]. Respondent 2: And hearing from somebody that actually has gone through whatever is, that probably would be, like, feel more inviting. Respondent 4: Mm-hmm [affirmative]. Respondent 3: And then we'll be able to give you time, just a daily time to call-in. Respondent 4: Because if you let them have the questions be asked for the person who is talking about what their issue is. They're gonna be put on the spot and they don't want to be, you know, okay I went through this and back. If you ask me that question, then I'm like next time I'm not volunteering to come forward” (KYUK Focus Group 2, p. 16).

It is important to listeners to be able to anticipate what clarification questions they might be asked on air if they call in, and need time as well as some initial information about a health topic to think about what questions they would like to ask of an expert when given the chance. Setting a regular time for participatory health programs can also help listeners feel more prepared and therefore make them more likely to call in and participate in these radio programs.

Call-in shows are also regarded as a space to share traditional knowledge on health topics, which used to be shared in person, passed down in families or shared at gatherings, but this is increasingly not the case now. Local residents want this information and see the radio as one of the few remaining places where this can effectively take place. Those elders in the community who have knowledge of traditional healing and medicines they can and are willing to share, can reach many more outside of their own family, who also want to learn about this, but have no one to turn to, by using tribal radio.

In some cases, the desire to learn about more traditional ways of healing, for example through ceremony and/or by using local medicinal plants, was connected to a fear or generalized mistrust, combined with a lack of knowledge, of other approaches, such as prescription drugs. Specifically, even if not named directly, what those respondents often referred to was a fear of

addictive pain medication containing opioids, since addiction is an issue local residents are highly aware of and sensitive to. Often, use of local plants and other approaches to healing was seen as a way to prevent those kinds of side effects from prescription medications: “Respondent 2: It [KYUK call-in shows] gives a good, it gives good way for the Natives to share what they use to like treat a burn, they can share it with other people. Respondent 6: And those treatments also have like no side effects. And they don't mess up your brain. They don't mess up your balance. They don't make it so it looks like you're psychologically ill. They don't cause it where it looks like you're a drunk or a drug addict when you aren't" (KYUK Focus Group 1, p. 19).

Another aspect of the call-in shows that makes them so popular with the audience, especially for conversations around health, is also that the sense of a shared experience is motivational to listeners, and according to some respondents helped them to implement a behavior change. A Hopi listener expressed it this way: “I think getting more individuals who are experiencing that type of issue that they're talking about [on air] so that they can, you know, give their side of the story and may connect with another listener that will push them, maybe who are hesitating to go get something checked, you know. That could be something that's an incentive to the listeners” (KUYI Focus Group 4, p. 4). Since shared experiences and addressing health issues as a community is important to respondents, as they emphasized several times in the focus groups, it makes sense that hearing others' experiences on air is a strong personal encouragement to take action, in this case to seek expert medical advice.

## **8) The radio as a space to discuss mental health, trauma, and other sensitive health topics**

### ***Addressing difficult health topics on the radio***

As mentioned in previous sections, respondents did recognize some health topics as more challenging to address, especially in a public forum like on the radio. However, respondents recognized the importance of health information, were very interested in learning about a wide variety of health topics over the radio, especially prevention, and did not consider any health topics truly taboo for tribal radio.

Respondent felt strongly that difficult topics need to be talked about, and that knowledge needs to be shared for the benefit of the community: “Respondent 3: If you don't say it they

won't know. So it's always good to report what you know so everyone knows. Respondent 1: Right. Respondent 3: Rather than just concentrate on the bad, you know say like, 'this is what happened to me and this is how I resolved it,' 'this is who helped me' — I think that would be good" (KUYI Focus Group 1, p. 21). This positive, hopeful, and practical focus was also important to listeners, and mentioned in different ways in all of the focus groups.

When asked directly about taboo topics, most said there were none, while some respondents spoke about other potential issues with health-focused call-in shows, such as callers discussing too many personal problems on air in a way that listeners did not find helpful. One respondent recalled KYUK show hosts having to intervene if a caller began to take up too much time or discuss matters that were too personal or involving other individuals: "Interviewer: Is there any health topic that maybe people would think is too personal or too difficult, or you don't want to hear about on the radio? Respondent 3: There's something like they stop them [listeners who call into live radio shows] when they talk some private stuff, when they go too far so they stop them or they just hang up on them and let them know that it's not good to be talking about privates. Respondent 1: But that's also, that information might also be important. I mean any information that we're getting and receiving is good" (KYUK Focus Group 3, p. 5, 6). This immediate rebuttal of the first speaker, voicing concern about limiting callers' air time on these shows exemplifies the strong need and desire for all kinds of health information. As the second respondent says very clearly "any information we're receiving is good," communicating primarily a high need for health information and a difficulty in accessing it otherwise. Of course call-in shows can be challenging for hosts to moderate, especially when there are such varied preferences in the audience for how they should be set up and managed.

A topic that came up a couple of times in Yup'ik, but not in Hopi focus groups were LGBTQ+ identities as a challenging topic for radio. According to the respondents, queer identities and relationships are a sensitive topic in Yup'ik culture, but even those respondents, typically the older demographic, also said they would like to learn more about it on the radio, and had nowhere else to turn for information. Again, a primary concern behind the motivation to learn about health topics that do not affect the respondent directly was to keep the community safe, and wanting to learn about everyone's concerns, not only concerns of the majority. One of

the oldest participants in the Yup'ik focus groups, just over 80 years old, brought up this topic: “Respondent 4: In other states they're talking about gay people and lesbians and I want that information to be told also here on KYUK. Like what what they're doing in other states. And here in Bethel, it's like, just starting to move in that area. Respondent 1: I want that information too. Respondent 4: They need to talk about it. It's going on around here. Respondent 1: Mm-hmm [affirmative]” (KYUK Focus Group 3, p. 16, 17). It was also quite common that whenever a respondent brought up a new health topic they'd recommend their tribal station do more programming on, someone else, often the entire group, agreed enthusiastically and wanted to make it clear that even though it was not their recommendation, they also wanted to learn about this topic. In the focus groups respondents very much behaved in a way that was in line with what they said they wanted from tribal radio health programming: Any information they could get about any health topic that could be addressed, ideally along with actionable steps they could take in their own lives. In addition, even if a topic did not affect a speaker personally, or had not occurred to them before as important, they enthusiastically supported that it should be covered on air if it matters to even one person, and that the entire community should make an effort to learn about it.

Another important aspect of addressing health topics as a community rather than individually, that also came up earlier in other contexts, is the inclusion of both elders and youth in those discussions, and ideally in radio programs. A Yup'ik respondent who had experience working in the mental health field shared why this was important to them: “When I was working with the suicide [prevention] program, what we had to do was we had to have elders and youth and teenagers and ways to help them to cope in addressing each of these issues. Whether it's domestic violence, sexual assault, neglect, childhood trauma, you know, and they have to — the kids, it's the new generation and the old generation I have to meet to address those issues and how to help each other. Because they're the ones living with each other. It's not necessarily you being the informant and putting it out there” (KYUK Focus Group 2, p. 18) Information here is not seen as something that only moves linearly from an expert to a group of listeners, but something dynamic that is shaped by those “living with each other” who have to make sense of the information and put it into practice. Inclusion of both elders and youth is important not only

for reasons of cultural appropriateness and respect, but the practicality and advantage of learning from both the experience of changes over time and of the demands of the present. Inclusion of elders and youth here is not only recommended so that youth can learn from the elders, but rather so that both parties can learn from each other, and that all perspectives in the community on an issue are considered.

Regarding taboo topics, listeners were more interested in how audience members who might have some resistance to learning about certain topics on the radio could be persuaded to still listen to these programs: “Respondent 2: I think it's good, I mean, the whole health thing is a good thing. But, I think, just how everything else is in the world, everybody gets easily offended by something. Respondent 4: Mm-hmm [affirmative]. Respondent 2: And so, you really want to catch your audience and keep them instead of, you know, being like, ‘Oh they're talking about this. I don't want to.’ You know? Some things are hush-hush, nobody wants to talk about that topic. Respondent 4: Yeah. Respondent 2: And those are the topics that we need to talk about the most. But, nobody really wants to talk about it. So, it's really difficult. Respondent 3: But with radio it just comes on and you don't — you just listen, you don't have to feel uncomfortable. Respondent 2: Yeah, you can turn it off. Respondent 3: But I think they'll listen because it's already happening” (KUYI Focus Group 2, p. 21).

The idea that nothing should be taboo on the radio is interesting. Tribal radio is accepted as a community space without some of the restrictions that might apply to other settings and media, where everything can and should be put out in the open for the purpose of collective learning and healing. It can work in this way, because tribal radio is recognized as a community gathering space that may not have a physical alternative in the present time, and was sometimes compared to traditional gathering and learning spaces that used to exist in the community. Tribal radio offers a space for the community to gather and address a difficult issue together, in a culturally appropriate way.

Another interesting observation is also that tribal radio can play a role in changing or breaking down social taboos around certain health topics over time, and thereby increase the likelihood that individuals will seek medical advice and care, according to the focus group respondents: “Respondent 3: I think it kind of opens the dialogue. Respondent 4: Mm-hmm

[affirmative]. Respondent 3: And it's definitely once you've heard it on the radio, it kind of makes it a little less taboo. So, you know, even if you don't have anything to say about it. I mean, it's kind of like an anonymous thing, you can sit there and listen to it, and it's very empowering to make your own judgements about that. So when somebody talks about it, like you know, as I am a nurse, and I say okay, 'Have you ever had any STDs?' It's a little bit, they have that little bit of frame of reference to kind of, hey, you know, what I'm talking about. But it kind of empowers them a little bit to say, 'Oh it's okay, they talked about this on the radio, so I kind of, I don't feel like it's in a shameful subject'" (KYUK Focus Group 2, p. 11).

### ***Mental health and intergenerational trauma***

The second key issue that was addressed in all of the focus group discussions was mental health. Several specific topics were discussed and recommended for further coverage on tribal radio, and while mental health was recognized as one of the most challenging topics to talk about, especially considering high rates of suicide, PTSD, and addiction in both communities, it was also highlighted by respondents as one of the most important and most urgent health issues to be addressed, and tribal radio was seen as one of the most suitable places to do so.

Interestingly, it was not only the information and resources shared via tribal radio that respondents found helpful in dealing with mental health issues, tribal radio was also talked about as a resource in itself, predominantly for those struggling with depression and/or addiction, feeling isolated or generally seeking community. For these individuals in particular, tribal radio could provide a sense of human interaction, empathy, belonging, and understanding. This quote from a Hopi respondent is just one example: "'Cause a lot of them [teens] are depressed and, you know, they don't know, have nobody to listen to but the radio, you know. And like I said, you know, I talk back to the radio, too [laughter]" (KUYI Focus Group 2, p. 39).

For most respondents, the primary concern was about teens, as most were aware of the high prevalence of teen depression and suicides in their communities, which are much higher than the national average. This speaker talking back to the radio isn't doing so in a way one might expect while watching or listening to sports, or perhaps reacting out loud to television or radio news. Rather, this person is having an imagined conversation with the radio

DJ or perhaps a guest on the radio. This off-air talkback is conversational, making the listener feel understood. There is clearly a high level of perceived or actual familiarity between the tribal radio DJs and their audience, and a strong desire on part of the audience to engage. This type of connection is what many respondents felt the youth in their communities was missing, and that tribal radio could provide a sense of belonging that could be a supportive factor in combating the mental health crisis among teens.

This topic, and the idea that tribal radio can play an important role in helping teens struggling with mental health issues, was brought up by many respondents at both locations. A common concern was that children and teens have nowhere to turn with mental health concerns, and that tribal radio is an important resource that is accessible to them, and even though young people are most likely to use smartphones and online resources, also listen to the radio, in their parents' homes, on school buses, at school, in public places in the community, including grocery stores and local businesses, in the car, and so on. Respondents recognized that mental health can be difficult to address only within the family, and thought that tribal radio is able to speak to teens in a way that is relevant and helpful to them, and that they would be open to.

One example from a Hopi focus group was this quote: "I think that there are some situations where kids, when they go through that, and their parents—I know there's children that's going through that. The other parents sometimes they really don't take that into consideration and they don't really talk to their children about it. Because for them to get together would be good, like to talk about it with them. This is a big issue, you know, the suicide, some of the kids have growing issues that they don't know how to express those issues to their parents" (KUYI Focus Group 3, p. 19).

Similar ideas were expressed in Alaska as well: "Respondent 4: I think suicide right now is the most important topic right now. Interviewer: Do you think the radio can help address this? Respondent 3: Yes, and people saw what like, what's causing all these issues and they [KYUK] can report on those core issues. They can focus on core issues. Like issues that will lead to suicide that would be mental health or cultural trauma" (KYUK Focus Group 2, p. 17).

Particularly Hopi respondents saw mental health and especially suicide as a very sensitive topic, but even those who felt that not everything regarding suicide was suitable for on air

discussion, still felt strongly that relevant resources need to be shared on the radio. And, as was mentioned several times regarding other health topics, having youth involved in this kind of programming was important to audience members: “Or then getting youth involved too, ‘cause there's a lot of stuff with the youth. I mean I know it's a real sensitive subject, but they have a lot of kids out here that are having mental health issues, stuff like that. So if you get more information off of them too, well and not, maybe put it in on air, but just giving a show of information or where they can go to get that information” (KUYI Focus Group 1, p. 19).

Since mental health issues are very prevalent, many were also interested in learning about how to support others. For example, a Yup'ik respondent shared: “There's not just the physical health, you know, like, mental health too. They can share what we can do if we're at home or somewhere not by the hospital. Or if we see someone that needs help mentally how we can help them? They can share ways we can talk, or encourage people to reach out to those people we see every day that are just struggling in life, you know. Or folks in our community, come on step up let's help these people get on their feet, you know” (KYUK Focus Group 1, p. 22).

Others thought primarily resources for those actually affected by mental health issues, or in crisis should be shared on tribal radio: “Sometimes you — I know there's touchy subjects and not always is there information for that, but maybe suicide prevention. Maybe something like why you've come to feel or you have these feelings, like a little checklist they have, ‘do you ever feel like this’, and if your answer is yes maybe you wanna call the suicide prevention hotline and give a number. Or do you feel like you, you know, do have this many blackouts, do you get drunk and and then they give a line where you can call. Like we have our substance abuse program here [...] They can give numbers for those and they can also talk about domestic violence. I don't hear numbers hardly ever about where you get help from domestic violence. [...] You know something like that, who would you call locally for that kind of help. Or sexual abuse or suicide or anything like that, you know, these are the top two subjects, but we don't get the numbers or the information out there so that when someone needs help where do they go to?” (KUYI Focus Group 1, p. 26).

Another major mental health concern for both KYUK and KUYI audiences was trauma. Different types or causes of trauma were mentioned, and all of them were recommended as topic



for further discussion on the radio. One example mentioned frequently was PTSD: “Respondent 1: Many, many people, many of our people they suffer from PTSD. And that's why we need to think about it. [...] Respondent 2: Yeah, it would be good to have even like a psychologist [on air]. Stuff like that because a lot of people have a lot of problems. I mean, I think about my father-in-law and he was in the military. And he's older now but all those things are coming back to him. And I think, you know, how could he benefit from listening to some other men who are in the same age as him. Or, you know, in that same kind of train of thought and how they handle it. Or having a physician, a psychologist, or someone to say, you know, ‘You can do this’ or, like someone from the Veteran's Center” (KUYI Focus Group 2, p. 33).

Another form of trauma listeners would like to hear more about on tribal radio is intergenerational trauma: “When I was going to this training over the summer, we were reading this book. And it talked a lot about what happened in our past, and how it's not even that long ago. The Great Death was when disease ran rampant throughout all Alaska and wiped almost like 90% of us. So I never really thought about it before, but there's this really old picture of my mom. And the rest of my mom's side of the family is all there in the picture, you know, wearing traditional garb and like shortly, you know, just a couple of years after that my great-grandmother died of TB [tuberculosis], and then my grandmother and my grandfather. Well, they all died within a couple of years. And yeah, that's not too long ago. And just, I'm thinking about that cultural trauma, that it's still coming out today and I think that's where a lot of the problems with behavioral health and that stem from, and I'm real thankful for programs doing outreach, especially when we have these tragedies that are occurring in our communities today [referring to suicides]” (KYUK Focus Group 2, p. 17).

There was a lot of interest and concern among participants at both locations regarding mental health and trauma, and while certainly seen as challenging, these topics were strongly recommended by listeners for tribal radio programming. The discussions about these topics also highlighted the strong reliance on tribal radio for essential mental health information, such as suicide prevention hotlines, signs and symptoms for early recognition, advice for helping others in a crisis, and information on where to turn to for advice.

## **9) Culturally appropriate health information and raising awareness of health issues**

Tribal radio presents health information in ways that are easily understandable, which was appreciated by the listeners. Respondents often mentioned this in the context of being more motivated to change their behavior when they understand the reasons for the required change, and the necessary extent, as this quote shows: “Respondent 4: Yeah. That's what my coworker and I were talking about this morning, about, you know, using more everyday language instead of using their technical terms. But like, like this afternoon, when they were talking about the diabetes, I really enjoyed that, what part I heard. Because like they were saying, you know, well, when you go to a birthday party, it's not saying you can't have any cake. You can have a little slice, you know, of whatever. But, 'cause I know a lot of people feel that way, that, you know, oh my doctor said I can't have this. And then that discourages them to where they go 'I'm not going to do my diet.' So just nevermind, you know. But the way they were saying it today made it sound more 'oh, yeah, I can have that little piece of cake,' you know. But I still have to behave later, or whatever, or before, you know. So, something like that. How people would really feel about it. So instead of being so strict, you know, encouraging them. Respondent 1: Yeah 'cause you're scaring them! [laughter] Group: [laughter] Respondent 4: Yeah” (KUYI Focus Group 3, p. 17, 18).

### ***Holistic and culturally appropriate approach to health***

In discussing both physical and mental health topics that listeners wanted to hear more about on tribal radio, it also became very clear that approaching health holistically rather than seeing these areas as disconnected from each other is very important to tribal radio audiences. Health information is therefore not just information about a particular disease and how to prevent or treat it, or information about mental health concerns, but also information about farming, about ceremonial cycles, traditional stories and values, all of which are seen as integral to the health of the community. Indigenous languages were also often mentioned as not only important for individuals to understand the information better, but also as an indicator and facilitator of community health. If the Indigenous language is spoken more, that is an indicator of a healthy Indigenous community according to some participants.

This Hopi focus group recommended for KUYI: “Respondent 1: Covering all health issues like spiritual, mental, and physical. [...] Like, talk about the food and agriculture. It’s really connected to the health. Respondent 2: The lifestyle. Respondent 3: The traditional farming and yeah. Yeah, that's interesting” (KUYI Focus Group 1, p. 13).

Respondents said that holistic views of health are more culturally appropriate and in line with Hopi values and Indigenous knowledge: “You know, the Hopi traditional lifestyle was living holistic health — mind, body, spirit. And they practiced and believed it and so maybe an idea for programming is to focus on that and maybe parts of that in Hopi, so you're incorporating the language. And then you're educating about Hopi traditional values and at the same time you're imparting, you know, these healthy lifestyle concepts. Maybe a program like that” (KUYI Focus Group 4, p. 26, 27).

Farming and healthy eating were important topics to many audience members. This respondent is expressing a desire to use radio to re-learn some traditional food preparation and cooking methods, and learning about what a Hopi diet used to be like in the past: “Well they [Hopi elders] said healthy food was the purest form of food a long time ago, and we went away from that so much. That now we're having a lot of issues, you know, definitely like me — I was raised on a lot of healthy food and then all of a sudden I'm eating like additives and stuff like that. So information is out there about healthy food being pure like piki bread [a traditional Hopi food made from local blue corn flour]. I heard of people they send a lot of email to people that are more knowledgeable with nutrition as a pure form of food, something like that” (KUYI Focus Group 1, p. 15).

In addition, listeners at both locations were quite aware of different audience segments locally, and highlighted in the focus groups how important it is to target the right audiences with health information on tribal radio. Primarily, different audience segments, mostly identified by age group and employment status, listen at different times of day, as this Hopi focus group participants explain: “Respondent 7: Well there's different audiences at different times, like at noon, or whenever house calls was. Respondent 2: Yeah. Respondent 3: Afternoon. Respondent 7: You're dealing with old people and probably people who don't work. What are the health risks for those people? You could talk about stuff that afflict the elderly, diabetes, different topics and

then different topics for the evening crew, which I don't know if teenagers listen in this certain time. But they might be listening when those kids come on and do their — Respondent 4: Yeah. Respondent 7: So yeah, and those kids could tackle things. Or, I don't know health is such a hard topic, too. But, tackle different things at different times” (KUYI Focus Group 2, p. 20).

### ***Health Information in the Indigenous languages***

The importance of Indigenous language use on the radio has already been extensively discussed. At Hopi in particular, use of the language was discussed specifically in the context of health. Yup'ik respondents highlighted that there are monolingual speakers in the area, and that for this and for cultural reasons, as much information as possible, especially if intended for the older audience segment, should be covered in Yup'ik as well as English. At Hopi, some listeners simply understanding Hopi better was one reason, but other reasons, such as cultural empowerment and slightly different meanings of words in Hopi that change how health is being discussed (e.g. with a more positive framing than is typical in English) were also mentioned. One Hopi respondent said having health information on the radio in Hopi is important: “Especially for the elderly. They're not computer-savvy and their main thing is either the radio or the newspaper. And again, there it's like he said, they understand more in our language so they can hear it in our language. ‘Cause you can't really, I mean they say you can write Hopi, but you really, to me, my personal opinion is you really can't. [laughter] And get the full meaning and stuff so it's really just spoken. And not that our, even our elderly would understand it anyway if they read it. They understand more if they hear it. So I think it's important for the elderly to get that news or that information in Hopi” (KUYI Focus Group 1, p. 11).

While it is correct that Hopilavayi can be written<sup>14</sup>, it also makes sense that, as this respondent points out, particularly older individuals, who learned Hopilavayi as their first language and at a time when it was only spoken not written, would prefer to hear Hopilavayi rather than reading it.

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<sup>14</sup> Unlike other North American Indigenous languages, like Cherokee, for example, Hopi does not have its own script.

Recognizing that not everyone speaks Hopi, and that not all programming can be translated, for time and staffing reasons, some listeners suggested that there should be set times for Indigenous language programming, about health in particular, so they can plan to tune in then. One person said: “I think maybe one thing they could do is if they do both languages, maybe especially with the house calls shows [call-in show with a medical doctor]. If they do the show all in English, and if they had time to translate everything and do all your production work to be played at a later date, and they can announce when that next show will be. And then that will be completely in Hopi” (KUYI Focus Group 1, p. 4).

### *Using the radio to create awareness of health issues*

Radio seems to be particularly effective in creating awareness and conversation around health issues in rural Indigenous communities. Because the tribal radio station is so ubiquitous in those communities, it provides a shared knowledge base among local residents that makes it easier to start conversations around topics that otherwise may not have come up.

Like this Yup'ik respondent, almost all participants spoke about their tribal station's ubiquity as a positive thing, and did not seem tired of hearing the same station nearly everywhere they go locally: “Interviewer: But, do you like to listen to health topics on the radio, or would you rather be reading something than hearing it? Respondent 3: Wherever I go I hear KYUK, even when I go to the store I hear it, it's awesome! Respondent 4: I would rather hear it on the radio. Respondent 1: Radio is good. Very good” (KYUK Focus Group 3, p. 12).

Several respondents recalled remembering information and PSAs they had heard on their tribal station when making health-related decisions, for example around food choices: “Respondent 8: I think it helps 'cause it will help make people think twice. Respondent 4: Yeah. Respondent 8: You know, and say ‘Oh I shouldn't do it’ you know. Group: [Agreement] Respondent 8: I thought about it, you know. In the, over the half way point and then remembered. Group: [Laughter]” (KUYI Focus Group 1, p. 12).

Others also appreciated health-related reminders, including about services available at the local health clinic at certain times: “Respondent 3: Activities or any kind of event, you know, it's good to know. Especially, as far as the health part, they let you know when they're having the

immunization clinics. And then I like to listen to some of the topics that they talk about. Like, I've heard that one with the doctor this week. [...] And, it's interesting just to keep up, you know, with what's going on today, you know” (KUYI Focus Group 3, p. 1, 2).

Much of the health information on tribal radio is also seasonal, or about urgent issues that come up at a particular time. Unlike other sources, radio can not only get the information out to everyone in the region quickly, but also give additional advice on how to act and prevent further spread of a disease, for example, in relation to the local culture and lifestyle. One example from Alaska is a salmonella outbreak that occurred a few months prior to my fieldwork: “Respondent 4: And oh I think they had an outbreak of salmonella this summer. It was on the radio and it was telling people how to take care of their fish and don't give them out and offer them if they're warm, you know? Not even if they're spoiled... like that information. Respondent 3: I really think it [KYUK] does a good job at that kind of stuff. [...] I think the radio does a really good job, at getting those kind of public service announcements out” (KYUK Focus Group 2, p. 14).

A similar example was offered by this Hopi respondent: “Their health topics that they [KUYI] do — a lot of things are real helpful to me, I could say, ‘cause I'm a single parent. And, you know, they let you know what's out there, like head lice outbreaks or measles, or chicken pox. They let that out. And that's real good for me, you know” (KUYI Focus Group 2, p. 2).

Many others discussed example of how tribal radio health programming generated conversations about these topics in their households and in the wider community. One common example was elderly family members asking questions of adult family members after listening to a radio program: “That's what I do with them [elderly family members], you know, I just discuss it with them. If it's something that I think might be important for them to know, then I'll explain some of the stuff that they're talking about [on the radio], because they'll be like, ‘What are they talking about? What's that?’ And you know. So that I just like sit there and explain it to them” (KUYI Focus Group 3, p. 9, 10). But also outside of the family members respondents are discussing radio programs on health topics, or talk about additional recommendations they have: “Respondent 4: They even have nurses [on air], you know, those people that are — our lady that goes to our church, [name redacted], you know, she's always telling us things at church, you

know. Like, ‘You should share this with the radio.’ [laughter]. Respondent 3: Yeah. Respondent 4: You know? [laughter]” (KUYI Focus Group 2, p. 28).

***Radio using humor and positivity in culturally appropriate ways when discussing health topics***

Many respondents expressed an issue with how they found that health information was usually shared, for example in print materials or by some doctors, and pointed out that tribal radio approaches those topics in a different, and in their view better way. They found tribal radio health programming to be more accessible, as previously mentioned, and more culturally appropriate, including use of humor and positive framing when covering serious and intimidating health topics. While this was mentioned in different ways in multiple groups at both locations, it was most extensively discussed in one focus group at Hopi: “Respondent 5: That’s what a big part of Hopi is, too, all the humor and being able to — Respondent 3: Make it personal Respondent 5: Make something so negative into something more positive. Respondent 3: We’re not really the stereotype Native Americans they make us out to be at all. [laughter] We actually have a lot of humor — look at our clowns during our ceremonies, you know, they teach us by making fun of us, by picking on our — Respondent 2: ‘This is how you’re walking.’ Respondent 4: Yeah. [laughter] Respondent 2: We like laughing with each other. We don’t take ourselves super serious, you know. Respondent 5: I guess more people are willing to listen just like that and when it’s coming from somebody that you feel more like your friend or a person you’re more willing to trust them. Makes it more easier, I guess, to grow from it. Taking it in a humorous way” (KUYI Focus Group 1, p. 22, 23).

This trusting relationship with the radio DJs and their way to talk about even serious, challenging, and intimidating health issues in a humorous way was contrasted by participants in this group with some experiences they have had interacting with certain providers at the health care center. They preferred when providers also communicated in a way similar to the radio: “Yeah it’s like, going to the health care [center] and you get some of these doctors that are all serious and don’t joke around, like, nothing. Then you get these doctors that joke around and you listen more and you feel more comfortable asking questions and feel more at ease to make jokes

to them and they come across and can get the message more — they just make you feel more relaxed too, and then you hear more. You remember it better” (KUYI Focus Group 1, p. 24).

While others in different cultural contexts might see it as inappropriate to approach serious health topics with humor, Hopi respondents were much more receptive to the information, and more likely to ask questions, as this respondent said, when this was the case.

### ***Health-related PSAs on the radio***

PSAs that tribal radio shares, many produced by them, but also some they receive pre-produced for airing, were mentioned in prior sections and generally appreciated by audience members. Regarding health topics, respondents said short PSAs are memorable and helpful to them. Some of the locally produced PSAs are in the respective Indigenous language as well, which was always appreciated. Many respondents recalled specific PSAs during the focus groups, or instances where they were reminded and encouraged to seek medical advice or get a check-up.

Hopi respondents shared that “I do appreciate the PSAs that they have, including, they encourage Indian individuals to go get checked up for prostate cancer, or getting mammograms, or things like that. Those are good PSAs that they have” (KUYI Focus Group 4, p. 40).

Participants in other groups agreed, recalling that “they have — like for cancer month or diabetes program, they have little PSAs that say something about cancer awareness month or something, you know” (KUYI Focus Group 3, p. 14) and PSAs “pushing for those check-ups. I hear that on there [KUYI] like ‘get your cancer check.’ And some of them are in Hopi, too, you know. Did you get — Bob, did you get your check-up? [laughter] So yeah” (KUYI Focus Group 1, p. 12).

As discussed in the previous section, use of humor was important here, too. Perhaps not in very short PSAs, but in longer radio skits aimed at motivating listeners to seek care, humor again was seen as appropriate and effective: “The thing I like, too, of the radio: it's funny. But you know, it's like, it makes you think too. Like how they do the little skits with the tobacco programming, you know? And then like, the diabetes, they tell you to exercise. And then they say, ‘Even just dancing at Indian Day.’ Those kind of little skits. It doesn't seem like it's giving out information, but it is. It's like motivation to do something or like, little reminders. It's not



preaching to you or whatever; it's telling you, but in a way of — more like, how, I guess, how the community will understand” (KUYI Focus Group 4, p. 38, 39).

Yup'ik respondents also appreciated the PSAs on KYUK, particularly those produced by them, with health information very specific to the local environment and lifestyle, where for example correct fermentation is necessary to maintain a nutritious diet year-round: “Respondent 4: More call-in shows. Interviewer: Would you like more interviews, PSAs, or kind of more of everything? Respondent 4: Both, both. PSAs work very good. With the doctors or more like what keeps the injury prevention, or health aides. It's really — a lot of people eat fermented vegetables around here, you know, and I heard one [PSA] about how to prevent botulism. Respondent 1: And how not to — how to ferment them right, properly, too” (KYUK Focus Group 3, p. 13).

Overall, PSAs seem to work well for listeners, particularly if locally produced with information that is very specific to the community, and ideally available in both English and the Indigenous language.

## **10) Radio programming improving healthcare interactions and barriers to achieving this**

The focus group discussions suggest that tribal radio can, in fact, improve audience members' direct interactions with healthcare providers, and motivate them to seek care, ask further questions, and follow recommended timelines for immunizations and general health check-ups.

### ***Procedural health information***

One topic frequently recommended for radio that I did not anticipate based on the literature was procedural health information, meaning information about insurance types available locally, how they function, what they cover, what the process is for seeking urgent care, what information patients need when they go to the health clinic, and other similar topics. Participants reported significant confusion about those topics, constituting a major barrier to their seeking care, and a strong desire to learn more. Again, many felt that print information they received about insurance, hospital admission procedures, and so on, were too confusing, not personal or engaging enough, and that they would much prefer to learn this information from

tribal radio. This is not the kind of information typically covered on radio, and often not considered very well suited, because it is so technical and can vary so much from person to person, for example when it comes to health insurance. However, there are again particularities that apply only to the U.S. Indigenous population, such as accessing healthcare through the Indian Health Services (IHS) that applies to so many listeners that radio can share some generally applicable information in that regard.

Procedural health information was strongly requested at both study locations. For example, participants in a KYUK audience focus group shared: “Respondent 5: If you don't have the insurance, or Medicare, what else — Respondent 2: Yeah, what steps can we take to get services for whatever health things we're going through. Interviewer: Is that something that the radio might be, or should be doing more of? Because I don't think they're doing very much of it right? Respondent 5: Procedural, no. Respondent 3: Definitely not at all. Respondent 2: Yeah. Respondent 1: Yeah. Respondent 4: Absolutely in every way they should” (KYUK Focus Group 1, p. 15, 16).

Many listeners recommended an interview format for this kind of information, like these Hopi respondents: “Respondent 3: To have somebody from their health insurance come in and explain some of the priorities and some of those policies. How they are using their insurance and if they're not using their insurance, maybe have somebody from their insurance company, you know, explain that on the radio to the tribal employees, because the majority of the offices, I think, have the radio station playing throughout. And so that would help. Respondent 4: I don't know how many are aware of, too, of like, okay you have this health care center, you know, and you have a job somewhere and you have your insurance through your work. You know, a lot of that, there's questions on that. You know, when I go there are they gonna charge my insurance or am I even eligible for the services there in the healthcare center?” (KUYI Focus Group 4, p. 36, 37)

Someone who had been involved with programming at a local community center shared their experience with sharing such information there, highlighting that there is a high demand and that radio should try to address these topics more: “We had [redacted] come in and talk with our seniors earlier this week, and he went through a lot of the, just general overview. But the

questions that they were asking — a lot of it had to do with insurance: The different parts of Medicaid, Medicare, whichever one it is. I think that really helped them a lot because that's something that a lot of people don't understand and when they become hospitalized, they don't realize that they should've signed up for something. And you know, that it costs a little bit more that they're going to have to carry some of that financial responsibility to make sure that they have that years down the road. So, that part of it, for them, I think was really enlightening. That not everything is covered by IHS [Indian Health Services] or by their insurance” (KUYI Focus Group 4, p. 8).

Information about insurance was mostly requested by older participants or by younger participants for the older individuals in the tribal radio audience. As with many health topics, impacts and interests for elders and youth were always considered, even if the respondent themselves did not self-identify as belonging to either group.

It was emphasized that this kind of information is needed in the Indigenous languages, particularly for the older population, and that radio is a well-suited medium for it. An elderly Yup'ik participant shared: “Respondent 4: I need to know, well, I just recently got on Medicaid and I didn't know about this and that. Interviewer: Yeah. A lot of people were saying that. So do you think like the radio can help with that? Respondent 4: The radio can help. It could help if it would translate that information both in Yup'ik and English, too. Hopefully they would have it in Yup'ik” (KYUK Focus Group 3, p. 25).

Participants also reported confusion about policies and regulations they encounter when visiting a healthcare facility, and wanting to better understand how types of facilities differ, why they need to give certain information when signing in for an appointment, and so on. Not knowing this information about the healthcare system exacerbated any existing doubts, confusion, or mistrust patients had prior to visiting the facility. Again, the radio was regarded as an appropriate and trusted source for this information, and this kind of information was explicitly requested by listeners. This quote from a Hopi focus group is an example: “I think, too, the big issue is like, I don't know if they might've did one [a radio program], and I never heard it, but, we have a lot of confusion on our healthcare system. As to that, it's just a clinic, it's not a hospital. And I think they need to maybe like, be more informative of what you need to do, like, in all. I

know sometimes you're out of town, you know, off somewhere and maybe you get in an accident somewhere, and have to go to another hospital, you know? And you have to let them know within so many hours that the healthcare, that you were seen at another facility. Those things and how that works. You know, kind of more of those kinds of information needs to be put out. And then the referral system and how that works. Who the specialists are. And then just follow ups, or just going to see them and you know. There's a lot of confusion with people” (KUYI Focus Group 4, p. 6).

Another Hopi group engaged in this discussion about the topic, again brought up by the group when asked about health-related topics they would recommend more programming about: “Respondent 1: And what I think might be nice is maybe every month like a show for IHS. Or people can give questions. Like when we go over there, you have to sign in. Well, why do you have to sign? I was just here yesterday and I asked someone: ‘Well why?’ And there's a reason why. It's all regarding payment and all of that. But things the public might have or why — why do I get penalized if I am 10 minutes late, but the doctor doesn't get penalized when they see me an hour later! Group: [laughter]. Respondent 1: You know? Respondent 2: Yeah. Respondent 1: Things like that. Respondent 4: The policy they changed on pharmacy on Wednesdays or something. Respondent 3: Yeah. Respondent 4: And I'm like, ‘Well why? How come?’ I mean, they could have shared that with KUYI, you know, and told KUYI, you know, on Wednesdays something about the pharmacy. And I'd have known like, ‘Oh.’ Respondent 3: And have a conversation with the IHS [Indian Health Services] people, because they impose all these things on us, but they never told us. Respondent 4: They never — yeah” (KUYI Focus Group 2, p. 26).

To the participants, KUYI was the obvious conduit for this information, and this group here suggests that it is the healthcare facilities’ or perhaps IHS’ responsibility to reach out to KUYI and other tribal stations in order to inform the publics they serve.

### ***Getting to know doctors via the radio and radio encouraging in-person visits***

The focus group data further suggests that tribal radio can facilitate more trusting and more informed relationships between local healthcare providers and their patients, who are predominantly the tribal radio audience.

The first set of recommendations in this regard concerned giving advice on what to ask a healthcare provider when going to an appointment, receiving a new prescription, or discussing medical test results. Many participants said they were given a chance to ask questions, but often didn't, because they did not know what to ask, felt rushed, shy or intimidated, or did not feel that their relationship with the provider was trusting enough for this kind of conversation, or that they had a relationship at all. Specifically, one Hopi participant phrased the request this way: "You know, tell us 'Always ask your doctor. Always ask this information. This is what you should ask.' Give those types of information out as to what kind of questions you should ask your doctor and you know, always go for, don't be afraid to ask, otherwise he won't say — because some people, they are afraid to ask certain things. Well, and they don't know how to ask" (KUYI Focus Group 4, p. 23).

Without being prompted, another Hopi focus group also brought up this same idea: "Respondent 2: I think it's hard to, sometimes for people to even talk to doctors. And someone giving questions to go with ahead of time that would be really good. Interviewer: So if the radio did that it would be helpful? Respondent 4: Very helpful. Respondent 1: It's very helpful. Respondent 3: Very very helpful [laughter]" (KYUK Focus Group 3, p. 24, 25).

Most listeners prefer to learn about health in a participatory format, where listeners can call in and ask questions or participate in discussion. Both stations, as well as many other tribal stations, host such programs on health topics, and usually invite a medical doctor or other expert to answer questions during this time. This format is well received by the audience and, according to focus group participants, strongly preferred over a radio interview with the professional. Both stations also do such interviews between a show host and a medical professional, academic, or other expert, and listeners do find these shows interesting as well, but what they most appreciate is the chance for direct interaction and learning from other community members, not only a single expert.

The participatory shows on tribal radio are often done with minimal to no pre-production, where audience members call directly into the show to be live on air, without speaking to a moderator first, as a larger radio station would typically handle participatory programs, fielding callers and questions prior to allowing them on air. While this can sometimes lead to issues that

listeners have pointed out, like someone speaking for too long, not having a specific question, or talking about very private matters, generally audience members appreciate the authenticity of these programs. As participants expressed repeatedly, it is critically important to community members that everyone is included in important conversations, such as those on health topics, especially both youth and elders, and that everyone has an equal chance to speak, and thus editorial decisions about whom to allow on air that are otherwise common in radio would be deemed inappropriate on tribal stations, and are thus more deliberate decisions than just a result of understaffing.

The participatory health programs cover a wide range of topics. For some shows, the general topic is predetermined while others are open to any questions listeners might have for the doctor in the studio. One Yup'ik participant succinctly described these shows: “When they have a subject, whether it's domestic violence, sexual assault, ... they ask someone who has the knowledge or went through that, whatever issue is on the agenda. And then they talk about it on the radio to us and then they give that information” (KYUK Focus Group 2, p. 15).

Several participants also recalled particular expert guests from the participatory shows, especially if they used to be featured regularly. Due to high turnover among outside medical staff in many rural Indigenous communities, it can be very challenging for tribal stations to find local experts to commit to regular radio appearances. For new staff, these shows are also seen by them and the audience as a good way to introduce themselves to the wider community, since the station has such a large and diverse audience locally.

Participants named some specific traits they appreciate among experts invited on air, such as being open and direct, using clear and simple language, as well as being inviting, not rushing, and not appearing to be dismissive of any concerns or questions. Some members in a Hopi focus group remembered one particular medical doctor who used to appear on a participatory radio show as having some very positive communicative skills, also highlighting that listeners perceive these skills to be quite rare among experts, and thus particularly memorable: “Respondent 4: Doctor [name redacted], he was a good one that — Respondent 3: Yeah! Respondent 4: He was a good one. When he did his house calls [on KUYI] he was real open. Like, when people would call him and ask questions he was real open to tell them, you know, this and that. And that's what

I liked about it ‘cause you know a lot of things, like this elderly lady they didn't know how to — she was tired of taking her husband back and forth to the bathroom. And he told her, you know, ‘Why don't you make an appointment and we can, you know, work from there?’ And asking her the side effects because a lot of people, you know, like the elderly, there are people mad ‘cause they have to take out time to take them [to the healthcare center]. And you know, that's just a waste of their time to them. But anyways, that would help, like, if they had a physician up there [at KUYI] saying those things” (KUYI Focus Group 2, p. 31).

Not only the omnipresence of radio helped facilitate an introduction and relationship building between the audience and the local healthcare professionals invited to the station, but more importantly the tribal radio DJs, who are well known and trusted in the community. These DJs are uniquely well positioned to introduce outsiders to the local community. Listeners appreciate this function of radio and are very receptive to new information and introductions provided by the DJs. Many participants highlighted the personal connection they feel they have with the tribal radio DJs, whether they have actually met them in person or not. One Hopi participant expressed it this way: “And they kind of hit on it personally. We know the DJs, whoever the DJs are. Some of us know when they interview people it's not strangers. We know some of the strangers. When they, if they do a Native, I mean a health issue thing like Doctor Calling [participatory radio show] or something like that and they have a doctor on there. You know, if you go to the hospital or the healthcare [center] you're going to see that doctor there probably [laughter]. So its all personalized. I mean it's all like you already know each other now. And so you're hearing from them [KUYI] before going there [healthcare center]” (KUYI Focus Group 1, p. 8).

It is interesting that even hearing a doctor on the radio once led this participant to choose the wording of “you already know each other now.” Listeners would likely not say this about individuals voicing advertisements on the radio or people they have seen on television. Rather, this perceived familiarity is a result of the deliberate introduction through a well-trusted radio station DJ, who in most cases is also a community member. An introduction facilitated by an outsider, or via a different, generally less trusted medium, like a commercial radio station or television, would likely not have anywhere near this effect. As this speaker clearly stated, having

been introduced to a doctor via tribal radio first, before visiting the clinic, reduced some of the anxiety or insecurity around meeting “a stranger” as the participant stated, which could be a barrier to seeking medical care for some. Through these participatory programs with medical doctors as guests in the studio, tribal radio stations are therefore not just answering audience questions about health, but actively reduce psychological barriers to accessing care.

Because many local residents experience significant infrastructural challenges, including transportation to the clinic, health-focused radio programs, and especially those that provide an opportunity to speak with a medical doctor, are very important to the audience. Many listeners said they plan ahead to tune in for these shows, sometimes even writing down questions, concerns, or symptoms they experience to ask a doctor during the radio show, as this was the easiest way for them to access a doctor. Some KUYI listeners criticized that one of the regularly scheduled participatory health shows was no longer happening at its regular time (it actually had to be discontinued for some time, due to difficulty finding a new regularly available guest for the show and the radio station preparing to move to a new location): “Respondent 9: You knew it was going to come on every Wednesday at one, or, you know, whenever. But now, there's no — Respondent 2: Nothing. Respondent 3: Yeah. Respondent 9: I mean but they're used to that, you get used to you know, okay set your radio at that certain time, I'll turn it on. But now there's no more of that so I'm like, ‘What happened to the —‘ Yeah” (KUYI Focus Group 2, p. 19, 20).

The generally high turnover at rural health clinics, particularly on Indian reservations, is a potential barrier, as the station has to continue the work of finding a new professional who is well suited for such a show and available to come in for no pay. However, patients in these regions are experiencing similar issues with this high turnover, and when tribal stations do succeed in finding someone to come on air, these participatory shows can help introduce new doctors to the patients and informing patients that a doctor has left the region. This is a need in the community, as this quote from a Hopi focus group shows: “And then the turnover of the staffing [at the clinic]. They [patients] get asked who's their primary physician and then they name them, but by the time another visit happens, then that physician is gone. So, we should talk a little bit about the turnover and the kind of health professionals that they've got here” (KUYI Focus Group 4, p. 10).



### ***Traditional and Western medicine***

For many, tribal radio could also bridge some perceived gaps between providers and patients in the sense of alleviating cultural misunderstandings. Some Indigenous patients perceive non-Indigenous providers to be judgmental or talking down to them, which may sometimes very well be the case, given that Native Americans are a frequently stereotyped population, and sometimes may be due to cultural misunderstandings. A Yup'ik elder shared this in one of the discussions, wanting to highlight neither Natives nor non-Natives ought to feel or act superior. The participant responding to the comment adds a desire for outsiders wanting to learn from, and listen to the experiences of local residents, and that this was in fact something they valued about this study: “Respondent 3: And as a senior, I would say that we're very smart and the non-Natives out there are very smart. I mean, like nobody's smarter than us, in actuality we're both smart, we have a lot people out there [outside of the rural community, e.g. working in cities alongside non-Natives]. It's like, not trying to be over this person, or over that person. Respondent 2: And also, we need more people like you [me, the researcher] coming from downstates and wanting to know more and share it. It don't got to be paid the \$25 to be here [payment for focus group participants], you know? Just like, that's so cool that you're coming here and wanted to know about us and share it” (KYUK Focus Group 1, p. 25).

Since listeners are already familiar with the show format in which medical professionals are introduced to share advice and answer audience questions, many requested this format to be used to share what they called “traditional knowledge,” meaning information about local medicinal plants, ceremonies and other traditional healing methods, perhaps also including information about traditional hunting, fishing, and farming methods, since participants repeatedly emphasized their holistic understanding of health, which also includes obtaining food. This was mentioned in conjunction with what is often referred to as “Western medicine,” meaning the medical system rooted in university education and modern medicine, including chemical drugs going beyond medicines that are locally available and that would be considered “traditional” as in having been used by the Tribe for hundreds of years — simply because other medicines and treatments were not available (and still can be hard to gain access to for many rural reservation residents).

One Yup'ik focus group participant explained this idea as follows, which was met with agreement from the other group members: "That sort of gives me the idea, a fun segment might be if you talked about cultural views of health. And then put it with somebody who does Western medicine. And see how they can intertwine, because, you know, cultural medicine, there's something to that. Half of it's probably just something somebody told them. But half of them there's really something to it. So it'd be interesting to put them together, merge them and see" (KYUK Focus Group 2, p. 21). Later in the same group, another participant brought this up again, when someone else mentioned wanting to hear more information about diabetes prevention on the radio: "Respondent 1: And all the diabetes stuff. Respondent 5: Yeah, all this with the diabetes thing. We have to find the elders in several or select communities to pass on traditional knowledge. To come and talk to kids in school and the radio station." (KYUK Focus Group 2, p. 19, 20).

Across the board and in both communities, there is an openness and strong desire to learn from both university-educated doctors and community members, usually elders, with particular knowledge regarding traditions, plants, and ceremonies, that are understood as health information. It was interesting to see such a strong shared desire for a merging of the two (or more) schools of thought.

Some participants also felt that they feel disempowered in their healthcare and disease prevention, because they don't know alternatives that might be available to them. This could be alternatives to a particular treatment or drug prescribed by their doctor, or alternatives in the sense of traditional alternatives to "Western medicine," meaning prescription drugs. Like this Hopi participant, several individuals expressed frustration over their lack of understanding of their own prescriptions, and feeling like they have to take too much medication. Of course not knowing what each drug does and why each one is important, it can easily feel like the sum of the prescriptions is too much.

However, from an ethical standpoint, this is also concerning as it shows Indigenous patients not being as informed as a healthcare provider should make sure they are when prescribing a drug or otherwise providing care. Without understanding their current treatment plan, patients are not able to raise their concerns about a certain drug or general approach or to

ask pointed questions about alternatives that might be available. What many participants across my focus groups have shared is in fact an expression of incomplete or not fully informed consent. They did give consent during their medical treatment processes, and most of the time followed the treatment regimen as prescribed, but most participants had lingering concerns and a sometimes severe lack of understanding of their own medical treatment or medication that they were comfortable sharing anonymously in the focus groups, but said they were not comfortable expressing to their healthcare provider. Therefore, addressing not only information gaps directly, but also facilitating stronger and more trusting relationships between rural Indigenous patients and their often non-Indigenous providers is an issue of consent, self-determination, and ultimately health outcomes, as compliance and treatment success can only suffer from such a lack of understanding — and sometimes trust — on part of the patient.

A Hopi participant spoke to this issue when they said: “The other part of that is, you know, it's good to ask questions, but I think what some of the things now are coming that, that I've not heard on this radio are alternatives to treating different conditions. And trying to get away from taking too much medication. You know, learn the other options that they've got out there. And use that as a resource. I know that a lot of people complain about having to leave the healthcare facility with a lot of baggage. And a whole bag full of medication that they're taking. And we don't know what all of those things are. You know, they take them long term and there's probably a risk” (KUYI Focus Group 4, p. 24, 25).

Related to this, several participants at both locations also expressed a desire for more information about traditional, local remedies being shared on the radio. This was a popular topic that generated input usually from the whole group whenever it was brought up, as this example from a Yup'ik focus group shows: “Respondent 6: Yeah, there's a lot of medicine here, that a lot of locals here use. The thunder tea. Respondent 3: A lot of it yeah. Respondent 5: [Yup'ik word for a local medicinal plant]. Respondent 2: [Yup'ik word for another local medicinal plant] Respondent 3: All kinds of other ones. Respondent 5: And berries, blackberries, yeah. Respondent 6: It's pretty good. I had a really bad burn and they showed me how to like, you can chew this plant put it on your burn, and you know, you're out in fish camp, there's no Band-Aids. And so it actually works; it's cool” (KYUK Focus Group 1, p. 20).

At Hopi, this was discussed in almost all of the groups as well, with one listener suggesting that the radio station feature different local plants and what they can be used for, similar to an index or a catalog of medicinal plants: “And Hopi has a lot of that, even for like high blood pressure there's different things that you can get that grow out here. Like a traditional herb list” (KUYI Focus Group 4, p. 25, 26).

Of course the radio stations staff themselves would not have time to compile this kind of list of local medicinal plants and uses, but the idea that the radio station ought to gather and share this information underscores their perception as the central information hub and a ‘keeper’ of traditional knowledge and songs, probably in part due to their archives that are well-known to the community. The archives do in fact contain much of this kind of information, recordings of elders and others deeply knowledgeable of the local ecosystem talking about animals and plants, traditional ways to prepare them, ceremonial and medicinal uses, and so on. This information is not indexed in the format the Hopi respondent suggested, in a “traditional herb list,” but both stations have in the past shared this kind of information on air, either from their archives or live on air, if someone with this kind of knowledge was available to come into the station. Often, this would be done as part of a participatory radio show on health, similar to the call-in shows with medical doctors.

In addition, many listeners mentioned the stations’ coverage of local events around health, such as small conferences, public discussions, panels, and so on. One Hopi respondent shared that in their view, “we’re currently happy with the Tribe having summits to engage people in various issues like health, education. And KUYI has been doing these interviews for a while, so these sponsors talk about these issues, either as post-summit, like a summary, or even pre-summit, sharing information. Those kinds of information are some things that I'm very interested in and always listen to” (KUYI Focus Group 4, p. 5, 6).

### ***Barriers to health information on the radio***

The focus groups also revealed some barriers to learning about health from tribal radio. In most cases, these limitations pertain to the participatory program format of the extremely popular call-in show. To a lesser degree, some restrictions the radio stations face as non-

commercial station, also funded by or otherwise associated with other local non-profits were also seen as barriers in terms of radio programming being as effective as possible.

For example, the latter concern is expressed here: “Respondent 8: The only thing is, there's so many restrictions, ‘cause you can't say certain things. So you just kind of get ‘There's a dance on Saturday’, you know, but they don't say if it's a benefit or — Respondent 4: You know, if it's for a good cause, I mean, I think they should, you know, say what it's for. [laughter]. Like, fundraising and stuff for certain things they can't say that part. Respondent 8: I think that just goes as part of the restrictions of — Respondent 4: Privacy. Respondent 8: — how the system actually works. I mean, you only have so many seconds and you have that many seconds to get all this information into an announcement or something like that” (KUYI Focus Group 2, p. 11).

One of the participants quoted here later also shared their concerns regarding call-in shows, and some frustration with some callers being unprepared to come on air, or few people being willing to call in at all, even though everybody loves to listen and finds great value in these shows, particularly when focusing on health topics. Two respondents in the group shared this exchange: “Respondent 4: And then they need people that are willing to talk [laughter]. Right? I mean, willing to talk and sometimes you get those who come on [air] and they’re all like, ‘Well, um, um, well.’ [laughter] Respondent 2: Or it's the same person calling, too. Respondent 4: Yeah. Respondent 2: You get tired of their voice. Respondent 4: Like, maybe have people call the station and give their question and it'll be read by someone else. So it would kind of anonymous. Speaker 2: Yeah, that would be good. ‘Cause even that is opening the door for somebody else. You know, there's going to be more than one person who has that question” (KUYI Focus Group 2, p. 31).

In addition, there were some concerns about privacy, since in such small communities, callers on air are easily identifiable, often even without stating their name. As the following example shows, respondents were eager to offer a solution when voicing a concern or criticism of the station or specific programs. A Hopi respondent expressed his concerns around privacy as a suggestion: “Or even if, because it's a live show, instead of having that person go on air, they don't wanna go on air, or if they do but just don't give their name, or they can ask the questions

for somebody that's in this studio with them and that person will ask the question for them, it's more anonymous that way" (KUYI Focus Group 1, p. 17).

Others highlighted calling into a radio show or leaving ones question with a DJ to be read on air later as an alternative to asking a doctor in person. For many, access to the doctor (in terms of transportation, cost, and availability of appointments) is the main issue, but as this participant states, many are also shy to ask important questions when they do meet with a provider. Many thought that the radio was an easier and even culturally more appropriate way to ask these questions. Culturally appropriate in the sense that asking a doctor whether a prescription is really necessary, if they can explain something better, or whether there are alternatives to a treatment they suggested could be seen as challenging authority and expertise (and perhaps also older age, depending on the situation) in inappropriate ways. These difficulties were seen as easier to navigate when the conversation took place over the phone (even if broadcast live on air). Another Hopi participant explained: "I think it's easier for some people. Because, you know, when sometimes they're talking about something and, you know, people that don't work, maybe when they ask their question, but they're kind of too scared to ask in person. And then they can ask over the phone. And maybe there's other people with the same question, but same thing, you know, they're scared to ask. Then somebody asks, and you know, it's told to everybody who is listening and everybody gets an answer. And it helps, I mean, because you know, a lot of people like out here, you know, they don't like to — it's just something that we're taught not to, you know, kind of do. So if you're calling over the phone, then you know, you're more anonymous. Or you could leave a comment with the station and they could just read it later" (KUYI Focus Group 3, p. 13).

Another concern that was brought up was that for English language call-in shows, some listeners, especially elderly people who learned English as a second language and don't use it primarily in their daily life, may feel self-conscious about their language skills and/or accent and may not want to be on the radio for that reason: "You know how people will call in for different shows? I think that the reason why we don't call in, too, is because our language is kind of like broken from the regular language, you know. We try to speak English, but is broken language, so maybe that's why a lot of people don't call in to the station 'cause they're embarrassed yourself.

But we do have a lot of smart kids, you know, younger folks and they're gonna have more education. There is some elderly people that called in, though, and I'm just thinking, you know, because of that broken language they don't — they feel embarrassed to talk on the radio [...] That's another thing that being in a public [space] — 'cause everybody knows each other out here” (KUYI Focus Group 1, p. 25).

At KYUK in Alaska, the health-focused call-in show is always done in Yup'ik, so this particular issue of lacking English language skills did not come up there. However, Yup'ik audience members agreed with the Hopi respondents on the point of being shy to call and ask a question live on air, also noting cultural norms around being more quiet and passive in conversation than a radio call-in show requires for it to be effective. This is possibly made even more difficult due to the absence of non-verbal cues which would otherwise signal when it is whose turn to speak. Speaking over someone, especially if older and of higher authority, and even doing so by accident, would likely be regarded as a serious misbehavior that callers would want to avoid, but doing so is more difficult on the phone, and especially if the person on the other ends is unfamiliar or of another cultural background. Some KYUK listeners felt that the desire to avoid such situations kept many listeners from participating in these radio shows and left only those who have very strong opinions as active participants, who may not always be the most appropriate or most experienced individuals to discuss a certain topic on the radio. One KYUK listener shared: “It's really hard for people to open up, you have to literally be doing it when you're a child growing up, to be all blunt and openly. I can't do it. You know, we were not, we're a quiet culture and we we're not taught that. Most of the majority [of Yup'ik people]. I mean, they may have all the knowledge but they won't, you know, partake [in discussion]. They only do if they have a very strong opinion. Group: [laughter and nodding]” (KYUK Focus Group 2, p. 14, 15).

Barriers to radio communicating health information and answering questions on health topics primarily stemmed from cultural and language barriers to listeners calling into participatory radio shows. However, it was previously mentioned that exactly those participatory formats are the most popular for learning about health issues. Some of the solutions suggested by participants for mitigating those kinds of barriers to the effectiveness of radio could indeed be

simple solutions, such as the DJs taking questions over the phone to then read on air in order to improve participant anonymity to the audience. On the other hand, several participants also mentioned earlier that hearing personal testimony about health journeys from other community members was deeply meaningful to them. Personal stories were highly memorable and many participants stated that they sought medical advice or care and improved some health behaviors like eating habits and exercise as a result of hearing another community members' personal story (for example about being diagnosed as pre-diabetic and the behavior changes this person made) on the radio. This suggests that while the privacy concerns are certainly valid in such small and close-knit communities, losing this aspect of personal testimony would likely mean losing a key aspect of what makes these participatory programs so effective in terms of raising awareness of health issues and encouraging the related positive behavior changes among listeners.

For learning about health, participatory programs were by far the most popular format among both communities, Hopi and Yup'ik, clearly preferred over interviews or monologues, and altering this format in a way that takes away the multitude of voices and the perceived direct interaction among community members themselves would stand in the way of tribal radio functioning as a community gathering space, which was regarded as one of its essential functions.

### ***Local healthcare centers and providers can use the radio stations as a resource***

The previous sections under this particular theme, on radio programming improving healthcare interactions and barriers to achieving this, have shown different ways in which audience members, regular community members who are not themselves medical professionals or experts, use tribal radio station programs to learn about health, what kinds of additional and expanded programming they would like to see in this area, and how they get to know healthcare providers through radio, breaking down some interpersonal and intercultural barriers that otherwise hinder these relationships and interactions. As the theme title also promised, barriers to achieving these goals were also discussed. However, participants also discussed the extent to which healthcare professionals and centers can and are expected to use the local tribal station as a resource, and how those who are from a different state or region can learn about the respective



Indigenous cultures from tribal radio to understand their patients better and communicate more effectively with them.

Focus group participants very clearly saw the responsibility to get certain types of health information, such as vaccination clinics, events, new healthcare staff in the area, prevention initiatives and so on, out to the public on part of the healthcare center, not the radio station. In their view, it is the responsibility of the healthcare center to reach out to the tribal radio station for collaboration, and local residents very much expect them to do so. Quotes like this illustrate this point: “Respondent 1: It’s good [health programming on KUYI], but at the same time, I think that that should be the healthcare center’s, their responsibility to address that to the public. I mean and you know, they can use the radio to get some of their stuff out. It’s their job to do that public education” (KUYI Focus Group 3, p. 21).

Many medically underserved communities around the world have community healthcare worker programs, which help meet the health needs of the community and bridge the gap between the need and the very limited availability of medical resources like doctors and other healthcare professionals, healthcare centers, mental health support, medical equipment for home use, and so on. Community health workers are community members who are in most cases not medical professionals, but receive training so that they can help their fellow community members with needs like health education (e.g. giving presentations and handing out fliers), basic health screenings, such as taking vitals and asking about symptoms to assess severity of a situation and recommend further care as needed, and often to provide first aid assistance when needed until emergency doctors arrive on scene.

The Hopi Tribe also has such a program within the Tribal government’s Department of Health and Human Services, called the Community Health Representative (CHR) Program.<sup>15</sup> When discussing health programming recommendations for the radio station and collaborations between the KUYI and healthcare professionals, two out of the four focus groups brought up CHRs. In both instances, participants spoke about a general level of confusion about what services CHRs can and cannot provide, and that the program should collaborate more closely

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<sup>15</sup> More information on the CHR Program can be found on the official website of the Hopi Tribe: <https://www.hopi-nsn.gov/tribal-services/department-of-community-health-services/community-health-representative/>

with KUYI to share this information with the community. The first example is this quote: “Respondent 1: We have people that didn't even know what CHRs [Community Health Representatives] were, And so we had to tell the CHR, well, how come you just don't tell the radio station? You know, you guys change your number and everything and here we had people that didn't come to you because they didn't know you guys were doing transport [to the healthcare center], you know. And it's just something that would help, especially with the elderly, because they're the ones that utilize that a lot. Interviewer: Yeah. So you think they should be making more of an effort to work with the radio station? Respondent 1: Yeah” (KUYI Focus Group 3, p. 21).

This quote already speaks to this kind of confusion, as the CHR Program actually does not provide transportation, but the Hopi Tribe has a separate Tribal support program for this purpose, called the Hopi Medical Transportation Program<sup>16</sup>.

A second Hopi focus group generated some discussion around CHRs, and the desire to learn more about this and similar health-focused support programs through KUYI: “Respondent 3: But just kind of reintroducing what they're [CHR]s offering, where to go from there, and what kind of partnerships that they have. [...] I think a reintroduction on the stations' end, what identifies their partnership with the healthcare center. And to kind of keep that conversation open. Respondent 5: Like, she was talking about, I know, you get a different family practitioner each time, too. Respondent 4: What I'd like to see is something that where there, where there's partnerships. This partnership effort where all these entities come together and maybe they could just, develop more of a comprehensive plan and focus on that. Get everybody involved. Because right now we're just all doing our own little thing and we're not doing anything together, I don't think, jointly” (KUYI Focus Group 4, p. 39, 40).

In Alaska, one respondent shared a chance encounter he had (as a bush plane pilot) with an optometrist coming to the area for a short-term medical visit to provide surgery and emergency care to medically underserved rural Alaska (this is common in rural Alaska, where there is a severe shortage of not only medical doctors in general, but particularly of specialists

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<sup>16</sup> More information on this program can be found on the official website of the Hopi Tribe: <https://www.hopinsn.gov/tribal-services/department-of-community-health-services/medical-transportation/>

like dentists, optometrists, surgeons, and so on). The respondent recalls how much they enjoyed learning about eye surgery through this chance encounter and, much like the Hopi respondents, thought that incoming medical specialists should share information about their work and any general advice they have with KYUK: “Respondent 5: I know during my last shuttle [flight], we had some of the eye doctors, optometrists on it, and he was describing the surgery, doing motions with his hands, trying to describe the eye. And he was like that [makes hand motions] Group: [laughter] Respondent 5: Okay, so I'm trying to translate this, because yeah, I had completely forgotten. Like, wouldn't that be really great if we could have it for this [radio] show? So, I think it'd be really great if they could get that up and going (KYUK Focus Group 2, p. 7).

Generally, respondents saw at least some of the responsibility to create radio health programs with the local healthcare center and providers, and even with specialists who visit rural communities only for a short time to meet the most immediate needs. Approaching the radio station was seen as the most obvious choice to reach the community, share information, and introduce oneself. Several respondents therefore expressed some frustration if they had the impression that these individuals and institutions had not approached the radio station to the extent they think they should have. This frustration, however, did not extend to the station and their staff, as these collaborations were not seen as their sole or main responsibility to set up.

This is another aspect that speaks to listeners understanding the radio station more as a community gathering space, that certain community members are expected to use as such, and not merely as a source of journalism where the responsibility to gather all content and decide what is being featured lies with the station. This expectation that other organizations, centers, and community members use the radio station as a resource to share information also includes the expectation that airtime will be made available. No one expressed any concern about radio station leaders not allowing for this programming to take place in the way that listeners imagine. There was no perception of radio station leaders and reporters acting as gatekeepers and making completely independent decisions on programming. Rather, it was strongly assumed that whoever requests airtime, an interview, or a new program on health information, would be given the opportunity to use the radio station. For some listeners, this assumption may be rooted in personal experience or that of others they know personally, since local musicians and community

initiatives are treated in the same way and the stations are very welcoming to unannounced visitors, often allowing airtime to such visitors spontaneously.

### ***Healthcare providers learning about the local cultures from the radio***

The radio station can also serve as a place for healthcare providers to learn about the local cultures. Especially given the high turnover of medical personnel that I mentioned earlier, there are often new non-Natives arriving to the area to stay for a year or a few years before being replaced by someone else. This is an even bigger concern in rural Alaska, where the turnover is extreme and considered a serious problem. Most of the time, professionals who stay only for a relatively short time are not only non-Indigenous but also from outside Alaska. To serve the population effectively, some level of understanding of the local culture is essential. Tribal radio can do a valuable service here, especially because health issues are explicitly discussed and participatory programs allow insight into some of the questions and level of understanding of certain health issues that local residents have. In addition, many tribal radio programs explain culturally specific traditions, holidays, and other information, that an outsider can learn a lot from.

Because the high turnover of medical and other specialized personnel (teachers are another example) is of greater concern in rural Alaska than in rural Arizona, due to the entire state being even more remote and often considered less desirable (even though average pay, especially for these much needed professionals, is higher), this issue was mostly brought up in the Yup'ik focus groups. Participants were very much aware of the issue, and on several occasions spoke to wanting those outsiders who are serve the community in different capacities to have some baseline understanding of who they are as Yup'ik or Hopi people, respectively. In Alaska, one Yup'ik participant, who also works as a nurse, shared her perspective as a provider. Even though she is Yup'ik and grew up locally with the Yup'ik culture, she still appreciates the learning opportunity that KYUK's call-in shows provide to listeners, but more in the sense of being made aware of community members' levels of understanding, and the need to communicate accordingly, for example by allowing ample time for patients to ask questions, explaining medical jargon, and so on. Specifically, she shared: "Respondent 3: Because as a

health care provider, I go in the room, and we kind of forget that everybody doesn't know what we know. And so we'll be just rattling off all these things and it doesn't occur to us, that, 'Oh hold on, they probably have no idea what we're talking about.' So it's nice to kind of be able to have that frame of reference. And also so people don't feel like — They don't feel like they don't know what we're talking about either, kind of, it opens — Respondent 2: And then that's just, it's alienating. Respondent 3: Exactly” (KYUK Focus Group 2, p. 11, 12).

Here, another Yup'ik respondent, who does not work in the medical field, jumps in to share her perspective as a patient in the kind of situation the first speaker described. The word choice of “alienating” speaks to an effect of culturally inappropriate communication, in the sense that the misalignment of expectations and communicative patterns makes one or both people feel disconnected, confused, and perhaps less trusting than if their expectations had been validated instead of violated. Given that healthcare interactions can be particularly stressful for many people, and trust can be essential for the patient to feel comfortable enough to share sensitive but important information about themselves with the provider, to ask clarification questions during the interaction, and to improve compliance with the recommended treatment scheme.

In another Yup'ik focus group, an elderly participant shared her experience as a Yup'ik patient interacting with a non-Indigenous doctor, and how even small and seemingly unimportant parts of the meeting, such as the greeting, can already make a Yup'ik patient feel alienated, and even a little angry, as the doctor — most likely unknowingly — violated Yup'ik cultural norms. This quote highlights why it is critical for non-Indigenous healthcare providers (as well as any other type of worker) in Indigenous communities to learn the basic cultural norms and expectations of their host community whom they are serving. Tribal radio stations are an excellent resource for this learning to take place, because they make otherwise assumed and invisible cultural expectations explicit, and invite participation from a wide variety of community members, who often openly share their needs, questions, and frustrations. Of course these are critical for cultural outsiders to learn about, especially if they serve in roles where they are expected to address those questions and concerns in some way. At the same time, the shows featuring precisely those outside professionals, with a particular focus on medical doctors, also give this side a way to reach out, introduce themselves, and share their motivations for coming to

the area. In some cases, this may also help to alleviate cultural misunderstandings, as local residents may understand from an interview or direct interaction during a call-in show that no disrespect is meant by a doctor's behavior that may violate Yup'ik or Hopi norms, but that it rather is due to the person being completely new to the culture, and that they — ideally — express a genuine interest in learning, but that they need some time to fully adjust.

Another Yup'ik elder in a different focus group shared her frustration with an interaction she had with a doctor recently that very clearly had to do with differing, culturally grounded, communicative expectation and which left her feeling disrespected: “Respondent 3: Oh can I make one more point on something else? Interviewer: Yes, yes. Respondent 3: You're looking at a real Native way of life here. When we ask somebody, how are you? Waqaa? [‘How are you?’ in Yup'ik] And if you have something to tell, we would listen to what you were saying. Whereas the Caucasian health care providers go ‘how are you?’ And then they'll walk away. Like. Interviewer: They don't even wait, yeah. Respondent 3: Sometimes that upsets me, sometimes that makes me — I'm wising up, like, don't ask me that unless you have two hours to listen to my answer. [laughter] Interviewer: Yeah, yeah. Respondent 3: And then sometimes I'm hoping that my joking about it will make them aware about it. Make them like, ‘Hey, here's what I need to change.’ And it's like, ‘I need to respect you.’ And then maybe on the radio something that's more telling them more about how we talk to each other as Yup'ik people” (KYUK Focus Group 1, p. 23, 24).

Here, radio is conceptualized as a way to bridge cultural differences by teaching people “how to talk.” Since radio literally consists of people talking to each other, sometimes with the audience, sometimes with the audience listening in on a conversation, it is the obvious medial choice for this kind of learning. While of course all media is “people talking to each other” in some way, the print format does not offer this kind of conversational setting as the respondent suggests being necessary, and visual media like television place so much more emphasis on the visual, nonverbal cues and less on the “talking” which no medium can foreground in the way radio does. It is particularly interesting that this perspective comes from a Yup'ik person, and especially an elder, who suggests that outsiders should listen to the Yup'ik station to learn not the language or the content of what is being shared there, but simply “how they talk to each other as

Yup'ik people," meaning the communicative norms, appropriate greetings and introductions, frequent use of quite lengthy pauses in normal conversation and generally keeping one's voice down and at an even level and pace, both of which are much less common communicative norms in mainstream, non-Indigenous U.S. American culture, even among other racial/ethnic minority groups.

Previously, tribal radio was discussed by participants as a learning space in terms of the community gathering it allows and encourages and the information that is explicitly shared. In this quote, the Yup'ik elder adds the dimension of the conversation in itself, regardless of topic, as a learning opportunity for cultural outsiders. Even as cultural insiders, for whom Yup'ik norms and ways of talking are the norm, respondents recognize the value of listening for those who are not as well versed in Yup'ik culture, and whom the Yup'ik residents know to frequently violate cultural norms and expectations. Rather than having to face the negative effects of this misbehavior due to lack of knowledge by those who come to Native Alaskan village from elsewhere, and constantly explain their cultural norms of respectful behavior, Yup'ik residents suggest cultural outsiders listen to the radio to "learn how to talk."

## **Discussion**

This part of the study offers a rare insight into audience perspectives of tribal radio, and generally a rural Indigenous media audience, very rarely studied or considered in our understanding of not just media, but even community media. Indigenous media in general, tribal radio, and particularly audience perspectives are severely understudied. To the best of my knowledge, this is the only study to present audience perspectives on tribal radio. This study aims to offer a holistic understanding of the functions of tribal radio in rural Indigenous communities. These functions include not only language revitalization which almost all of the few existing studies on tribal radio have focused on, but the study revealed numerous other unique functions that have not been previously discussed by other studies, such as relationship building with local healthcare providers, intercultural learning by both locals and outsiders, a community gathering space, strengthening cultural identity and pride, and more.

Building a more nuanced understanding of audience needs and benefits of using tribal radio is not only important for a more complete and inclusive study of ethnic or minority media in general, but for Indigenous Studies and the study of Indigenous languages, rural media use, radio for health education, and tribal sovereignty.

The aim of this part of the study was to learn what tribal radio means to the listeners, what functions it fulfills for them, what functions it could fulfill that so far remain untapped, what some of the barriers are and potential strategies for mitigation. This study shows that we cannot assume that we know this from other studies of ethnic/minority media done in other contexts or that the only unique factor of Indigenous media are that Indigenous languages are used wherein media may support their revitalization.

The rare insight into Indigenous media audiences presented here revealed that while the factors previously identified in the literature, such as language revitalization and are important contributions of tribal radio to their audiences, but there were also other, unexpected functions we can only learn about from audience members themselves. This study purposefully included a great diversity of audience members, in terms of age groups, genders, occupations, individuals with their Indigenous language as their first language, second language speakers and non-speakers, individuals who have spent extended time outside of their community — meaning in very different media environments — and those who have not and are thus less familiar with information infrastructures in other, especially urban, spaces. Despite a quite tremendous diversity of participants and active participation from all, participants agreed on many key aspects and even though different age groups might prefer different types of programming, the way they experienced the role of tribal radio in their community was the same. Similarly, use of the Indigenous language was seen as of critical importance even by those who do not speak the language and were not currently actively trying to learn it. Even these listeners agreed with those who could actually understand the Indigenous language programming that it was of vital importance to their community — and to the role they saw tribal radio as fulfilling.



At this point, let's return to the research questions that guided the data collection process from drafting the focus group questions to conducting the focus groups to writing the audience recommendation reports for the radio stations. The research questions for this chapter were:

***Audience-Centered Research Questions (Focus Groups):***

- What role does tribal radio play in the lives of Indigenous communities in rural areas? (RQ4)
- What are the barriers and facilitators of tribal radio as a health information resource for reservation residents? (RQ5)
- What contributions does tribal radio make to the health education of rural reservation residents? (RQ6)

Research Question 4: “What role does tribal radio play in the lives of Indigenous communities in rural areas?” is primarily addressed by the following themes:

- 1) The role radio plays in the community for information and entertainment
- 2) Cultural information and Indigenous languages on the radio
- 4) Culturally appropriate communication and the radio instilling cultural pride
- 5) Creating community locally and for those who have moved away

The data underscores what a multitude of roles tribal radio plays in the lives of local residents. Trying to name a single role that may otherwise be applied to radio, like “informant” or “entertainer” or a mix of both, would do a gross injustice to this unique medium that has many characteristics and affordances in this particular cultural context. Tribal radio is a community gathering space, a room for conversations — even the most difficult ones, addressing issues from teen suicide to substance abuse to elders criticizing younger generations for not living according to traditional ways of life as much anymore. Tribal radio is seen as an open, fairly neutral space with very little gatekeeping; a space where virtually anyone can get involved and where any topic can be discussed, and will be discussed, even if it only matters to one person. Tribal radio fulfills the role of a convener, a motivator, an educator, and a reflection of community strength, resilience, and creativity.

Listeners are well aware of the stations' statuses as independent, non-commercial stations, the financial and operational struggles that come with it, but also the freedom in

programmatic decision-making. This independence, including from their own tribal government, is very important for listeners and increases their trust in the information shared on tribal radio. Listeners both in Arizona and Alaska echoed what radio scholars have highlighted about the medium, that it can blend much better with a rural lifestyle — or subsistence lifestyle, particularly in the case of Alaska — than any other medium can (Craig, 2009). Yup'ik fisherman shared stories about listening to KYUK at fish camp<sup>17</sup> and connecting the radio to a car battery in order to make sure they never lose their connection to the vital information that KYUK provides. Not only is there often no Internet or cell reception, but even if there is, other sources are not providing the information these fishermen need at the time they need it, such as the sometimes rapidly and unexpectedly changing fishing regulations, that can result in fines if not adhered to (e.g. even for Yup'ik tribal members, fishing certain fish like salmon is only allowed in certain areas at certain times of day and week, and those times can change with immediate effect and no prior warning). KYUK is watching for this information for the hunters and fishermen in their community, and immediately relaying any changes over the air. As this example shows, not only is radio easier to integrate with a rural or subsistence lifestyle, it is essential to it, if used with the intent to support those living in this way, as KYUK is in this case. In addition, these announcements prevent this particular kind of policing of Indigenous people. Arbitrary changes to hunting and fishing times can be used to police, fine, and even arrest individuals pursuing the livelihood of their families and communities within the regulations, and who simply did not know or have any way to access information about sudden changes to these regulations. In this way, KYUK is providing safety information for safety from overpolicing and tactics of criminalization of Indigenous subsistence lifestyles.

Tribal radio is seen as a reflection of the community and its diversity, and different demographic groups all said they felt represented on their tribal station. Similarly, the wide variety of music genres played and the variety in program format and content is very important to listeners, and they enjoy being exposed to unfamiliar genres and content and learning something new.

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<sup>17</sup> Varying locations away from the villages where fishermen meet in groups to stay for several weeks, sometimes months, catching predominantly salmon and preserving it for their families and others in the village to last through the winter.

In terms of representing the community, having both youth and elders involved in the radio programs was explicitly brought up by most participants at both locations. Listeners explained that this is in line with cultural norms, and that they notice the station making an effort to do this, but that even greater representation, particularly of youth, was desired and needed. Tribal radio is deeply embedded in the local culture and able to communicate information in a culturally appropriate way, and understanding which information might be considered too sensitive, taboo, or designated for certain people, times, or places only. Listeners, especially those who grew up in the community and know the culture very well, notice this and appreciate the communication style and this mindfulness of certain cultural restrictions that they encounter on tribal radio.

Tribal stations like KUYI and KYUK often share culturally specific information, such as information about traditions, upcoming dances and other important cultural events (usually ceremonies are not included in this, as this information is meant for specific individuals within the community and therefore deemed inappropriate for radio, especially because non-Indigenous outsiders are also listening). These serve not only as reminders, but often feature a brief explanation, and might be new information to many listeners. Several respondents expressed a desire to “re-learn” more of their cultural traditions and knowledge, such as knowledge of local medicinal plants.

Of course sharing cultural information also includes use of the respective Indigenous language, which is a key feature of tribal radio stations. Nearly every respondent, and certainly every single focus group, spoke about the importance of Indigenous language use on the radio. From the perspective of the listeners, the main purpose of using the language was not necessarily its preservation, which is what scholars regard as being the case, but rather a better understanding since Hopi and Yup’ik, as most if not all Indigenous languages, have a lot more nuance than English so that to a bilingual speaker, use of the more sophisticated language available to them would naturally be preferred over something fairly simplistic and limiting like English. This was especially true when the topic of discussion was complex and of great importance, such as health information. Respondents who speak the Indigenous language strongly preferred hearing health information in Hopi or Yup’ik, and not only because hearing it

in their own language was comforting to them, as may be assumed, but primarily because these languages offer greater linguistic nuance than English does. Use of the language also makes culturally appropriate communication easier, since certain things are naturally expressed in a way that doesn't violate cultural norms and expectations. One example of this given to me was that something one wishes to avoid, like a disease, should not be named since that might attract it. Thus, the Hopi language does not even have a word for 'cancer' for example, but the disease can be described in other ways, still allowing everyone to understand what the discussion is about without violating that cultural norm. This is more difficult in English, and not always possible.

The prior two points, about tribal radio sharing cultural information helping the audience learn about their own history, cultural practices, information about the region, local plants and so on, and about use of Indigenous languages, together contribute to another key role that tribal radio plays. The programming on tribal radio, as well as even having this resource in the first place, supports cultural pride and self-confidence. Especially programming that covers news from the other villages in the community strengthened a sense of pride in one's identity and culture according to the respondents, and especially among Yup'ik respondents, a stronger identification with other Yup'ik people beyond one's village and others one knows personally. This is likely more of a factor for Yup'ik than for Hopi people, because Alaska Native villages in the Yukon-Kuskokwim Delta are much more spread out and some very difficult to reach, whereas the Hopi villages are comparatively closer together and easier to travel to.

Several Yup'ik respondents shared that they predominantly identify as Alaska Native and by the villages they grew up and currently live in, and that it was KYUK that led them to develop a stronger sense of belonging with other Yup'ik people. They said hearing stories of other Yup'ik villages and Yup'ik individuals in other parts of Alaska and elsewhere in the world led them to identify more strongly as a Yup'ik person who has a lot in common with other Yup'ik people, rather than identifying as narrowly as only one's village or as broadly as Alaska Native or Indigenous. Some respondents shared that they did not realize how many Yup'ik and other Alaska Native villages face the same struggles or questions as them had it not been for KYUK sharing this information, and facilitating call-in shows among residents from all over the Y-K Delta.

In line with this role of tribal radio is also its role as an advocate. In confronting and combatting stereotypes, listeners also feel a greater sense of pride in their Indigenous identity and their particular identity as a member of their Tribe and of their specific local community. For example, many participants mentioned interviews they had heard on their tribal station with community members who had achieved great success of some form, and said they might not have otherwise known about it, and that they felt inspired and proud of those achievements by a fellow member of their community. In the focus groups, several respondents also referred to stereotypes they had encountered, and the role they felt the radio station played in portraying a more accurate picture. Generally, audience members feel proud of the way they are portrayed on tribal radio, and identify quite strongly with the way the station covers their culture and community.

Finally, a key role of tribal radio is connecting individuals to others who may otherwise feel isolated. Examples that were given here were local elders, especially if lacking transportation or ability to use transportation (i.e. driving a car, boat, snow machine, or to fly) due to age, health issues, and/or financial constraints, and people who have left the community for college, work, or other reasons. Listening to their tribal station (online for those located elsewhere) allows those individuals to stay in touch with what is happening in their home community, hear their language, and learn alongside the other listeners about culture-specific information like the meanings and associated behaviors for each month or time period, reminders about cultural norms and values, teachings and songs, and information related to a lifestyle of farming, fishing, or hunting, which many listeners may not be currently practicing but interested in hearing about for the sake of cultural education.

Research Question 5: “What are the barriers and facilitators of tribal radio as a health information resource for reservation residents?” is primarily addressed by the following themes, wherein some speak more to the facilitators, some address barriers, and some both:

- 1) The role radio plays in the community for information and entertainment
- 3) The station as an integral and trusted part of the community
- 4) Culturally appropriate communication and the radio instilling cultural pride
- 6) Radio as the primary or sole source of information for audience members

- 7) Health topics listeners have learned about from the radio
- 8) The radio as a space to discuss mental health, trauma, and other sensitive health topics
- 9) Culturally appropriate health information and raising awareness of health issues

As potential barriers, lack of access to other sources was discussed, which complicates finding follow-up information about a health topic that was mentioned on the radio. In addition, sometimes, and often because the healthcare professionals are predominantly English-speaking, certain health information can only be offered in English on the radio, e.g. when interviews on a topic are conducted with an English-speaking professional, translation may not always be possible, especially live on air. As noted before, English language health information be difficult to understand for some, especially the elderly who prefer receiving information, especially about a topic as personal as health, in the Indigenous language that is their first language. Listeners also suggested additional health topics that they want to learn about on the radio, and not all topics they want to learn about are currently covered. But since so many topics are important and prevalent in the community covering everything is hardly possible. However, with the audience recommendations perhaps stations can get a sense of recommendations frequently mentioned and make sure those topics are addressed. Primarily, listeners wanted to learn more about prevention of various chronic diseases they know to be prevalent in their community, information for caretakers of the sick and elderly, procedural health information, e.g. regarding insurance, and more health-related shows run by and for the youth, addressing, among other things, sexual health and mental health.

There are many facilitators for tribal radio functioning as a health information resource. First of all, the audience has very strong trust in the information shared on the radio and all focus groups agreed that radio is generally a good medium for health information. Though participants acknowledged that some health issues are sensitive and more difficult to talk about than others, nothing was considered truly taboo for radio. A major strength of radio was that listeners feel encouraged to visit a healthcare provider for more information after hearing a related program on the radio. Many participants also reported feeling more confident in their interactions with doctors after learning a bit more about a particular health topic, including some terminology, from KYUK or KUYI.

In the discussion on the previous research question I brought up the widespread appreciation for diverse programming in terms of music and talk programs on tribal radio. Of the informational segments, call-in shows are the most popular format, as mentioned previously. Another type of programming that is also particularly popular and has not been discussed as much here are national programs that focus on Indigenous issues — primarily *Native America Calling*<sup>18</sup> and other *Native Voice One*<sup>19</sup> programs which are broadcast on many tribal stations across the U.S. and Canada. Often, these programs focus on either political or health issues — matters that are relevant and interesting to all Indigenous people in North America. Sometimes, a particular example is discussed in these programs, for example how a certain Tribe has responded to a health threat and what others may be able to learn from their experience. Learning about other Indigenous communities is something both KYUK and KUYI audiences said they liked, also noting that a greater awareness of the shared struggles and experiences among all Indigenous people in North America led them to develop a greater sense of identification and belonging with the wider Indigenous community, not only their own specific village or Tribe.

Of course a significant facilitator for the effectiveness of tribal radio in communicating health information is the immense trust that the station operators, DJs, reporters, and volunteers enjoy among their audience. Partly, this has to do with the independent, non-commercial status of the stations, partly with the fact that tribal radio DJs are more often than not Indigenous community members and that they are well known locally on and off air, and partly with the low gatekeeping and the perception of tribal radio as truly representing the community, providing a nonphysical (and sometimes physical) gathering space accessible to all.

As has already been discussed at length, accessing information, including health information, is a challenge in rural Indigenous communities due to the infrastructure injustice

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<sup>18</sup> Native America Calling is a 1-hour participatory call-in radio show on a topic relevant to Indigenous people in North America, accessible online and broadcast on over 60 radio stations (many of them tribal stations). A new episode of the program airs each day, Monday through Friday. It is a production of the Native-operated Koahnic Broadcast Corporation, located in Anchorage, Alaska. For more information and to listen to recorded Native America Calling episodes go to: <https://www.nativeamericacalling.com/about/>

<sup>19</sup> Native Voice One is the distribution division of the Native-operated Koahnic Broadcast Corporation, located in Anchorage, Alaska, which also produces Native America Calling. Native Voice One offers a 24/7 web stream of various content focusing on the North American Indigenous perspective. National Native News is another very popular program that many tribal stations broadcast. It is a 5-minute weekday newscast focused on Indigenous issues. For more information and to listen to the programs, go to: <https://www.nv1.org/about/>

they face. Thus, besides the tribal station, there is no place for residents to access local information, besides local newspapers, if available. Local information includes news like events and political matters, but also important safety and health information. Many respondents reported that KUYI or KYUK was their only source of news, especially local news. As mentioned previously, like many tribal stations, in particular KYUK creates their own news program — and has the only Indigenous language news program in the nation — with their own reporters. At Hopi, it is also noteworthy that KUYI announces on air where the Mobile Computer Lab, providing free WiFi access, computer, printer, and scanner use, as well as basic tech support and training, will be located on any given week. So even Internet access is reliant on the radio for many. This is of course in itself a facilitator of tribal radio as a health information resource. Local residents heavily rely on their tribal stations for this kind of information and expect it there. So there is no additional barrier in terms of establishing tribal radio as a key resource, or concerns regarding whether health information would fit within their programming. Instead, given their standing in their communities and the strong reliance on them by local residents, it would almost be strange if tribal stations didn't cover health information. It is expected and fits naturally with their mission and programming.

Not only do local residents trust their tribal station in general, because of their independence and known DJs, but respondents also reported trusting health information from other sources less. For example, they felt that health information they received in print, brochures, flyers, even books, were outdated or that it could not be trusted that the information was the most relevant to their population, or that the recommendations given there are really the most appropriate for them. These concerns are valid in light of how little specifically tailored health information exists for rural Indigenous populations, and that information they found on their own might have really been outdated. I would trust that the information given by providers and the health clinics is accurate and up-to-date, but even then it may not be perceived this way by residents. None of these concerns applied to tribal radio. This may also have to do with a general preference for receiving information orally, from another person directly, as opposed to print. This preference is likely especially strong for complex and important information about health issues that are often already anxiety-inducing.



Tribal radio is a great medium to impart this kind of information as an oral medium with well-trained show hosts and other employees who know how to present these topics in a way that allows audiences to be most receptive to it. This is a strong facilitator of tribal radio being effective as a health information resource. In fact, respondents saw tribal radio as well-suited to cover even the most challenging or otherwise taboo health topics, such as those related to mental health, addiction, and intergenerational trauma, that affect many in rural Indigenous communities and are often personal, sad, and challenging topics to talk about. In some cases, there may be cultural taboos surrounding some of these topics as well. However, respondents emphasized how critical they found it to be that the community as a whole confront these issues in order to improve their health and the future for their youth. Tribal radio facilitates these conversations well and is able to do so in culturally appropriate ways that are aware of what can and cannot be said on air, who should be part of these discussions, what the right tone is, and very importantly, what the underlying structural causes are and how present-day struggles such as these are less about individual choice and more about centuries of colonialism. This understanding is taken for granted on tribal radio, and may be severely lacking in other contexts where issues of mental health, addiction, and so on are being discussed.

The show hosts on tribal radio have the ability to use communicative features like humor in culturally appropriate ways and there is usually at least one person at the station, in the case of KYUK and KUYI several, who are fluent in the respective Indigenous language(s). Humor in particular was mentioned in every focus group and was very important to the respondents, especially when a very serious and often scary or intimidating topic was discussed, which includes the majority of health topics. Using humor appropriately in the context of a very personal, complex, scary topic requires not just a general finesse but a thorough understanding of cultural norms, expectations, and taboos. Listeners expect that humor and positivity will be used in appropriate ways when health issues are discussed. Several respondents said they are less receptive to health information they described as “dry” or “too serious,” even though of course it is acknowledged that these topics are very serious in nature. Respondents here do not mean to downplay the severity of health issues affecting the community, or the importance of information on this topic. They merely emphasize that they have an expectation that use of humor and

positivity, that also applies to other topics, will be maintained in conversations about health, especially when the topic is challenging.

Call-in shows were by far the most popular format for health programming. Listeners enjoyed hearing from others in the community, and felt that addressing health topics together, rather than the community passively listening to an interview or other talk segment, was more in line with their culture. In this context, inclusion of youth and elders was again brought up as important. However, it was also acknowledged that the call-in format bears challenges. Based on the data, I would recommend, and have recommended in my final reports, to tribal stations that they continue to predominantly use a participatory call-in format for health-focused programming (ideally with a healthcare professional present to answer questions live on air), but that they are mindful of the challenges it presents, not just from their perspective but that of the listeners. A barrier to tribal radio's effectiveness as a health information resource in this context are, for one, privacy concerns. In small communities, the chances that someone can be identified by their voice alone, without ever saying their name, occupation, or specific location, are high. Many listeners use the call-in shows with a health provider as their chance to consult with a doctor, often about health issues they themselves or a close family members is experiencing. Doing so in front of the whole community may not be their first choice, but better than not asking these questions at all, or facing the barriers they experience to meeting with a doctor at the clinic in person, which can be substantial. Another issue with these programs is that while the interest in the conversations and the provider's expertise on the topic is widespread, many respondents lamented that only a few, sometimes the same individuals, call in, and that they sometimes do so not to ask a question, but to tell a lengthy personal story, or because they want to voice a strong opinion they already hold on the topic. Listeners agreed that this was not the best way to use this air time, but that they and most others are too shy or uncomfortable to call in themselves and that they prefer listening.

During the focus groups, some solutions were suggested by respondents that are promising for mitigating some of these issues. One possibility is that callers could give their question to a radio DJ prior to the show, who will then read it later, on air, without giving the person's name. This could help those who are too shy to call in to be live on air and those

concerned about their privacy. On the other hand, this might take away from the interactive aspect of these programs that is the reason audience members enjoy them so much. It is particularly the representation of diverse voices from the community, and personal testimonies that make this format so appealing to local listeners. Perhaps this approach, having a radio DJ collect questions prior to the show, could be given as an option in addition to the open phone line during the show. This could retain the original appeal of the program while addressing some of the concerns around privacy and participation only from a few to whom speaking publicly comes more naturally than to others. In any case, based on these focus group discussions, the call-in format for health discussions should be kept as part of the regularly scheduled radio program. Several respondents reported setting a timer to make sure they never miss an episode.

Overall, facilitators significantly outweigh the barriers to tribal radio as a source of health information. While it is certainly possible to improve particular programs on health, and increase the breadth of topics addressed, using the audience recommendations listed in this chapter and provided to the station leadership in my final reports, tribal radio in general works extremely well as a source of health information. The insights provided by the listeners in this chapter can help KYUK, KUYI, and other stations serving Indigenous populations improve their existing programs on health, or consider new formats they have not previously used. The long list of topics suggested by audience members not only shows a general, very strong interest in health information and strong motivation to receive it via radio, but also provides a useful starting point for station leaders to talk to local healthcare providers and see which of these topics they may be able and willing to address on air, with an option for listeners to call in with questions.

Research Question 6: “What contributions does tribal radio make to the health education of rural reservation residents?” is primarily addressed in these themes:

- 6) Radio as the primary or sole source of information for audience members
- 7) Health topics listeners have learned about from the radio
- 8) The radio as a space to discuss mental health, trauma, and other sensitive health topics
- 9) Culturally appropriate health information and raising awareness of health issues
- 10) Radio programming improving healthcare interactions and barriers to achieving this

The contributions of tribal radio to the health education of their listeners is significant. The way in which not just radio as a medium, but these tribal stations in particular, are able to share information about often complex and sensitive topics in a culturally appropriate way is unique and very effective. Listeners reported feeling more open to learning about health from the radio as compared to written information, and also said an in-person visit with a professional only to learn more or get a check-up is often not possible for financial reasons, lack of transportation, family obligations, and other reasons. Having this information available in the respective Indigenous language is also extremely important to listeners, even if it is only a call-in show that is in the language, and is not directly health-focused, but provides a space where participants can discuss these matters in their language if they wish. While local residents said they generally trust their healthcare providers, they often feel unfamiliar with the system and the particular person, and reported finding it much easier to schedule an in-person visit after being introduced to one of the healthcare professionals on air. Audience members had already learned a lot from tribal radio about health topics and are particularly interested in learning about health from a doctor in connection with their own cultural traditions. Some respondents suggested inviting both a medical doctor and traditionally trained healer or knowledgeable tribal elder onto a radio show to discuss the same issue, for example healthy eating or exercising, from their perspective.

Answering this research question appropriately requires us to consider more than radio programs increasing knowledge on the health topics they address. This could be measured in an experimental or quasi-experimental study as often conducted in the fields of Education and Public Health. This qualitative study conducted at one point in time can offer insight on the contributions of tribal radio for population health beyond increasing knowledge on a particular topic, which a study like this cannot assess. In fact, this study revealed a number of very important functions of tribal radio in the field of health education for its local audience.

First, tribal radio does critical translational work. In many instances, the information is translated from English to the respective Indigenous language. But in addition, there is critical translational work being done in terms of translating jargon to language everyone can understand, and translating between cultures, such as repeating what a doctor said on air, for

example, in a more culturally appropriate way, or intersecting with examples, specific cultural references, or humor, which a non-Indigenous person may not know or find appropriate. All three aspects of translation allow the audience to be more receptive to the information. Much of this translational work comes naturally to the tribal radio show hosts, and is an integral part of their work as radio DJs. Translation, in those three meanings of the term, is a key contribution that tribal radio makes to the health education of their audience.

Another contribution that is certainly very intentional and that we can say based on the focus groups has been achieved to a large degree, is raising awareness of health issues — primarily in order to motivate preventive behaviors. This audience study shows that not only are listeners more aware of certain health topics, and have reported being more likely to consider lifestyle changes or going to a doctor for a recommended check-up, annual exam, etc. for themselves, they also discuss these matters more with others. The focus groups showed that not only is the goal of awareness raising accomplished at the individual level, there are also more conversations about health within families and the wider community. A common example given was grown children talking to their parents and explaining a health issue to them based on what they had heard on tribal radio, but also community conversations taking place, e.g. at church, about a health issue recently discussed on the tribal station. Of course a facilitator of these community conversations is the almost ubiquitous use of tribal radio and the fact that locals can reasonably assume others to have heard the same program, or to be interested in hearing what it was about if they missed it. Without the radio program as an easy entry into those conversations even with individuals one does not know as well as family members, many of these conversations likely would not happen.

Another contribution to population health is tribal radio encouraging in-person visits to a clinic or healthcare professional elsewhere, and giving listeners some tools to make these interactions more effective for them, which can improve the long-term outcomes. While the explicit objective of the health-focused call-in shows is to answer questions and impart information, a very helpful side effect of these shows is that listeners are being introduced to their local healthcare providers, getting to know them a little bit before they meet them for the first time at the clinic. Especially with the high turnover among medical personnel in rural areas

and the existing barriers to non-urgent but necessary in-person visits due to transportation issues and hesitation due to prior negative experiences (cultural misunderstandings, long waiting times and doctors pressed for time during visits because of understaffing and underfunding, lack of prior knowledge that makes asking questions more difficult, and so on), getting to know a doctor via the radio can help mitigate the first barrier to an in-person visit. After hearing a doctor on the radio, and perhaps even speaking to her/him directly during the show, can build some initial trust, and — as a respondent in this study said — lead to providers no longer feeling like “strangers,” reducing some of the hesitation to go to the clinic in the first place, and to have the confidence to ask more questions while there. I support respondents’ idea to include recommended follow-up questions in the radio program, such as asking for side effects when a new medication is prescribed, or asking for alternate treatment options when one is not entirely comfortable with a suggested treatment plan, or simply would like to know what alternatives exist, if any. Generally, the focus groups revealed that radio programs encouraged listeners to seek further medical advice, information, and treatment, and meet with a provider sooner than they otherwise would have. For one, this is due to the information and direct encouragement given by the radio DJs, and two, the call-in shows with providers helped to break down some of the barriers to in-person visits.

Another point of confusion, and sometimes frustration, related to visits to the healthcare center was procedural information, e.g. regarding health insurance, the differences between the local healthcare center and a hospital, sign-in procedures, and so on. A majority of respondents stated that they would like to hear more information about this on the radio.

Because tribal radio functions as the central information hub in the community, and is also seen as a gathering space that brings everyone together, audience members expect local clinics to reach out to the station to share information. It is interesting that this outreach is expected primarily of the local providers and health clinics and not of the radio stations and their journalists. Listeners appear to expect others to use the radio station in the same way they do, as a gathering and learning space, and not merely a medium for passive listening.

Other, non-Indigenous, ethnic/minority radio stations, often serve a minority community immediately situated within a dominant or host culture, e.g. immigrants or refugees living in a

city in their host country to whom a community radio station might be providing programming in their native language and news from their country of origin. Tribal radio stations are in a different situation. Most serve a rural population on Tribal lands, not immediately surrounded by cultural outsiders. As independent nations, the United States, or Canada for that matter, are not 'host countries' to Tribes, but colonial powers with whom Tribes have nation-to-nation relationships, but who continue to disrespect this tribal sovereignty. Thus, the positionality of a tribal radio station and its relationship with the non-Indigenous community is quite different. Translational work of some kind likely takes place at every community radio station, particularly if serving a racial/ethnic minority. However, at a tribal station, the goal is not assimilation, but rather a facilitation and translation between the Indigenous and the outside, dominant culture. To return to the research question discussed here, we can examine the intercultural facilitation work that tribal radio does from the perspective of what listeners can learn from it about health topics. There is a deliberate effort being made to strengthen and foreground Tribal knowledge and traditions regarding health, but to also partner with the local healthcare centers and professionals to benefit from their expertise. The goal is for the audience to benefit from both, traditional knowledge of their own tribal elders, such as about local medicinal plants, healing ceremonies, healthy eating and lifestyles that have been practiced for centuries, and so on, as well as modern medicine, meaning chemical medications, vaccines, and so on. Tribal stations make an effort to cover both and encourage their listeners to seek out what local healthcare centers have to offer, get vaccinated, get health check-ups, adhere to recommended treatment for diabetes, cancer, and so on, and also give a platform to those who can share knowledge of the much older, traditionally used prevention and healing methods of the community, such as tribal elders.

Listeners want to learn about both perspectives and what each approach has to offer. A majority of focus group participants was most interested in hearing both perspectives on a certain health topic in the same radio show. Listeners would most like to learn about diabetes prevention, for example, from a radio show where both a medical doctor from the local clinic and a tribal member who knows about things like traditional healthy diets, farming, or exercise, such as the deeper meaning of running to Hopi society. There is clearly respect and appreciation

for both perspectives at tribal stations and in their audiences, and presenting both perspectives in the same show seems like a very promising approach to share health information.

Building intercultural bridges is a key contribution of tribal radio that benefits the listeners' health education. The focus groups, and my additional, informal meetings with professionals at the local healthcare centers, revealed that patients (or future patients) are not the only ones learning from tribal radio health programs. Healthcare professionals also learn from these programs, in their case about the needs, questions, and cultural norms and expectations of their patients. There were a few focus group participants who either currently or at a previous point in time held a position within the local healthcare system, and they appreciated in particular the health-focused call-in shows on tribal radio, which afforded them an opportunity to hear directly from the community and learn about their questions, concerns, and points of confusion. They said this allowed them to serve their patients better due to better understanding their needs and concerns. In addition, similar to those who don't speak the respective Indigenous language, but still appreciate the Indigenous language radio programs, healthcare professionals said tribal radio led them to develop a deeper appreciation and understanding of the Indigenous culture. While all focus groups participants were Indigenous (members of the respective Tribe) and thus already have a deep understanding of their culture, even the non-Indigenous providers I met with at the clinics shared this appreciation for the tribal radio programs for their own learning. Of course this learning process also requires a certain level of cultural humility and interest on the side of the non-Indigenous providers, who often only work in rural Indigenous communities for short amounts of time.

Overall, tribal radio does not only make a contribution to the health education of local residents by providing information that can raise awareness and aid in disease prevention and management, but also generates conversation within the wider community, encourages in-person visits to the local clinic or healthcare provider, and educates those serving the community on patient needs and important cultural norms that facilitate trust between patient and provider.

Considering all three research questions and the seven focus groups held in Arizona and Alaska with diverse audience groups, it is evident that tribal radio fulfills many roles for their audiences, is well-suited and positioned as a source of health information, and that audiences



benefit in different ways from tuning into these health-focused programs, including feeling more encouraged to meet with a healthcare professional and more empowered to ask them questions. The very specific recommendations for additional topics and radio show formats that resulted from these focus groups might help the stations further improve their programming on health and prevention.

Tribal radio is a learning space for both local Indigenous residents and cultural outsiders. Listeners have very strong trust in the station leaders and show hosts, who are also community members, most but not all also tribal members. Tribal radio does different kinds of translational work and bridges cultural differences within the local community, for example between Indigenous patients and non-Indigenous providers who do not have much experience with the culture and may alienate and frustrate their patients without noticing. Especially participatory formats work well for both sides to learn about the other perspective and begin building a relationship even before the first in-person visit. This also helped patients overcome some of the barriers that usually prevent them from seeing a doctor, and thus holds promise for improving population health long-term.

The independent status of tribal radio stations, even from their own tribal government, is important to audience members and their trust in the information. Listeners feel a sense of ownership over their tribal station and see it more as an integral part of the community, where they can gather, express themselves, and learn from one another. There is not a perception of gatekeeping performed by the station leaders or show hosts; listeners feel that the station belongs to everyone and represents their community fairly and equally, though they did express a desire to see even greater youth involvement at tribal stations and young voices on air.

Tribal radio is an example of Indigenous innovation and resilience, and in prioritizing Indigenous issues, perspectives, voices, languages, and communicative norms helps to assert tribal sovereignty.

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## CHAPTER 5

### Conclusion and Future Directions for Tribal Radio

This study presented both radio producer and audience views of an understudied medium in an understudied population: Tribal radio produced and consumed by rural Indigenous communities. It took place in two very different ecological, cultural, and political environments: The Hopi Reservation in the high desert of Arizona, entirely surrounded by the largest reservation in the country, and small, remote Yup'ik communities in Western Alaska, a state without Indian reservations<sup>20</sup> due to different treaties and agreements between the state and Indigenous nations in Alaska. The study included both the oldest non-commercial tribal radio station of the United States, KYUK, and a second, younger but also well-respected and influential tribal radio station, KUYI. I worked collaboratively with the General Managers of the station to design the study, to ensure not only the feasibility and success of the study, but to ensure that some of the results would be directly useful to the radio stations, who otherwise do not have the funding and time to conduct audience focus groups like this. In 2018, two years after the data collection, I traveled back to the Hopi Reservation to meet with the then new General Manager of KUYI, as well as station staff and representatives of the Hopi tribal newspaper The Tutuveni to discuss the findings in person and how the audiences' recommendations might be realized by the station and what the study has revealed about audience needs and preferences. The station management has since been taken over again by the previous manager whom I worked with during the study.

In order to respect tribal sovereignty and follow the appropriate ethical protocols for working with Indigenous communities, particularly as a non-Indigenous person, I had the study and resulting publications and public presentations approved by the appropriate tribal review

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<sup>20</sup> The Metlakatla Indian Community located on Annette Island, which now belongs to Alaska, is the only exception. For more information, see: <http://www.metlakatla.com/>

boards (in addition to the required university review board), who were in full support of the study each step of the way, and whose recommendations have improved the data collection and the resulting documents, including this dissertation.

Thanks to the support of the tribal review boards, the radio stations, and the interest by the local population to contribute to a study about their beloved radio station, I was able to recruit a diverse pool of participants ranging in age from 18 to 85, representing multiple genders (though women were in the majority), a variety of educational backgrounds, with a high school diploma being the most common highest degree, and variety of occupations, with about an equal distribution of individuals employed in the sense of working for wages, and being unemployed, keeping house and raising children full-time, or being self-employed, often as an artist, farmer, hunter, or fisherman.

While the results of the study of course cannot be generalized to other tribal radio stations or Indigenous communities, the inclusion of two quite different Indigenous communities whose radio stations share similarities in terms of their missions, programs, audience served, rurality, unique geography and lack of infrastructure, use of Indigenous languages, and so on, provides insights that speak to functions, challenges, and achievements of tribal radio beyond one specific community. While audience members often only knew their specific radio stations, the producers — especially at these two stations which are highly engaged with other tribal stations and Indigenous media organizations — were aware of other tribal stations and the common goal of tribal radio stations across the United States and beyond. The interviews therefore could speak more directly to a wider mission of tribal radio and Indigenous media, beyond their station, while those more general patterns became apparent in the focus groups through shared perspectives and ways of engaging with radio that were shared even among different age groups, Indigenous nations with very different lifestyles and cultures, and values those listeners expect to see represented at an Indigenous radio station.

This study should be of interest to media scholars as much as Indigenous Studies and Public Health scholars. As I am interested in direct results of research and applied research generally, it is also my hope that Indigenous radio producers and other media practitioners may

find these insights of value, as well as development professionals working in media development and rural health education.

While the previous two chapters have analyzed first the producers' and managers' perspectives and then the audiences' perspectives, here I will highlight some of the most important and striking similarities and differences in their characterizations of tribal radio that help us gain a more complete understanding how tribal radio functions, in what aspects the intended mission is realized most. Of course, a particular focus of the study was on health information, which is also an area of great need and of importance to the stations, and will be discussed in greater detail here.

Overall, there was striking agreement between the station leadership, producers, and other station employees who were interviewed and the audience in terms of the station's mission, functions, and roles it plays in the community. The trust and respects between producers/station employees and listeners is tremendous and goes both ways. Tribal radio makes no attempt at gatekeeping, or highlighting their standing as those with access to information and ICTs that the vast majority of the population is lacking. Both by the employees and the listeners their position is seen as well integrated with the community, and as truly attempting to serve their communities, designing programs according to audience needs and wishes, and doing their best to share the information that is most helpful. Interestingly, this was not necessarily defined as information helpful to the majority, as one might assume, but, as a KYUK producer expressed it: "If there's one person in our audience that wants to have this type of programming, then we should think about them too" (KYUK Interview 7, p. 14).

This sense of responsibility to serve every single person in their audience to the best of their ability, including covering more fringe interests is remarkable, especially considering that the audience, the entire local community, does not have many alternatives regarding radio programs or other media. Thus, by this choice, more or less the entire community is made to listen to something that might be important to (requested by) a single person. In Chapter 4, many listeners spoke to the need to discuss and ultimately address problems, such as health problems that came up in our discussion, as a community, in a group setting where everyone has a chance to share their views, experiences, and ideas. It was particularly important that youth and elders

are both represented in such discussions. At both locations, this was emphasized as the culturally appropriate way to address concerns, and thus the radio stations are in line with this cultural norm in their attempt to value each individual voice and bringing it into the community-wide discussion, rather than orienting their programming solely on majority interests. This particular audience is likely to be very receptive to fringe interests and perspectives coming from their fellow community members, as this is considered the appropriate, even standard approach, which is quite different from non-Indigenous mainstream media. Of course commercial radio needs to cater to the majority for economic viability, but even among community stations, fringe interests are more likely to be covered due to a producer's interest, not a single audience member's request.

Similarly, the importance of including both youth and elder perspectives is recognized by both stations who attempt to not only represent those voices within any given program as much as possible, but also purposefully recruit youth to host their own shows, and give them nearly total freedom to design their shows and choose their topics for discussion with the community at large. Elders mostly participate at both stations as volunteers, often hosting shows in Hopi or Yup'ik, since older residents are more likely to be fluent in their Indigenous language, often having learned English as a second language later in life (or not at all; especially rural Alaskan communities still have monolingual speakers of Indigenous languages, including Yup'ik). Use of the language is extremely important to both listeners and producers at both locations. In our conversations, some radio producers and show hosts were concerned that perhaps covering content in both languages might take too long and annoy the audience, or that many wouldn't be able to understand the Indigenous language program and would prefer to hear everything in English. However, in the focus groups, listeners actually expressed that they would like to hear even more Indigenous language programming, and even those who don't understand or speak the language said they enjoy hearing it and that it creates an even deeper appreciation for the culture as a whole. Thus, practitioners and audience are in agreement about the central role that Indigenous languages should play on tribal stations.

Station employees strongly identify with their work and see themselves as advocates for their communities. Many spoke of wanting to protect their communities from being taken



advantage of. One example given was that even though funding is always a concern and it is difficult to turn down sponsors and advertisers that help keep the station financially viable, KUYI has turned down funds from companies affiliated with, or aiming to directly advertise, products that may harm the health of the population they serve, such as commercial tobacco products, which are heavily marketed to poor rural communities (Bailey et al., 2017).

While audience members likely do not know about specific instances like this one, participants in this study strongly agreed with tribal radio's self-assessment as a community advocate. Listeners feel that the station truly does represent their interests and that the radio station, as well as the individuals working there, are highly trustworthy.

One factor contributing to this perception is the makeup of the station employees and volunteers. In an interview, an employee said that their station's staff represents the diversity of the local community. While audience members at both locations are predominantly Indigenous and citizens of the local tribal nation, there is diversity in terms of some non-Indigenous residents, even immigrants from other countries, especially in Alaska. Station employees, both Indigenous and non-Indigenous saw the diversity of their teams as a strength of their stations, and said they enjoyed working with each other. In the focus groups, the Indigenous audience members agreed with this, and though most voices they hear on air are fellow local Indigenous people, they were aware that station managers and other employees are non-Native. They did not see this as problematic, and instead expressed their appreciation for those individuals, as they are well known locally and make an effort to integrate themselves into the culture as much as possible and as much as is appropriate. For several non-Indigenous staff members, this included learning the Indigenous language. KUYI General Manager Richard Davis, for example, is nearly fluent in Hopilavayi.

Both Yup'ik and Hopi cultures have very clearly defined gender roles, though each culture and lifestyle is very different — Hopi society is matriarchal and built around a farming lifestyle, while Yup'ik culture is more patriarchal and built around hunting and fishing, often involving men being gone for these activities for months at a time. Both radio stations are acutely aware of what is and is not culturally appropriate, in terms of gender roles, respect for old age, norms around giving space to both youth and elderly in important discussions, and

certain taboos. Audience members often praised their tribal stations for demonstrating this awareness and sharing information in appropriate ways, which they sometimes contrasted with other media or other non-Indigenous individuals they had encountered, whose behavior they found to be taboo-breaking, disrespectful, and ill-informed.

Both stations make a conscious effort to invite non-Native professionals, especially working at the health clinic, to the station for interviews and to introduce them and their work to the community. At the same time, they focus on sharing local and traditional knowledge about health topics, e.g. regarding medicinal plants or home remedies for small injuries when out hunting. This balance between featuring local, traditional knowledge about health and Western medicine is equally important to radio producers as it is to their audience. Audience members wanted an even more direct comparison, or dialogue, between both perspectives. In addition, they appreciated being introduced to healthcare professionals in the area, particularly because turnover is so high in rural communities, especially in Alaska. For the same reason, tribal radio is also a great resource for healthcare professionals to learn about the culture of the people they serve, since they are often there for a short amount of time, and do not receive much training on local cultural norms and expectations. Based on stories and frustrations shared by focus group participants, a doctor breaking such cultural norms can be a barrier to a trusting doctor-patient relationship.

Tribal radio provides a learning space, even compared to a Yup'ik *qasgiq* by a Yup'ik elder working at KYUK (KYUK Interview 3, p. 9), expressing great respect and appreciation for the space KYUK creates, and for the information itself. Both station employees stated that they make a conscious effort to create an open gathering and learning space for everyone, with little gatekeeping or pre-defining of discussion topics. The main format in which this can happen are call-in shows, which were also named in the focus groups as an audience favorite. It is quite unusual that callers are being let on air without pre-production where audience questions are fielded for appropriateness, interest, and so on. This sometimes resulted in issues like repeat callers, some callers taking up too much time or talking about matters deemed by listeners to be too private. However, overall, audience members appreciate this openness and pronounced absence of censorship. They enjoyed hearing from other local residents. This was even true when

no particularly helpful information was shared, simply for the purpose of feeling more connected to others. For example, KYUK's birthday line is extremely popular, and many reported simply enjoying hearing everyone calling in to send birthday greetings, even if the show featured all people they did not know. The gathering space function of tribal radio, not only its learning space function, is very important to listeners.

Station employees also spoke at some length about their archives that they make an effort to continuously collect materials for and build over time, often without the intention of sharing these recordings on air. Not all listeners were aware of these archives, but some had seen some materials used, for example in a school setting. Listeners agreed with station management that the safeguarding of these materials — often traditional songs, recordings of stories, traditional knowledge, teaching, and even some material related to ceremonies — was very important, and that this kind of content is not meant for cultural outsiders, even citizens of other Indigenous nations. Thus, the importance and handling of the archives is another area of agreement between station employees and listeners. The same can be said about the online stream, even though that is likely more appreciated by those who have moved away and wish to stay connected to news from their home community and their Indigenous language, whereas most focus group participants were local residents who had not spent much time away from the community and listen to the station via a radio, not online.

Overall, it is quite remarkable how strong the agreement is between practitioners and audience when it comes to how tribal stations are run, what kinds of programs they offer and how those are handled, as well as the functions tribal radio fulfills and should strive to fulfill. It is also noteworthy that there was much agreement between Yup'ik and Hopi participants despite cultural differences between their communities.

However, there were also some aspects where views differed between the two study locations and radio stations, or between the station employee view and the audience view. One stark and interesting difference between Yup'ik and Hopi participants was that both station employees and listeners at Hopi were a lot more concerned with safeguarding what they considered to be sensitive cultural information from outsiders. In Alaska, both participant groups regarded information as inherently good and thought it ought to be shared as widely as possible.

There was also a perception that cultural outsiders would not understand information specific to Yup'ik culture anyway, and there was little concern that songs, knowledge, stories, or other material of particular cultural value could be somehow misused by others. At Hopi, precisely this concern was very prominent. Both station leaders and listeners were worried about outsiders exploiting materials of cultural value if access was public, and that for this reason, those materials needed to be restricted and protected. One reason for this difference may be that Hopi is accessible to outsiders more easily, and that Hopi people are more used to tourism, where they have unfortunately directly experienced such exploitation and disrespect. Some station employees referenced finding recordings of songs and ceremonial activities uploaded onto public sites like YouTube, or even commercialized by outsiders, which is exploitative and regarded as culturally harmful due to disrespect of deeply meaningful, perhaps even sacred, Hopi knowledge, cultural practice, and intellectual property.

Yup'ik people in this region with much less tourism may not have experienced this as much recently, or may not be aware of aspects of their culture being appropriated and commercialized by outsiders elsewhere. For Yup'ik participants, protecting themselves and their information from outsiders was much less of a concern than it was at Hopi, though station employees at KYUK still reported being careful not to share teachings, songs, and other materials that could be considered too sensitive or not appropriate for non-Yup'ik people to learn.

When it came to discussing health topics, KUYI show hosts were also more concerned with cultural taboos around certain topics than Yup'ik show hosts were, and in doing so, each station was in line with their audience. Yup'ik focus group participants felt strongly that no topic should be taboo in the health realm, and that everything should be discussed as openly as possible, whereas Hopi listeners acknowledged that they found some topics to be difficult or inappropriate for public discussion.

To audiences at both locations, radio show hosts acted as translators in more than one sense. Of course, they literally translate between Hopi or Yup'ik and English, but also between an expert guest on a show using jargon to an easier reading level so everyone can follow, and also for cultural appropriateness and relevance, sometimes adding their own examples or

explanations so that the information becomes as relatable and useful as possible to their particular audiences. The audience was highly aware and appreciative of this translation work, whereas radio staff only highlighted their direct translational work, between two languages.

For show hosts, the focus was primarily on language use, making sure that there are programs entirely in the Indigenous language, as well as a participatory format using predominantly or exclusively the Indigenous language. Audience members shared that they appreciate this, but would also like to see more of a focus on learning the language. Both stations have a “word of the day” program, which are very popular, and listeners said they wanted more of this kind of programming, explicitly teaching the language.

Another difference brought up in the study was that KUYI’s radio programming changes more with certain times of the year than it does at KYUK. This is likely due to cultural differences in which the Hopi calendar, centered around farming, prescribes more particular rules of behavior for certain times. One example given was that winter time is supposed to be quiet and centered on storytelling. Nothing grows on the fields and families used to gather around to share stories more in this time. At KUYI this is reflected by not playing fast, loud music with a lot of drumming during winter time, especially the month of December. There was no equivalent of this kind of change in programming based on times of year at KYUK, beyond coverage of different topics throughout the year, since certain types of information related to hunting, fishing, sports, and so on are relevant at different times.

Given the cultural differences between Hopi and Yup’ik societies, the similarities in how their tribal radio stations perceive themselves, what they aim to do, and how they function for their audiences are remarkable. There was not much discrepancy in this study between the radio producer and listener perspectives, and the tremendous appreciation and trust these audiences have for their tribal stations — as one Hopi listener said: “You know it’s reliable [information] if it’s on KUYI” (Focus Group 2, p. 6) — may be at least partly explained by this cohesion between the station and their audience.

While language revitalization is the one aspect most studied and written about regarding tribal radio in the U.S., this study has shown numerous other contributions of tribal radio. Some similar to other community media, some as unique as the population it serves, and most not

easily replaced with online sources. Tribal radio stations like KUYI and KYUK are not only the sole source of information because affordable Internet is severely lacking in their locations, but because the information they cover cannot be found anywhere else. Indigenous concerns, interests and voices continue to lack representation, and through their own independent media — primarily radio due to its low cost, wide reach, and feasibility in rural locations — rural Indigenous communities have built an important forum to discuss matters of importance to their population, inform their fellow residents of critical health and safety matters that help improve population health, and collect and house valuable pieces of their cultural history on their own land, in a way that would not be possible without the equipment, knowledgeable staff, and trust these radio stations have.

Regarding health information, tribal radio is not merely a way to pass on commonly known preventative strategies to mitigate conditions like diabetes or cancer, but the stations create programming that is “hyperlocal,” in that it is highly relevant health information for this particular region that might have little value most other places. One example is the advice to invest in the more expensive copper bullets rather than buying cheaper lead bullets for hunting. For someone hunting occasionally for sport, this will not be a concern, but for someone hunting for subsistence, and often having to transport the animal a considerable distance prior to processing, dangerous levels of lead can get into the meat and ultimately the person’s diet. There are few places in the world where this kind of health information would be helpful or relevant at all, but to subsistence hunters of the Yukon-Kuskokwim Delta, it is vital. There are many other examples of hyperlocal information outside the health realm as well, from advice for voting in federal elections as an Indigenous person in a certain state living on a reservation without an address to KUYI announcing when the Mobile Internet Van will be in which village, thereby providing listeners with a way to access free Internet and a computer.

Tribal radio also makes a unique intercultural contribution as a translator and learning space for both local Indigenous residents and cultural outsiders, helping to improve their interactions, in the health field and beyond. Because tribal stations are ubiquitous and well loved in their communities, they are in an ideal position to create conversation and raise awareness of health issues, ultimately leading to changed behaviors and improved outcomes, e.g. for the focus

group respondent who shared that they visited the clinic earlier than they would have without their tribal station encouraging them to do so and introducing them to the doctor they will meet there beforehand. As the central medium in their communities, the radio facilitates conversations everywhere in the community, which I have witnessed during both research stays and my prior and later visits to the communities. Naturally, it would be significantly more difficult to begin a conversation with someone in the grocery line about a website one has seen than a radio program one can be reasonably certain everyone there has also listened to. Many listeners named church as a location where discussions of tribal radio health programs take place. Again, it is easier to begin discussing an otherwise difficult topic when everyone driving up has just listened to the same program. But tribal radio also facilitates these discussions more directly in participatory radio programs, which are an audience favorite among all age groups, not just the elderly, though they do seem to participate more often.

The health information tribal radio shares is culturally grounded. Tribal radio producers are able to use appropriate wording and tone to talk about even difficult topics like mental health issues or intergenerational trauma. Several Hopi respondents pointed out that they find much of the health information they have seen in print or online, or been told by doctors, appalling, because it was very dry and no humor was involved. Most white Americans would consider use of humor in health education about such topics highly inappropriate, and it could be in Hopi society if used wrong, but humor and positivity made such topics approachable, and tribal radio show hosts know exactly how to strike this balance.

Residents of rural Indigenous communities do not only listen to tribal radio out of a mere need for information and because other infrastructures are mostly unavailable, but the medium creates value beyond providing access to information. Listeners deeply value the gathering space that tribal radio represents, and many former residents who have moved away to urban areas still listen to their station online and those who participated in this study and had spent time away from their home community all said that listening to the station allowed them not only to be informed, but to truly feel connected in a way that made it easier for them to return home and re-integrate themselves.

General Managers described their stations as advocates for their communities, as wanting to protect them from further exploitation and to counter stereotypical and other harmful portrayals of Indigenous people that are abundant in mainstream media and non-Indigenous U.S. culture and schools. This pronounced anti-hegemonic orientation and pride in the activist roots of tribal radio in the late 1960s is something the audience certainly picks up on today, even if programming today is not explicit in this way. Focus group participants at both study locations agreed that listening to the station has strengthened their sense of belonging with their particular community, as well as unity with other Indigenous nations in the United States, and even worldwide.

The existence of tribal radio in itself is a testament to Indigenous resilience, innovation, and self-determination, and the programs center the Indigenous experience, genuinely care about their missions and their listeners, and counter ever-present, harmful colonial portrayals of Indigenous life that oversimplify, stereotype, patronize, and commercially exploit, and also counter silence, in the sense of suppression of Indigenous concerns, rightful demands rooted in many treaties not held up by the United States, and continued calls for justice.

As the KUYI General Manager put it: “This [radio station] is an organ of communication of strength and resilience and perseverance. If you can't hear your strengths mirrored back to you, if you can't see your resilience mirrored back to you, then it becomes a little more difficult to keep that fire going to resist against appropriation, or to resist against the dilution of a culture, let alone physical threats to farming and agrarian livelihoods, and a lifestyle that is more in harmony with this world” (Interview 1, p. 10).

Tribal radio shares a “profound sense of dissatisfaction with mainstream media form and content” (Howley 2005, p. 2) and is “committed to enhancing community relations and promoting community solidarity” (Howley 2005, p. 2) in a way similar to other community radio stations and community media, however, in the particular instance of Indigenous peoples, this sense of “dissatisfaction” does not only have to do with stereotyping, silencing, or discrimination; it is rooted in the colonization and forced removal of their people and continued oppression by the government and the now dominant culture, in media as well as in policy, healthcare, education, and so on. This is a profound difference to non-Indigenous community



media, and an important similarity among Indigenous media around the world. Tribal radio fits the definitions of community media just as well as definitions of alternative media, which focus even more strongly on a pronounced anti-hegemonic orientation in operations and programming. Alternative media are community media “that challenge the dominant capitalist forms of media production, media structures, content, distribution, and reception” (Fuchs, 2010, p. 178). Or, as Downing (2001) states, alternative media “express an alternative vision to hegemonic policies, priorities, and perspectives” (Downing, 2001, p. v), which is not true of all community media. Some scholars have cautioned against assuming that just because community media are produced by members of a minority group, they are truly alternative or counter-hegemonic (Echevarría Vecino, Ferrández Ferrer, & Dallemagne, 2015).

The case of tribal radio is unique in multiple ways. First of all, it is produced on tribal lands, and thereby alone, regardless of content, is an assertion of Indigenous self-determination. Second, tribal radio stations around the world play an important role in preserving and strengthening Indigenous languages and cultures, which is necessarily counter-hegemonic when Indigenous languages and cultural practices were illegal in many countries like the United States for a long time, and colonization aimed to erase first the people themselves and then the languages and cultures of the survivors. Tribal radio is the medium of survivors, not just of an ethnic minority, as community or alternative media are usually described. Before we consider the content shared on tribal radio airwaves, its mere existence on tribal lands and production under oversight of majority Indigenous boards with a majority Indigenous staff, is already anti-hegemonic and testament to Indigenous resilience in the face of ongoing colonialism.

Third, tribal radio has much more direct political impact than other community media do. Tribal radio stations coming on air required the creation of a new office within the federal agency regulating media. Independent, reliable, and trustworthy media are essential to democracy for any nation, but even more so for nations who find themselves within a colonial state, with their land held “in trust” and their legally agreed upon rights continuously diminished and disrespected. Tribal radio production cannot be considered as separate from tribal sovereignty. This is not a consideration for any other community medium, and while most minority population groups who operate community media have to fight for their rights and may use

community media to do so, tribal sovereignty is a concept that uniquely applies to Indigenous peoples, particularly in the United States. It describes not only basic rights of Indigenous peoples, but a true sovereignty, as independent nations that relate to the United States (and to each other) on a nation-to-nation basis. Owning and operating independent media is an important assertion of this sovereignty. This holds true for other media and ICT infrastructure as well. Radio is set apart by its functions and how it is used in this particular space.

Tribal radio is a negotiation — A public forum that not all information is suitable or appropriate for, a place in which Indigenous and non-Indigenous residents gather (physically and virtually), where multiple generations want to bring their perspectives to bear, and where even different languages, and the air time each should receive, are constantly negotiated. Another aspect of this dynamic is wanting to protect the community from outside exploitation and therefore safeguarding information, but also aiming to educate outsiders in order to reduce harmful stereotyping and prejudice. What does not apply to tribal radio, and would be a quite colonialist and limiting view to apply, is “traditional” Indigenous culture as somehow frozen in time, necessarily diluted by “modern” technology (Ginsburg, 2002, p. 212). Indigenous peoples have used all kinds of technologies all along, and hidden in the false tradition versus technology, or tradition versus modernity dichotomy is a toxic, paternalistic view of Indigenous cultures as “primitive” and therefore necessarily at odds with what these schools of thought consider to be more advanced Western science and technology. Such approaches to the study of Indigenous media are founded on a false dichotomy that limits what functions and contributions of tribal radio can become visible and understood by a wider, non-Indigenous audience.

At the same time, as practitioners interviewed for this study have made very clear, tribal radio stations do not see themselves, or aim to be, part of a utopian “global village” in which the intercultural space they provide facilitates not just mutual understanding, but a form of shared experience and identity with outsiders. Rather, tribal radio practitioners wish to protect their Indigenous communities, who have suffered tremendous loss from colonization and continue to suffer today due to ongoing colonialism, from a dominant, non-Indigenous culture they know to be potentially dangerous, destructive, and exploitative. As Ginsburg (2002) writes, “the important, specific ways in which cultures differ and people experience political and economic

inequality are erased in a modernist and ethnocentric utopian vision of an electronic democracy” (p. 213).

There is a strong sense of needing to either withhold information (e.g. about certain cultural practices at risk of exploitation and commercialization) or share information (e.g. facts and stories that combat common stereotypes) for the explicit purpose of protecting the community in the best way. Each piece of information, including stories, songs, and factual information, is evaluated from this perspective.

From the view point of infrastructure studies (Edwards, Bowker, Jackson, Steven, & Williams, 2009; Parks & Starosielski, 2015; Plantin, Lagoze, Edwards, & Sandvig, 2018), issues of infrastructure ownership and governance are particularly interesting in the Indigenous context. In terms of radio, regulation of tribal stations, including those whose signal does not extend beyond tribal land, by a U.S. federal agency reinforces limitations to tribal sovereignty and limited freedom to use tribal lands (and air waves) as the tribe sees fit. While the tribe ideally holds the license and also owns the necessary equipment to operate the station, thus the technical infrastructure required to come on air and share information, the land and the airwaves themselves are an infrastructure required for communication, and this is where the rights of Indigenous peoples are most limited when it comes to Indigenous-led and -controlled communication.

Regarding broadband Internet, again, issues of regulation and land rights are central. Particularly for the Hopi Tribe, entirely surrounded by Navajo land, complex right of way issues can complicate infrastructure deployment. Infrastructure itself becomes highly politicized in the Indigenous context, because it is so closely tied to land rights, which are, in turn, a central issue of tribal sovereignty. The material and political aspects of communication, that infrastructure studies is concerned with, have a very direct and profound sociocultural and economic impact in the Indigenous context. In particular those approaches concerned with structural exclusion of certain communities from infrastructure, especially high-speed Internet (Lee, Dourish, & Mark, 2006; Ribes & Bowker, 2009; Ribes & Finholt, 2009), apply to rural Indian reservations. Most of the policies and programs designed to increase broadband Internet infrastructure availability and adoption in rural areas have failed Indigenous communities, because those policies have included

internal contradictions rendering tribes ineligible to apply for funding, favor outside providers over tribal telcos, or otherwise exclude rural Indigenous people even when they have worked well for other rural communities and ethnic minority groups in the U.S. Exclusionary policy, by design or by oversight, is a structural issue and in this case resulting in infrastructure injustice which then exacerbates other forms of inequality, such as economic, educational, and health inequities.

In public health, the Theory of Fundamental Causes (Link & Phelan, 1995) focuses on the health impacts of structural inequities. The approach explains persistent health disparities certain population groups, like Indigenous people, are experiencing, with socioeconomic status and community-level access to healthcare infrastructure, like clinics and trained personnel, and ICT infrastructure for access to health information. The theory posits that access to information is critical to being able to avoid health risks, thereby reducing mortality and improving overall population health long-term (Link & Phelan, 1995). While infrastructure access is not the ultimate solution to reducing or eliminating health inequities, it can at least contribute to improvement. ICTs in the health field allow for more than just sharing information, e.g. e-health approaches that are useful especially in rural areas that lack medical personnel. Policies that support infrastructural exclusion rather than inclusion exacerbate other forms of inequality, including in health, economics, and education.

As Communication Infrastructure Theory (CIT) posits, ICT infrastructure, cultural norms, social hierarchies, and local economies — in this framework referred to as the communication action context — all interact to facilitate or inhibit a community's information sharing and storytelling, which directly affect health (Ball-Rokeach, Kim, & Matei, 2001; Wilkin, Moran, Ball-Rokeach, Gonzalez, & Kim, 2010; Wilkin, 2013). The communication action context includes macro, meso, and micro-level actors, through whom infrastructure availability acts to affect health outcomes. The macro level, such as federal government programs, cultural institutions, and mainstream media in the context of this study mostly affect population health by extending highly inadequate support to rural Indigenous peoples, or excluding them altogether. The meso level is where tribes are able to exercise their sovereignty more and affect positive change, despite the lack of support and infrastructure from the macro

level. The meso level includes schools, community organizations, and community media. Indigenous communities have heavily invested in the meso level, and multiple Indigenous-led organizations exist at this level to build capacity and improve population health in a sustainable way. Finally, the micro level includes family, friends, colleagues and neighbors, and in this context I would add fellow residents of one's village, extended family, and clan members. This is where health information is informally passed on, and individuals can be encouraged to act in health-promoting ways by others whom they trust. This study has shown how strongly tribal radio impacts information sharing at the micro-level, reducing barriers to seeking medical care and motivating preventative behaviors. The macro level, which is mostly out of the control of tribes, is posing the greatest barrier to a health-promoting communication action context, whereas meso and micro-level actors are maximized in creative ways by rural Indigenous people to improve health. It is important to note though, that Indigenous control and sovereignty needs to continue at the macro level — especially at the macro level — instead of non-Indigenous actors retaining control at the highest level and gaining further control of meso and micro levels. What is needed from the macro level is financial and policy support for Indigenous-led solutions, and infrastructure build out on the terms of the respective tribal nation.

To achieve this, Indigenous people need to be involved more directly in ICT-related policymaking, which in turn requires adequate training (Hudson, 2013) so that the outcomes of this involvement can be as sustainable and impactful as possible. In addition, greater access to federal funding, including access to programs that other U.S. minority groups already have access to, is needed to support developments like telecommunications companies owned by tribal nations providing services to their own citizens on their own land. ICT infrastructure development on tribal lands should be driven by community interests, not corporate interests, similar to how Indigenous media and development in other areas, like agriculture and ecotourism, are successfully run locally.

As previous chapters have pointed out, studies like this one are far too rare and research on Indigenous media, current levels of ICT access and information needs among rural Indigenous people, is urgently needed to affect policy change and gain access to appropriate levels of funding from the federal government for Indigenous-led development. Quantitative,

qualitative, and mixed-methods work is needed to fully understand barriers and facilitators of ICT adoption, like broadband adoption, among rural Indigenous households, especially on tribal lands. In addition, I believe that communication and media studies as a field is well suited for community-based participatory research (CBPR) and other action research approaches, and that those are tremendously underutilized at present. While quite common in public health nowadays, participatory and action research are still quite rare in communication studies overall. Especially work on a current topic or issue of immediate relevance to a particular population can maximize its impact by not only making results available to the academic community, and designing studies based on academic literature alone. Collaboration with local stakeholders throughout the research process, from defining research questions to disseminating findings, can ensure feasibility of the study, as well as a benefit to the community in question, not the academic community alone. In addition, policymakers ought to use academic research more than it appears to presently be standard practice. Greater institutional support by universities for publicly engaged research may be one way to facilitate this.

This study, designed in collaboration with KYUK and KUYI who have both received final reports with audience recommendations for their use in future program design, aimed to understand tribal radio as a source of health information, but also how this medium functions for its audiences, beyond the previously studied language revitalization. Based on the findings and the unique political and sociocultural positioning of Indigenous peoples, I also aimed to complicate our understanding of community media, avoiding to subsume Indigenous populations within “rural,” “community” or “other” categories, as commonly done in government reports and academic research lacking data on Indigenous populations, which has contributed to ineffective policymaking, insufficient government funding based on inaccurate numbers, and a lack of understanding of unique contributions of Indigenous media to their own communities and media diversity overall. Both the Hopi Reservation and the Yukon-Kuskokwim Delta are also good examples of how infrastructure injustice exacerbates health inequities, and how tribal radio mitigates some of these negative effects to raise awareness and create conversation around health topics, facilitate better doctor-patient interactions and motivate patients to seek care and advice

early on, in addition to translational work on multiple levels, from language to reading level to cultural appropriateness.

This particular aspect of the study may be helpful in development work, where health is a key issue to be addressed, and community radio continued to be frequently used in rural regions around the world in order to do so. Even in areas where ICTs are available, community radio plays an important role. As Megwa (2007) states: “Community radio can make critical contributions in our effort to bridge the digital chasm between the information rich and information poor by extending development information access to poor and rural communities in society. Therefore, a combination of traditional radio and new ICTs could increase this capacity to expand development space by assisting to optimize development information services to rural and poor communities” (p. 337).

Some take-aways from this study for development work involving community radio are that participatory formats work particularly well, that introductions to local healthcare providers, e.g. through a radio interview, work to reduce some psychological barriers to seeking care, that the applicable cultural norms around which individuals should be part of which discussions need to be understood, e.g. in this case, involvement of both youth and elders was key, and that cultural taboos need to be understood and respected, but that this does not necessarily mean a certain topic cannot be discussed — it may just be that a different way of addressing the topic is required, e.g. using humor as was the case at Hopi, even if that seems counterintuitive or inappropriate to Western researchers and development workers.

A future study on the topic may want to design and test an intervention in the form of a radio program, for example a set of PSAs about prevention of a certain type of cancer or diabetes. Further information about what types of radio programs work best for health education would be helpful to tribal radio stations, as well as to the development sector and perhaps even non-Indigenous community stations. However, a study like this would fall more into the education or public health fields, where intervention tests are also quite common. Within communication and media studies, of further interest might be how Indigenous communities with greater ICT access use radio, and whether they are integrated in some of the ways the literature suggests they are in rural communities in other countries. In addition, it would be

interesting to compare the functions and characteristics of tribal radio identified here with those of a station serving Indigenous people in an urban environment, and whether urban Indigenous residents prefer a community station catering to them, or whether they simply listen to an online stream of the tribal station in their home community — which in itself makes a statement about belonging and identity, and could be another way to approach the complexities of the “urban Indian” experience.

Another avenue for future research are tribal telcos and broadband infrastructure deployment and adoption on rural tribal lands. Infrastructure studies would be a great framework here, as the particularities of the physical infrastructure itself, land as infrastructure, and the functionality of broadband in this highly politicized context would lend themselves quite well to further studies from this perspective. In addition, studies on adoption — and reasons for non-adoption — in rural Indigenous communities when broadband is available are critical to understand what policy interventions are necessary.

Finally, it would be interesting to conduct a content analysis of tribal radio programming to see how radio show hosts convey belonging, trustworthiness, and sincerity. Ideally, this work would be conducted by an Indigenous scholar who perhaps even speaks the Indigenous language or can work with a translator, but who would be able to analyze cultural particularities of speech and communication present in the radio program. This also includes some of the audience expectations mentioned in this study, for example that humor and positivity will be used to address health issues like depression, cancer, and so on, where by most Western standards humor would be highly inappropriate in most instances. A scholar with a linguistics background might be able to analyze transcripts and recordings to gain an understanding of what types of humor are used in those situations, and how it might make certain topics more accessible for this particular audience. Again, it would be important that the researcher has the ability to ground this analysis in the culture and apply an insider’s perspective.

Based on all I have learned throughout this study, I predict that tribal radio will continue to exist and be relevant in Indigenous communities, even if broadband Internet becomes widely available on rural tribal lands. It may not be listened to as much by as many residents as it is now, but it will continue to provide a gathering space, hub for hyperlocal information, source of



inspiration and pride, and testament to Indigenous activism and resilience that cannot be easily replaced by digital alternatives, though they will certainly complement each other well, similar to what has been observed in rural Indigenous communities in other countries, such as Zambia, who gained high-speed broadband, in some cases even before starting a community radio station (Van Stam, 2011), because those technologies complement — not simply replace — one another.

Tribal radio does important work under challenging circumstances, and contributes to population health, tribal sovereignty, a stronger shared identity among Indigenous people of the region, political awareness, community safety, and cultural preservation through audio archives.

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