

For my son, Diego

Acknowledgements

I am grateful for so many things pertaining to my graduate school experience. My journey at the University of Michigan has been one of great privilege. I have been surrounded by wonderful people who have strengthened me in different ways through this process toward my dissertation.

The administrative staff of the History Department is unequalled. I am especially thankful to Lorna, Sheila, Dawn, and Kathleen. They have always taken time from their busy days to respond to my confusion and questions in astoundingly timely manners. Their disposition, level of professionalism, and human warmth never cease to amaze me.

The graduate students of whom I had the pleasure to form a part were another source of support for me. As I went through each step of the doctoral program I found myself rather unsure as to how to proceed. People like Ed Murphy, Rebecca Pite, Marie Cruz, Jennifer Palmer, Tamar Carroll, Juan Hernández, Tina Delisle, and Lenny Ureña, were always there to give a hand with advice and to share their invaluable experiences and materials. Without them, I doubt I would have been able to firmly set my course. I was lucky to come into the History Program with Victoria Castillo, a fellow Latin Americanist. We have gone through almost every stage of the doctoral program together. Her humble persistence and steady, yet good-natured pace have helped to keep me in balance more than once. Nathan Connelly and Clapperton Mavhunga have provided long

hours of good conversation and contaminated me with their energy and focus. Sergio Huarcaya has seen my weakest moments and been a constant source of support on almost every level I can think of. I am deeply moved by and grateful to all of these incredible colleagues.

Many University of Michigan professors have inspired me and been crucial allies, despite not being on my dissertation committee. The human quality of the professors at the University is exceptional. Their scholarship speaks for itself. Rudolf Mrazek and Bill Rosenberg taught me to search for the voices in my research and filled my first year with cheer and inquiry. Damon Salesa gave me confidence to explore beyond the Puerto Rican shores and be true to my roots. Larry LaFountain-Stokes offered his spirit and made me believe I had something to contribute to the academy. Jean Hebrard provided insight and pushed me to probe beyond what I initially saw in the archival document. But above all, the professor who has made the biggest difference during my time at Michigan is Jesse Hofnung-Garskoff. He has gone well beyond his call of duty, even by Michigan standards, to support my many endeavors. He has provided me with generous amounts of good spirit and counsel, which have helped me make sense of things in times of bewilderment and frustration. He has also reminded me when to celebrate and take a break.

I have a wonderful and exciting committee composed of members whom I genuinely admire, both as people and as scholars. It has been a privilege to work with them. Alex Stern's ability to identify the weaknesses in my research and suggest possible routes to take has helped me improve my scholarly production. I have identified with and admired her work for a long time. Marcia Inhorn has re-affirmed my belief in

interdisciplinary scholarship. She has been a teacher of global health, medical anthropology, ethnography, and reproduction, and has exposed me to a worldview of women and health. Marty Pernick was one of the first people I met even before coming to the University of Michigan and has been my single most fundamental resource and support in the field of medical history.

I am unable to imagine the past six years at Michigan without Rebecca Scott's guidance and support. She was one of the first people to treat me as a scholar, requiring me to keep my standards high and do things right as she moved in many directions to support my development as a graduate student, professor, and historian. Rebecca has been an extraordinarily thorough and persistent reader and commentator of my work. I have been genuinely impressed by Sueann Caulfield's tireless dedication to my dissertation and career. I am humbled by the amount of time she has given me. I am grateful for her patience and her ability to help me simplify and organize my jumbled thoughts. Every minute I have spent with her has been immensely productive.

I would not be where I am now without having first completed my Master's Degree at the University of Puerto Rico. It was there that I got my bearings and built my skills and confidence. Without the support of people like Humberto García, Astrid Cubano, Mayra Rosario, Marita Barceló, and María del Carmen Baerga, I would not have pursued a doctoral degree.

I would like to thank all of the doctors, mothers, and midwives who allowed me to intrude on their lives and shared their stories and knowledge with me in interviews for my research. There were many people who assisted me graciously in the archives in

Puerto Rico. Two archivists to whom I owe a special thanks are Lucy Peña and Carmen Santos, of the Puerto Rican Collection in the University of Puerto Rico Medical School.

I would like to thank the University of Michigan Rackham School of Graduate studies as well as the History Department and the Institute for Research of Women and Gender for funding my schooling and research over the past six years.

Finally, I want to thank my entire family for their support, guidance, and belief in me. I have a great family. My father read many drafts of my Master's Thesis and passed along hundreds of pages worth of information in the past years. My mother also read several drafts of different chapters, kept me updated with newspaper articles, looked up information for me, and was always there to get me through graduate school overall. On a few occasions I asked my sister to read over my writing at the last minute, and she seemed to find time in her crazy schedule to lend me her keen eye. Veronica, Eduardo, and Nazarena have been my family here in Michigan. They have stood by me and given me insurmountable support for the last six years. Veronica Miranda and Maria Fernanda Burbano, dear friends, have helped me transcribe and build my archival database. Miguel has stayed up late at night to keep me company and help me out; he has monitored my anxiety levels, given me chicken soup when I needed it, read pieces of my writing for errors, and believed in me more than myself.

Finally, I dedicate this dissertation to Diego, my son. He has grown up through my years in school, going from classroom to classroom, sitting quietly through lectures, going with me to the library, watching me grade papers, and traveling back and forth from Puerto Rico to Michigan with me without ever complaining. He has inspired me to keep my head up and never give up. He has made me realize that things are more simple

and profound than I often make them out to be. He has kept me strong, true, and grounded. He has made me learn to listen to the birds, notice the beautiful flowers, and to be less wasteful. Diego really has been the ultimate reason for me to move ahead and seeks answers. This project was born with him, and I hope I can make him as proud as he has made me.

Table of Contents

Dedication.....	ii
Acknowledgements.....	iii
List of Tables.....	xi
Abstract.....	xii
INTRODUCTION	1
THEME	1
MEDICALIZATION AND DEVELOPMENT	3
LOCAL CONTEXT	6
REPRODUCTION	10
SETTING	11
<i>Time of Rapid Changes.....</i>	<i>11</i>
<i>Unique Status</i>	<i>13</i>
CONTRIBUTION TO SCHOLARLY LITERATURE.....	15
<i>United States and European History of Birthing.....</i>	<i>16</i>
<i>Medical Anthropology.....</i>	<i>21</i>
<i>Puerto Rican History</i>	<i>24</i>
STRUCTURE.....	29
<i>The Chronological Framework.....</i>	<i>30</i>
CHAPTER ONE	33
STAGE ONE- BIRTHING AT HOME, 1948-1953.....	33
TOMASA'S STORY	33
INTRODUCTION AND CHAPTER OVERVIEW	36
THE COMADRONA AUXILIAR	40
OVERVIEW OF BIRTHING DISTRIBUTIONS	53
SEEDS FOR CHANGE.....	55
<i>General Changes in Overall Health and Conditions of Living</i>	<i>55</i>
<i>Legal Controls and Regulations</i>	<i>57</i>
<i>The Push for a Medical School.....</i>	<i>71</i>
<i>The School of Medicine</i>	<i>76</i>
<i>The Medical Association of Puerto Rico's Educational Campaign Against Folk Healers</i>	<i>78</i>
ATTITUDES AND PATTERNS OF USE AMONG PROVIDERS AND MOTHERS	79
CONCLUSIONS.....	83

CHAPTER TWO	85
STAGE TWO- TRANSITIONING TOWARD HOSPITAL BIRTHS, 1954-1958	85
DOÑA PENCHI'S STORY	85
INTRODUCTION AND CHAPTER OVERVIEW	88
OVERVIEW BIRTHING	97
OVERVIEW OF BIRTHING PRACTICES BY REGION	101
MODERNIZING TRAINING FOR BIRTHING PROFESSIONALS	105
COMADRONAS AUXILIARES	107
NURSES	108
NURSE-MIDWIVES	111
THE SCHOOL OF MEDICINE	114
MEDICAL INTERVENTION DURING CHILDBIRTH	118
PUBLIC VS PRIVATE: 1950S PATTERNS OF MEDICAL USAGE AND SERVICES	124
CONCLUSIONS	130
CHAPTER THREE	133
STAGE THREE- HOSPITAL BIRTHS, 1959-1965	133
INGRID'S STORY	133
INTRODUCTION AND CHAPTER OVERVIEW	136
MOVING TO HOSPITALS.....	137
'OPERACIÓN REGIONALIZACIÓN': A MOVE TOWARD CENTRALIZING HEALTH AND WELFARE AROUND THE HOSPITAL	144
THE SCHOOL OF MEDICINE	146
NURSE MIDWIVES	152
AUXILIARY MIDWIVES (COMADRONAS AUXILIARES)	155
REGIONS	157
USE OF SERVICES AND PRENATAL CARE-MOTHERS	160
CONCLUSIONS	163
CHAPTER FOUR	167
STAGE FOUR- MEDICALIZED BIRTHS, 1966-1979	167
DOCTOR GARCÍA'S STORY	167
INTRODUCTION AND OVERVIEW	170
REGIONS	172
AUXILIARY MIDWIVES	174
FACTORS LEADING TO THE MEDICALIZATION OF CHILDBIRTH.....	175
<i>The School of Medicine</i>	178
<i>Crisis, Social Monitoring, and Consumption</i>	185
<i>Specialization</i>	187
<i>Defensive Medicine and Patient-Doctor Tensions</i>	190
<i>Science, Technology, and Ideology</i>	195
<i>Standardization, Efficiency, Disease, and Reproduction</i>	203
<i>The Role of Women</i>	206
CONCLUSIONS	211
CHAPTER FIVE	214
STAGE FIVE- A TECHNOCRATIC MODEL OF BIRTH AND FUTURE ALTERNATIVES, 1980- 1990s	214
ISABEL'S STORY	214
INTRODUCTION AND CHAPTER OVERVIEW	221
CIVIL RIGHTS, PATIENTS, DOCTORS, AND THE MEDICO-LEGAL CLIMATE	223
FINAL STAGE OF LAWS RELATED TO BIRTH ATTENDANTS	232
CESAREAN SECTIONS	236

INTERNATIONAL, FEDERAL, AND NATIONAL GOALS FOR MATERNAL HEALTH AND MIDWIFERY	245
NOVOPARTERAS (NEW-MIDWIVES).....	247
NOVOPARTERAS: DEFINITIONS AND STATUTES OF PRACTICE	248
THE NOVOPARTEAS AND INTERNATIONAL ORGANIZATIONS	250
WHO ARE THE NOVOPARTERAS?.....	251
<i>Ruth: The Bridge Between the Past and the Present</i>	252
<i>Rita: Naturalist and Emergency Medical Technician</i>	256
<i>Debbie: Organizer and Unifying Force</i>	259
CONCLUSIONS.....	264
CONCLUSION AND EPILOGUE	266
BIBLIOGRAPHY	281

List of Tables

Table 1: Distribution of Births by Place and Provider, P.R., 1951.....	54
Table 2.1: Distribution of Births by Birth Attendant and Location, P.R., 1953-54.....	97
Table 2.2: 1951 and 1954 Comparison of Overall Distribution According to Birth Attendant.....	98
Table 2.3: Selection of Demographic Statistics, P.R., 1945-1985.....	99
Table 2.4: Births by Municipalities, Birthing Place, and Birth Attendant, P.R., 1953-54 (by selected municipalities and ranked from highest hospital birth rates to lowest)..	102
Table 2.5: Births in Ponce According to Location of Delivery, P.R., 1953-1962.....	104
Table 3: Selected Demographics, P.R., 1945-1963.....	138
Table 4: Selected Consumption Data.....	186
Table 5.1: Selected Cesarean Rates in Western World, 1985.....	236
Table 5.2: Selected Cesarean Rates in Western World, 2002.....	237
Table 5.3: Cesarean Section Rates by Region and Sector.....	239
Table 5.4: Cesarean Complications.....	244

Abstract

This dissertation documents and analyzes the dramatic transformations in birthing practices that accompanied broader economic, political and cultural shifts in Puerto Rico during the latter half of the twentieth century. Birthing changed from being a home-based event assisted by midwives to a hospital-based procedure, attended by medical experts, in fewer than 20 years. In 1950 the number of registered midwives was double that of registered doctors and they attended well over half of all deliveries. The Puerto Rican government grew after the 1950s and established itself as a colonial welfare system looking to uplift and remake itself following an industrial model, informed by rational, scientific planning, which ideally included even the most remote sectors of the island. These forces coalesced with the development of medical education, new medical technologies, significant improvements in the overall quality of life on the island, the urbanization of Puerto Rico, and a new faith in science, and moved labor and deliveries into the hospital while redefining childbirth and its practice altogether. I argue that as families ventured out of their more isolated, home-based daily lives to access basic needs, became active in public, urbanized spaces, and bought into a system based on colonial state planning, led by scientifically trained experts and organized by bureaucratic institutions, they also restructured their birthing practices. Midwives accepted these

changes. They quietly stepped aside as the next generation delivered their babies in hospitals. Doctors came to hold the authoritative knowledge about the female body and its path towards birthing children and by the late 1970s midwifery disappeared. By the 1980s and 1990s, as a technocratic model of birth predominated obstetrics in Puerto Rico and cesarean rates skyrocketed, five newly trained midwives began delivering babies at home once again. The practice of these new midwives was the only birthing alternative to medicalized childbirth available to women on the island after the 1980s.

INTRODUCTION

Theme

In the middle of the twentieth century there were only 729 doctors registered on the island of Puerto Rico and 1,500 midwives. Over 60 per cent of all births were assisted by midwives, most of them at home, while doctors attended 25 per cent of all births almost exclusively in a hospital setting.¹ Twenty years later, the midwife had disappeared and the number of physicians had almost tripled. By 1970 almost every baby in Puerto Rico was delivered in a hospital, under the authority of a physician. Though the medicalization of birth in Puerto Rico occurred at an exceptionally swift rate and managed to cover the entire island, it did not occur evenly throughout all regions.

The underlying question that guides my research is why and how birth moved from a home-based, family oriented process, assisted by women and midwives and “accomplished” by the mothers, to a medicalized, hospital-based procedure “accomplished” and directed by biomedical, predominantly male, practitioners and ultimately reconfigured, after the 1980s, into a technocratic model of childbirth, driven by doctors’ fear of malpractice suits and hospital corporate concerns.² My research also

¹ Guillermo Arbona, *Borrador para un discurso del Gobernador Luis Muñoz Marín* (9 December 1964) VLMM series 9; Puerto Rican Department of Health, *Informe Anual del Departamento de Salud, 1950-51*, 113.

² I am borrowing Davis-Floyd's terminology and definition of a "technocratic model of birth," which I will explain briefly further into the introduction. Robbie Davis-Floyd, *Birth as an American Rite of Passage* (Berkeley, University of California Press, 1992).

aims to discover how obstetricians managed to assert and consolidate themselves while midwives first disappeared and later recast themselves in response to new demands. It attempts to explain and document cultural shifts on the island by focusing on birthing practices. Changes in birthing were related to new focuses in the political and economic superstructures but were accompanied by significant cultural transformations without which the medicalization of birth would have been impossible.

This shift forms part of the dramatic and widespread changes that occurred in Puerto Rico between the late 1940s and early 1970s. This project studies the transformations of birthing in Puerto Rico after 1948, the year that the first locally elected governor took office with new programmatic ideas to radically transform the social, political and economic landscape. I aim to document and examine the development of some of the larger belief systems and everyday practices that accompanied the period of rapid industrialization on the island. By doing so I engage with and contribute to scholarship that scrutinizes how biomedicine is culturally constructed in different regional and historical contexts, how and why cultural practices change over time, and the relationship between culture, politics and the economy. The aggressive industrialization of Puerto Rico from the late 1940s until the 1970s, geared toward raising the standard of living and developing the island, converges unavoidably with shifts in birthing practices. In studying the way in which birth is socially organized and culturally produced through time and space, I build upon the existing history of medicine, women, the body, the family, industrialization, the politics of power, and the production of knowledge, most specifically, of contemporary Puerto Rico.

I argue that transformations in birthing practices were a result of broader social, political, and cultural dynamics responding to predominant power structures and possibilities. As new political, economic, and ideological structures were put into place, medical practice and physicians were able to assert themselves over the more informal forms of apprenticeship and intuitive, community based practices, such as midwifery. As change swept over the island, at uneven yet far-reaching and rapid rates, expert, institutionally based knowledge consolidated its power piece by piece. What were once relatively isolated and intimate domestic spaces began moving outwardly in search of these experts and services. The government grew, established itself as a colonial welfare system looking to uplift and remake itself following an industrial model, informed by rational, scientific planning, which ideally included even the most remote sectors of the island. These forces coalesced with the development of medical education, new medical technologies, significant improvements in the overall quality of life on the island, the urbanization of Puerto Rico, and a new faith in science, and moved labor and deliveries into the hospital while redefining childbirth and its practice altogether.

Medicalization and Development

The medicalization of birthing is not unique to Puerto Rico, but follows a pattern common to regions that have adopted western biomedical standards along with industrial development strategies. This has occurred in both socialist based economies as well as capitalist economies. The rise and consolidation of the obstetrician as a medical expert, for example, is part of the training and specialization of professionals in increasingly subdivided and specialized fields that commonly accompanies development.

Complex industrial societies also organize themselves through their institutions and laws. Through the professionalization of specialized disciplines, experts set and regulate their own practice and protocols. Bureaucracy also expands and becomes more complicated.³ Once ideals and standards are set, experts intervene when they are not met. Fixed guidelines determine what is normal and abnormal. Medical knowledge conceptualized pregnancy, labor and delivery as either normal or abnormal according to predetermined standards and classifications. Biomedical experts, ultimately obstetricians, came to hold the "authorative knowledge" about pregnancy and delivery. These are emblematic features of the medicalization of birth or the implementation of what medical anthropologists such as Robbie Davis Floyd describe as the "technocratic model of birth."⁴

According to the technocratic model of birth, the successes of medicine "are founded on science, effected by technology, and carried out through large institutions governed by patriarchal ideologies in a profit driven economic context."⁵ The basic tenets of the technocratic model of birth as described by Davis-Floyd, are based on the divorce of the laboring body (or woman) from its cultural, social, and emotional context and dividing it into separate components in order to better understand and control it. The body is treated like a machine by a distant expert and his or her machines and staff. This model assumes that the body is faulty and is best cared for from the outside because it is

³ Louis Althusser, *Ideología y aparatos ideológicos de Estado* (Buenos Aires, Ediciones Nueva Visión, 1974); Antonio Gramsci, *La política y el Estado moderno* (Barcelona, Ediciones Península, 1971).

⁴ Davis-Floyd, *Birth as an American Rite of Passage*; Robbie Davis-Floyd and Carolyn Sargent, "The Social Production of Authoritative Knowledge in Pregnancy and Childbirth," *Medical Anthropology Quarterly* 10, no. 2 (June 1996) 111-120.

⁵ Robbie Davis-Floyd, "The Technocratic, Humanistic and Holistic Paradigms of Childbirth," *International Journal of Gynecology and Obstetrics* 75, no. 1 (November 2001) S5.

not able to monitor and care for itself efficiently. In addition, the obstetrician and technology carry the main responsibility for the outcome and decision making in labor and delivery.⁶ The technocratic model of birth subordinates individual needs to standardized institutional practices and protocols. In general, complex industrial societies seem to make norms and values universal.⁷ This research demonstrates how technocratic, biomedical standards in birthing became generalized and spread throughout Puerto Rican society by the 1970s.

Like most countries in the west, Puerto Rico sought to increase production and efficiency through industrialization and “modernization.” Ideally, the collection and analysis of statistics and scientific research projects directed by “experts” and technocrats would suggest how to best reorganize social, political, and economic systems. Accordingly, doctors came to hold the authoritative knowledge about the female body and birthing. Medicine constructed the female body according to an industrial-capitalist model of production, and conceptualized reproduction in terms of efficiency and preset stages.⁸ Intuitive and more holistic conceptual approaches toward birth and the body ceded under the authority of the medical-scientific specialist.

This dissertation then, is also a study of competing conceptualizations of the childbearing body. The body, in my work, functions within the three areas that feminist scholars such as Scheper-Hughes and Lock have delineated: the individual self, the social

⁶ Davis-Floyd, "The Technocratic, Humanistic," S5-S10.

⁷ Jurgen Habermas, *Teoría de la acción comunicativa: crítica de la razón funcionalista*, II (Madrid, Taurus, 1999) 245-4; Gertrude Jacinta. *African American Midwifery in the South: Dialogues of Birth, Race, and Memory* (Cambridge, Massachusetts, Harvard University Press 1998) 167.

⁸ Carolyn Sargent and Caroline Brettell, “Introduction,” in *Gender and Health: An International Perspective*, eds. Carolyn Sargent and Caroline Brettell, 2 (New Jersey, Prentice Hall, 1996).

body, and the political body.⁹ The individual bodies under scrutiny in this study become medicalized, standardized, pathologized, and monitored, as part of the same process affecting the broader social and political bodies in post WWII Puerto Rico.

Local Context

The decades following World War II were a period when a new faith in science and medicine and the belief that everyone could control his/her own destiny with the help of professional experts spread through many regions of the world. Many believed that science and medicine would team up with foreign aid for “developing countries” to eradicate poverty which otherwise could destabilize a country and lead it down the path of communist revolution.¹⁰ At the time, Puerto Rico was in its early stages of industrial development and officially searching for a way to resolve its internationally criticized colonial relationship with the United States.

Locally, the aggressive process of colonial industrialization was fashioned after the ideas of prominent liberal leaders such as Franklin Roosevelt and Rexford Tugwell.¹¹ Their ideas, adapted in the 1940s by leaders such as Puerto Rico’s first locally elected governor, Luis Muñoz Marín (1948-1964), through the project *Manos a la Obra*

⁹ Nancy Scheper-Hughes and Margaret M. Lock, “The Mindful Body: A Prolegomenon to Future Work in Medical Anthropology,” *Medical Anthropology Quarterly* 1, no. 1 (March 1987).

¹⁰ Dorothy Roberts, *Killing the Black Body: Race, Reproduction, and the Meaning of Liberty* (New York, Pantheon Books, 1997) 259.

¹¹ Rexford Tugwell, a University of Columbia professor and economist who had served as one of President Roosevelt’s New Deal advisors, was appointed governor in 1942. He played a critical role in working with the local Popular Democratic Party’s (who held a majority in the legislature already) plans of economic and industrial development and urbanization in the hope of eradicating Puerto Rico’s economic crisis.

(Operation Bootstrap), managed to alter all levels of Puerto Rican society.¹² The original political platform of Muñoz Marín's Popular Democratic Party (PPD) stated its intent to industrialize and urbanize the country, with the hope of generating higher standards of living and opportunities for Puerto Ricans. The PPD, and its Operation Bootstrap aimed to diversify the economy, attract United States investment through explicit incentives such as tax exemptions, create more factory jobs, and provide more social welfare programs. These policies accelerated the process by which Puerto Rico changed from an agriculturally based economy and culture, heavily dependent on sugar and coffee production, to one characterized by techno-industrial urban production, which transformed the social structure in just twenty years. As life in general changed, so did birthing practices and expectations.

Puerto Rico's post-1948 government and its liberal-populist economists believed that the state should not only protect private property but also guarantee the social welfare of its population and intervene in the economy.¹³ The state thus assumed both the right and the obligation to intervene in family life and customs in order to assure family well-being.¹⁴ Quality of life on the island, as measured by education, infrastructure and

¹² These ideas, which were very common in the postwar era, are further explained in Gerardo Navas, ed., *Cambio y desarrollo en Puerto Rico; la transformación ideológica del PPD* (Río Piedras, Editorial Universitario, 1980); Mayra Rosario, "Detrás de la Vitrina; Expectativas del Partido Popular Democrático y política exterior norteamericana," in eds. Silvia Alvarez and María Elena Rodríguez, *Del Nacionalismo al populismo: cultura y política en Puerto Rico* (San Juan, Ediciones Huracán/ UPR, 1993).

¹³ For more information on the process of industrialization see James Dietz, *Historia Económica de Puerto Rico* (Río Piedras, Ediciones Huracán, 1989) 200-339; Richard Brian Ferguson, "Class Transformations in Puerto Rico" (PhD diss., New York, Columbia University, Graduate School of Arts and Sciences, 1988) Chapter 5.

¹⁴ Puerto Rico had its first locally elected Governor in 1948 and ratified its first constitution in 1952. Its current government and "Free Associated" status was constituted at this time.

health standards improved dramatically between 1948-1970. This was achieved through a planned economy in conjunction with massive social welfare programs.

The Puerto Rican state behaved in a paternalist manner, taking over the traditional responsibilities of the male head of household and provider. The figure of the strong male patriarch had been rattled by urbanization and many local leaders and intellectuals feared for the stability and progress of the family, the home and eventually all of society. The absence of men in the home due to migration to the United States in search of jobs, World War II and later the Korean and Vietnam Wars, the amount of single mothers and the increasing rates of divorce, worried many government planners.¹⁵ Many women learned to leave their homes and make their way through the labyrinths of government bureaucracies in search of its services and welfare. Just as in the U.S. South after the 1920s, Puerto Rico was seeking order in the 1950s and 1960s by monitoring family life and making it accessible to planners and experts with the goal of improving the overall quality of life on the island.¹⁶ Domestic life in Puerto Rico, once intimate and often rather secluded, opened up and moved into a mostly urban, public world of institutions and experts.

The direction that these PPD strategies took not only fortified Puerto Rico's colonial status, but also reconfigured the collective everyday conscious of Puerto Ricans because Puerto Rico became exclusively dependent on the United States for all of its consumption and basic needs.¹⁷ The economic dominance of the United States was

¹⁵ Isabel Córdova, "Setting Them Straight: Social Services, Youth, Sexuality, and Modernization in Postwar (WWII) Puerto Rico." *Centro Journal* 19, no. 1 (Spring 2007) 30, 38.

¹⁶ Gertrude Jacinta Fraser. *African American Midwifery in the South: Dialogues of Birth, Race, and Memory* (Cambridge, Mass., Harvard University Press, 1998) 49, 53.

¹⁷ Ferguson, 317. See also, Fernando Picó, *Historia General de Puerto Rico* (Río Piedras, Ediciones Huracán, 7ma edición 2000) 257-290.

enhanced by Operation Bootstrap because the program disproportionately favored United States business interests at the cost of local production. The economy diversified, but remained under the control of U.S. capital. The ratification of the first Puerto Rican constitution and the *Estado Libre Asociado* status took Puerto Rico off the United Nations list of existing colonies while leaving Puerto Rico under U.S. jurisdiction with no vote or representation in the United States Congress. Dependency and intimate ties to the United States also affected the development of medical institutions, social practices and attitudes on the island. Often, progress and science were equated with the United States and U.S. experts and universities constantly provided direction in the construction of new programs and institutions such as the School of Tropical Medicine and the Medical School.

The notions of progress and social equality disseminated by Puerto Rico's post-1948 governments emphasized the need for technology, standardization, and bureaucratization. Professional expertise became paramount, as experts came to hold monopolies of knowledge within discrete fields and left little room for autonomy or questioning on the part of clients.¹⁸

¹⁸ For more on how this plays out in medical training and birth in the United States see Brigitte Jordan, *Birth in Four Cultures: A Crosscultural Investigation of Childbirth in Yucatan, Holland, Sweden, and the United States* (St. Albans, Eden Press Women's Publications, 1978); Robbie Davis-Floyd and Gloria St. John, *From Doctor to Healer; The Transformative Journey* (New Brunswick, Rutgers University Press, 1998). Relying on the state, viewing institutional, standardized protocol as inevitable, and seeking experts and their technologies became ingrained into the collective consciousness of Puerto Ricans. Many scholars, especially those who work in the anthropology and sociology of reproduction, argue that there has been a medicalization of society in general, that has transformed the social into biology. In other words, "social problems are recast as individual pathologies and symptoms." Nancy Scheper-Hughes and Margaret M. Lock, "The Mindful Body," 10. For works on the medicalization of society see Michel Foucault, *Historia de la sexualidad* (México, Siglo XXI, 1977); Michel Foucault, *The Birth of the Clinic; an Archaeology of Medical Perception* (New York, Vintage Books, 1975, c1973); Emily Martin. *The Woman in the Body: A Cultural Analysis of Reproduction* (Boston, Beacon Press, 1992 [1987]).

Reproduction

Authors such as Laura Briggs and Annette Ramirez de Arellano have linked the Popular Democratic Party's modernization efforts and the concern with "overpopulation" of Puerto Rico to reproductive practices and policies in Puerto Rico.¹⁹ My work expands this link even further by including birthing within the rubric of reproduction instead of restricting reproduction to the contraception. Many local government leaders and doctors in the 1950s and 1960s were Malthusians and had participated in the long-standing efforts on the island to control reproduction. The history of these efforts has generated tremendous controversies. In *Reproducing Empire*, Laura Briggs shows that Puerto Rican women served as guinea pigs in clinical trials for hormonal contraceptives and have had among the highest rates of sterilization and cesarean sections in the world since the 1970s. What has led to this? Why is it that today from one third to nearly half of Puerto Rican children come into the world via the scalpel and the same proportion of Puerto Rican woman choose to be sterilized? These are questions I explore.

Who resorts to sterilization, birthing at home, and using private healthcare institutions versus public ones varies by class. Though I do not use the terminology Shellee Colen has coined as "stratified reproduction," my work speaks to her theoretical framework that argues that reproductive technologies and practices play out differently for people of different genders, ethnicities, races, economic classes, place within a global

¹⁹ Annette Ramírez de Arellano, *Colonialism, Catholicism and Contraception: A History of Birth Control in Puerto Rico* (Chapel Hill, University of North Carolina Press, 1983); Laura Briggs, *Reproducing Empire: Race, Sex, Science, and U.S. Imperialism in Puerto Rico* (Berkeley, University of California Press, 2002) 35, 68, 144.

economy and geographical origins.²⁰ I do not address all of these categories, but I do spend time discussing the importance of class, gender, and geographic place within the Western global economy with relation to childbirth practices. Class, for instance plays an important role in the choices and possibilities for mothers as well as health care practitioners in Puerto Rico. Therefore, my research serves as another example of stratified reproduction.

In placing birth at the center of my research, I untangle some of the historically grounded relationships among culture, everyday practices, politics, the law, and the Puerto Rican industrial model of development.

Setting

Time of Rapid Changes

There are many reasons for choosing Puerto Rico after the 1940s as the setting for my research. This is a period that captures several key and unique experiences for the history of Puerto Rico. It is the period when the nation's current colonial status was legalized and consolidated and when all of the political actors and parties that exist today came into being. Therefore, in many respects my historical motivation has a strong grounding in the present. One would be hard pressed to find a time and place that experienced faster and more widespread changes, including changes in birthing than Puerto Rico between 1950-1965. The dramatic compression of time and space makes the Puerto Rican case unique.

²⁰ Shellee Colen, "Like a Mother to Them: Stratified Reproduction and West Indian Childcare Workers in New York," in *Conceiving a New World Order: The Global Politics of Reproduction*, eds. Faye Ginsburg and Rayna Rapp, 78 (California, University of California Press, 1995).

Some statistical examples help to illustrate the extent and swiftness of these changes. In 1945 there were forty-two babies born for every 1,000 inhabitants, infant mortality was 93/1,000 and maternal mortality 319/100,000.²¹ In 1946 approximately 11 per cent of Puerto Rican households had a refrigerator, over half of households lacked a kitchen inside of the house at all, and about 20 per cent had indoor, flushable toilets.²² Nearly half of the population collected water from wells or rivers.²³ Most medical needs in the late 1940s were taken care of within the home. In rural areas, over 90 per cent of women gave birth at home, while 72 per cent did so in urban centers.²⁴ The general death rate was twelve per 1,000 inhabitants in 1948.

The first Puerto Rican medical school opened in 1950.²⁵ Migration to New York reached its peak at mid-century, making immigration and the continental United States a common factor in most families, putting them into direct contact with New York city life. By 1960, one could drink running tap water from any municipality in Puerto Rico.²⁶ The majority of families not only had refrigerators but also had televisions and toilets by then. In 1967 over 90 per cent of all births occurred in hospitals.²⁷ In 1964 the general annual death rate dropped to 6.8 per thousand inhabitants. This period also marks a rapid decline in fertility rates. In 1967 the birth rate was 27/1,000, infant mortality was 33/1,000, and

²¹ Department of Public Planning of Puerto Rico, *Informe de estadísticas vitales de 1985*, 13.

²² Lydia Roberts and Rosa Luisa Stefani, *Patterns of Living in Puerto Rican Families* (Department of Home Economics of the University of Puerto Rico, 1949) 64, 56, 115.

²³ *Ibid.*, 138.

²⁴ *Ibid.*, 118.

²⁵ There had been a School of Tropical Medicine since the beginning of the century.

²⁶ Guillermo Arbona, *Borrador para un discurso del Gobernador Luis Muñoz Marín*, December 9, 1964 (VLMM series 9).

²⁷ *Informe Anual del Departamento de Salud, 1967-68*, 122.

maternal mortality 37/100,000.²⁸ Many areas of the developing world experienced similar shifts, but they were almost always confined to particular towns or urban spaces.

Unique Status

Puerto Rico holds a unique political, legal, and geographical status that also make it a unique locus of study. It is economically, legally and politically bound to the United States as an official territory, yet it shares historical and cultural ties to Latin America and the Caribbean. Its close relationship with the United States can provide an illuminating comparison with other neocolonial and uneven spheres of power in the world. Puerto Rico has in many ways maintained its culture distinct from that of the United States. Puerto Rico has this in common with many other countries in the world, although its colonial relationship is more acute.

Puerto Rico's medical schools and training have maintained direct ties (curriculum, text books, and professors) with the United States, yet, curiously, the history of birthing has diverged in the two countries. Whereas by 1950 most U.S. births had already moved to the hospital setting, Puerto Rican women were still birthing primarily in the home and with midwives up to the 1960s. On the other hand, it is interesting to note that there have always been strong movements to provide alternatives to biomedical hegemony in the United States as well as other Latin American countries as well. It is not uncommon to see folkloric, traditional or "alternative" medicine co-existing with mainstream-western-biomedicine in Latin America.²⁹ In important ways, many

²⁸ Department of Public Planning of Puerto Rico, *Informe de estadísticas vitales de 1985*, 13.

²⁹ For examples and discussion concerning the co-existence of medical belief systems in Latin America please see: Marcos Cueto, *Entre médicos y curanderos : cultura, historia y enfermedad*

governments and medical institutions have adapted to less interventionist, less authoritative, more holistic and humane medical protocols in different parts of the world.³⁰ They have incorporated midwives, tried to reduce the numbers of episiotomies and cesareans sections, and permitted mothers in labor to be accompanied by family and friends. In contrast, Puerto Rican medical authoritative hospital procedures have gone virtually uncontested and followed particularly extreme technocratic, interventionist and hierarchical birthing practices. Episiotomies, cesareans, and restricted access to partners and family members have persisted with little resistance, and the medical establishment has not felt the need to support their practices with scientific evidence. It is as if Puerto Rico's colonial and "underdeveloped" relationship to the U.S. has led to an exaggerated adoption of U.S. technocratic medical models.

Understanding this flow of professional training and the manner in which it plays out differently in each country might contribute to postcolonial studies and Latin American and medical history in interesting ways. Scholars of Latin America and the Caribbean who work on the history of medicine and public health, like Marcos Cueto, Julyan Peard, and Steven Palmer recognize the relationship between empire and public health, but warn us that we should not assume that medical developments were exclusive

en la América Latina moderna (Buenos Aires, Grupo Editorial Norma, 2002); Steven Paul Palmer, *From Popular Medicine to Medical Populism : Doctors, Healers, and Public Power in Costa Rica, 1800-1940* (Durham, Duke University Press, 2003); Sowell, David. *The Tale of Healer Miguel Perdomo Neira : Medicine, Ideologies, and Power in the Nineteenth-Century Andes, Latin American Silhouettes* (Wilmington, Del., SR Books, 2001).

³⁰ U.S. Department of Health and Human Services Office of Disease Prevention and Health Promotion, *Developing Objectives for Healthy People 2010*, September, 1996, 133-136. Also see World Health Organization conference concerning birthing that took place in Brazil 1985 in Debbie Díaz and Merixa Cabrera Mont, "El servicio de las parteras en Puerto Rico: historia de la profesión y análisis del servicio a través del nivel de satisfacción de las madres atendidas durante la gestación, alumbramiento y puerperio en las décadas del 1980-1990" (MA Thesis, Río Piedras, Universidad de Puerto Rico Recinto de Ciencias Médicas, Departamento de Salud Pública, 1999) 33.

to Europe and the United States nor that medicine was merely transplanted to Latin America unilaterally.³¹ With this in mind, I explore the relationship between U.S. and Puerto Rican medicine, but my focus will be on local actors within Puerto Rico. In other words, I do not use the history of birthing as a vehicle to discuss Empire but rather to discuss changes brought by the industrial development of post WWII Puerto Rico, which was framed within an Empire.

Contribution to Scholarly Literature

This project draws upon and contributes to three major fields of scholarship. In the broadest sense, they include the history of medicine, medical anthropology, and the history of twentieth-century Puerto Rico. More specifically, within the history of medicine, my research falls directly into the history of birthing, midwifery, obstetrics and reproduction. Within medical anthropology I come into direct contact with the anthropology of birthing, specifically the medicalization of birthing, as well as with feminist and other theoretical discussions about the body and cultural constructions of biomedicine and technology. There is somewhat of an overlap between this area of anthropology and some sociology that has dealt specifically with birthing and gender in medicine. Finally, within the very broad scope of twentieth-century Puerto Rican history I converse with the historiography written about the post 1940s up until the last decades of the century. The history of industrialization (Operation Bootstrap), the development of

³¹ See Marcos Cueto, *Salud, cultura y sociedad en América Latina* (Lima: IEP/Organización Panamericana de Salud, 1996); Steven Paul Palmer. *From Popular Medicine to Medical Populism : Doctors, Healers, and Public Power in Costa Rica, 1800-1940* (Durham, Duke University Press, 2003); and Julyan G. Peard. *Race, Place, and Medicine: the Idea of the Tropics in Nineteenth-Century Brazilian Medicine* (Durham, NC, Duke University Press, 1999).

the Partido Popular Democrático, labor history, political history, economic history, the history of medicine, and women's history, are all bodies of scholarship with which I engage within the context of the island.

United States and European History of Birthing

Although no aspect of the extensive history of birthing in Puerto Rico has ever been written, this is a topic that has been researched in the fields of modern United States and European history, especially after the 1970s. I will briefly mention some of the scholars that have influenced my research. Some historians have, since the 1980s, centered their research on the social history of childbirth. One of the earliest of these North American histories was published in 1977 by Dorothy and Richard Wertz.³² Their extensive publication discusses the relationship between mothers and their birth attendants as well as how these relationships change and become professionalized as the social status of women change. One of the more significant contributions of these earlier historians was simply to present midwives and women as competent historical actors. One of my initial motivations driving my interest in childbirth was precisely to present women and midwives as important historical agents.

Other key historians representative of this first wave of the modern history of United States and Great British birthing include Judith Leavitt, Jean Donnison and Ann Oakley.³³ Jean Donnison's *Midwives to Medical Men: A History of Interprofessional*

³² Richard W. Wertz and Dorothy C. Wertz, *Lying-In: A History of Childbirth in America* ([expanded edition] New Haven, Yale University Press, 1989 [1977]).

³³ Judith Walzer Leavitt, *Brought to Bed: Childbearing in America, 1750 to 1950* (New York, Oxford University Press, 1986); Jean Donnison, *Midwives to Medical Men: A History of Inter-Professional Rivalries and Women's Rights* (New York, Schocken Books, 1977); Ann Oakley,

Rivalries and Women's Rights, provides a brief history of midwives in England and the United States and later shows how legal regulations affected their practice and how midwives resisted regulation restraints. She writes from a feminist conceptual framework. Donnison discusses the relationship between birthing technologies (forceps, anesthesia, curette) within the broader changes in politics and the economy that permitted physicians to claim cultural authority as men of science. Influenced by Donnison, I too decided to pay attention to the law and medical technologies and they way they affect change. Leavitt also brought medical technologies such as anesthesia (specifically the early twentieth century “twilight sleep” movement) into the discussion about birthing and began to challenge some of the romanticism about female led birthing for which authors such as Wertz and Wertz were sometimes criticized. Leavitt claims that the choice of drug induced “sleep” that some women resorted to over ninety years ago was likely to have been an attempt by more affluent women for greater control over their deliveries. It is this type of analysis that assists my own thinking concerning childbirth attendants, legitimacy, and power in Puerto Rico.

Other authors who published influential works on the history of midwifery and birthing from the perspective of a particular midwife are Nicky Leap, Billie Hunter and Fran Leeper Buss.³⁴ These first two authors also portrayed midwives as competent actors while describing birthing in early America as a risky and feared experience. Though I do not focus on a single character, I use the voices of midwives, doctors and women actively in my dissertation. Just as Leap, Hunter and Buss, I tell the story of birthing not only

The Captured Womb; A History of the Medical Care of Pregnant Women (Oxford, Oxford Publishing, 1984).

³⁴ Nicky Leap and Billie Hunter, *The Midwife's Tale; An Oral History from Handywoman to Professional Midwife* (London, Scarlett Press, 1993); Fran Leeper Buss, *La Partera; Story of a Midwife* (Ann Arbor, University of Michigan Press, 1980).

through government archives and official reports, but also enrich my archival research with personal accounts and oral histories.

William Arney, though not a historian by profession, also contributed to this initial historical scholarship on birthing, but in this case, focused on obstetrics.³⁵ His book, *Power and the Profession of Obstetrics* about the history of the transformation of obstetrics in the United States and England, convinced me of the importance of including obstetrics in my project. His focus is on physicians but his analysis considers the relationship between the production of knowledge and power. He associates the rise of obstetrics with modern medical notions of the body as a machine that needs observation, monitoring and fixing. Arney follows Foucault's theories as relayed in works such as *The Birth of a Clinic*. He exposes the production of knowledge as a social response, which in the case of modern medicine seeks rational organizational patterns. Arney is interested in exposing these systems of power and control as he overtly avoids demonizing scientific bio-medicine. My research follows these same lines. Arney's publication is a good example of how to profitably integrate Foucauldian theory with an empirical study of socio-historical transformations in the medical profession. It also offers insight on how obstetric medicine overtook home-births in England and the United States, which provides a useful comparison with the Puerto Rican case.

More recent U.S. and European publications on the history of birthing seem to focus on more precise thematic or geographical areas. I will mention a few that treat topics of particular interest to my study. Raymond DeVries' *Regulating Birth: Midwives, Medicine and the Law*, published in the mid 1980s, is a study about state regulations in

³⁵ William Ray Arney, *Power and the Profession of Obstetrics* (Chicago, University of Chicago Press, 1982).

the United States that influenced the practices of midwives. DeVries describes licensure as the interaction between medicine and the law, which, in most cases, completes a stage of medical dominance and inhibits innovations within the field.³⁶ He goes on to explain that most regulations recognize a body of knowledge related to birth that was developed by those who society deems “experts”. If we consider that the gradual acceptance of the scientific approach to childbirth was crucial to undermining traditional midwifery, then the attempts to regulate and standardize birth further served to consolidate the power of the physician over the midwife.³⁷ When doctors standardize birth into fixed, predetermined categories, most births become classified “abnormal” because they cannot comply with all of the pre-established norms. If the birth is considered abnormal by standard medical practice it convinces most that it is risky and pathological and will be acted upon as such. What is pathological requires the intervention of medical experts.³⁸ Although this sociologist describes how the midwives in his case studies eventually inserted themselves into these legal and medical models, unlike the Puerto Rican midwives before the 1970s, his contributions on topics such as the regulation of medicine and birth have provided insight for my research, especially on the legal history of birthing and its relationship to power and the disappearance of the midwife. This author’s arguments have greatly influenced my research on birthing, the law and the consolidation of obstetricians in the birthing process in Puerto Rico.

Reading Birth and Death by Jo Murphy-Lawless also brings together science, power, and the history of birthing. Murphy is heavily influenced by Foucault and his

³⁶Raymond G. DeVries, *Regulating Birth: Midwives, Medicine and the Law* (Philadelphia, Temple University Press, 1985) 15.

³⁷ *Ibid.*, 34.

³⁸ *Ibid.*, 40-42.

discourses on power related to science. Focusing on Ireland, Murphy-Lawless too interprets the impacts of statistics, laws, standardization and concepts of “normality” on birth. Her conclusions do not depart greatly from those of the above authors, but she adds that obstetrics legitimated its standing as a science by making “truth claims” about women as suffering, feeble subjects at the mercy of many dangers during childbirth.³⁹ The way in which obstetrics constructed birthing became part of our own experience during birth, according to Murphy-Lawless. In other words, hospital interventions and experiences “become part of how women think of themselves.”⁴⁰ I find Murphy-Lawless’ analysis provocative and it has motivated me to seek for connections between the history of birthing and the history of how women in Puerto Rico are seen and see themselves and their biological/physical potential and roles.

One of the more original works and the most pertinent to the case of Puerto Rico is that of Gertrude Jacinta Frazier, *African-American Midwifery in the South*. The author, an anthropologist, disperses interviews that she used during her research throughout her narrative and touches upon themes that few researchers have related to birthing. She includes regulation measures but also the accumulation of statistics as part of the process that lead to the disuse of the midwife in the southern United States. She claims that few historians have “noted the connections between the birth and death registration movement and the ascendancy of scientific medicine.”⁴¹ This, together with the development of the local infrastructure and the socio-political changes that transpired in a delayed fashion, compared to the rest of the states, influenced and transformed birthing

³⁹ Jo Murphy-Lawless, *Reading Birth and Death*, 29.

⁴⁰ *Ibid.*, 44.

⁴¹ Fraser, 45.

practices. Her analysis, the most broad-ranging among those reviewed, explains how Public Health campaigns and monitoring, represented by the State, as well as medical-professional supervision also pushed midwifery further into the margins. Because the south of the United States has a lot in common with Puerto Rico, the book is particularly useful. Development and industrialization arrived much later in the South than in the northern states, and the South was more rural and maintained traditional practices longer. Therefore, the timelines of the South almost parallel those in Puerto Rico. In some ways, the South often has more in common with the Caribbean than with the rest of the United States.

Medical Anthropology

Medical anthropology has produced significant contributions to the topic of birthing. Birthing brings the fields of medical history and medical anthropology together comfortably. Medical historians and anthropologists have been arguing for some time that scientific and medical “truths” are socially constructed. Many assumptions about pregnancy, labor and delivery cannot be sustained by science nor do they hold true through time and space.⁴² In fact, disease is not merely *discovered* but also created by time and culture.⁴³ Key historians like Bruno Latour, for example, claim that biology

⁴² For examples of cross-cultural and theoretical explanations that challenge or destabilize the U.S. and Puerto Rican models of technocratic birth see Robbie Davis-Floyd and Gloria St. John, *From Doctor to Healer; The Transformative Journey* (New Brunswick, Rutgers University Press, 1998); Brigitte Jordan, *Birth in Four Cultures: A Crosscultural Investigation of Childbirth in Yucatan, Holland, Sweden, and the United States* (St. Albans, Eden Press Women's Publications, 1978); Margarita Artschwager Kay, *Anthropology of Human Birth* (Philadelphia, F.A. Davis Company, 1982).

⁴³ Pernick, "Eugenics and Public Health in American History," *American Journal of Public Health* 87 (November 1997), 1767-72; Starr, *Social Transformation of American Medicine* (New

derived its prestige largely from its influence on health and much less on science, and that it was not until the Pasteurian revolution that western medical arts entered the domain of science.⁴⁴

Anthropologist Robbie Davis-Floyd, following in Brigitte Jordan's footsteps, upon exposing what she calls the "technocratic model of birth" practiced in the United States in recent decades, explains that medicine reflects the American core value system oriented toward science, high technology, economic profit, and patriarchy. The United States (and Puerto Rican) mainstream societies practice a super-valuation of science, which claims objective, positivist truths that tend to lead to reductionist practices.⁴⁵ Following this line of thinking, by studying birth, I am able to capture some of Puerto Rico's "core value systems" in the last five decades. In her edited volume on the anthropology of birth, Margarita Artschwager Kay points out the relationship between childbearing, power and the political systems in which they operate.⁴⁶ Hence the history of birthing will serve as a medium for discussing the ways in which science and colonial "development" (synonymous to industrialization in this case) all build off of each other and become hegemonic in the latter half of the twentieth century in Puerto Rico. Also, just as Emily Martin points out in her book *The Woman in the Body*, "we will be able to see in what senses and to what extent science has become women's common sense."⁴⁷

York, Basic Books, 1982); Nancy Theriot, "Women's Voices in Nineteenth-Century Medical Discourse: A Step Toward Deconstructing Science" *Signs* 19, no. 1 (Autumn 1993) 3; Roy Porter, *Blood and Guts : a Short History of Medicine* (1st American ed. New York, Norton, 2003).

⁴⁴ Bruno Latour. *The Pasteurization of France* (Cambridge, Harvard University Press, 1988).

⁴⁵ Davis-Floyd and St. John, 15.

⁴⁶ Margarita Artschwager Kay, "Writing and Ethnography of Birth" in *Anthropology of Human Birth*, 1 (Philadelphia: F.A. Davis Company, 1982).

⁴⁷ Emily Martin, *The Woman in the Body: A Cultural Analysis of Reproduction* (Boston: Beacon Press, 1992) 21.

Once again joined by sociologists, some anthropologists employ feminist theory in their analysis of medicine and birthing. I find the combination of these areas of study to be very effective in addressing transitions in birthing. Feminist theory concerning medicine, science, and epistemology all support my analysis on birthing. Books such as *Gender and Health; An International Perspective*, edited by Carolyn Sargent and Carolyn Brettell offer several essays related to feminist studies, technology and its interplay with women's bodies. It includes, for example, an article by Robbie Davis-Floyd on birth choices and the technocratic body. She does a class analysis and demonstrates how birthing choices are often mediated by the mother's social extraction and experiences, much in the same way stratified reproduction functions. The introduction to *Gender, Work and Medicine*, edited by Elianne Riska and Katerina Weger, theorizes on the transformations in medicine and its structures due to corporization and technological development in the last decades of the twentieth century.⁴⁸ These authors describe the medical divisions of labor, its credentialism and claims to scientific knowledge and how this lead to the devaluation of women's skills and previous positions as lay healers. They write about the manner in which medicine presents itself and is consumed as "neutral" and rational knowledge. Devries, in a later essay from this collection, claims that medicine is yet another social product subject "to the influence of structural arrangements and cultural ideas."⁴⁹ This holds true in Puerto Rico. In the same essay Devries suggests that the emphasis our societies have placed on risk (legal risks, health risks etc) has been key elements in the consolidation of "expert" and professional power. Therefore if

⁴⁸ Elianne Riska and Katerina Weger, eds. *Gender, Work and Medicine* (London, Sage Publications, 1993). "Corporization", a derivative of corporation, is very similar to the process of institutionalization and professionalization which I hope to explain in my dissertation.

⁴⁹ Ibid,131.

midwives could present themselves as risk and “uncertainty” reducers they would be able to claim a professional space.⁵⁰ This forms part of the explanations for the rise of the “expert” obstetrician in Puerto Rico as well.

Puerto Rican History

Finally, the third area of scholarship with which I engage is that of post WWII Puerto Rican history. I feel a personal commitment to contribute to the historiography on Puerto Rico. Puerto Rican contemporary historiography has been dominated by social history since the 1980s and rarely crosses disciplinary lines. Most historical topics tend to cover broad political or economic themes such as sugar, coffee, immigration, labor, political parties, significant historical events, slavery, imperialism, and the military.

The few medical histories of Puerto Rico barely mention birthing practices and scarcely include midwives, birthing or obstetrics. For example, Arana Soto’s book, *Historia de la medicina puertorriqueña hasta 1898* (1974), dedicates three pages to midwives, but as the title indicates, his work covers a period earlier than the one I study. Those that address midwifery do so in a schematic, empirical or negative and condescending manner.⁵¹ Perez and Rivera mention the midwife in some detail in *Enfermería en Puerto Rico desde los precolombinos hasta el siglo XX*.⁵² These nurse-historians dedicate a section to the history of midwifery and obstetrical nursing, but their focus is primarily limited to legal history and in a couple hundred pages cover 500 years

⁵⁰ Ibid, 143.

⁵¹ O. Costa Mandry, *Apuntes para la historia de la medicina en Puerto Rico*, (1971); Manuel Quevedo Báez, *Historia de la medicina y cirugía en Puerto Rico* (1949) 264; Arana Soto, *Historia de la medicina puertorriqueña hasta 1898* (1974) 615-17.

⁵² Lydia Pérez and Mildred Rivera. *Enfermería en Puerto Rico desde los Precolombinos hasta el siglo XX* (Mayagüez, Universidad de Puerto Rico, 1997).

of history.⁵³ Doctor José Román de Jesus published the most recent effort to put together a sketch of some of the accomplishments of the medical sciences in Puerto Rico since the U.S. invasion in 1898. His book, *El desarrollo de las ciencias médicas y los servicios de salud en Puerto Rico durante el siglo de dominación de los Estados Unidos*, is a chronology of selected medical developments.⁵⁴ None of these publications attempt to explicitly incorporate any theoretical analysis or interpretation, nor do they use academically grounded historical methodology.

A collection of articles about women in medicine in Puerto Rico was published in the *Puerto Rican Health Journal* of April 1990.⁵⁵ Though these articles rarely part from a historical perspective they do elaborate on themes related to women in the medical professions, the discrimination that they confronted, and the establishment of public practices in these fields. Besides these articles, there have been scattered reports in the Puerto Rican press, but there has been little else written concerning birthing practices and practitioners.

Beyond the history of any aspect of medicine in Puerto Rico, there is much written about labor, economics, industrialization, politics, political parties, the sugar and coffee industry, 1898 and the U.S., biographies on “great” national leaders, and slavery.

⁵³ There are two MA theses from the University of Puerto Rico concerning midwifery. The first comes from the School of Public Health and was written by one of the midwives still practicing today. She includes a lot of important and useful information about the statistics, preparation and clientele of today’s midwives. The other thesis, from the Department of Psychology of the Interamerican University written by Carmen Rita Ducret Ramu, “La comadrona puertorriqueña, colaboradora en el proceso de parir” (1989), contains information about Puerto Rican midwives, but from a psychoanalytical point of view. None of these are from the social sciences.

⁵⁴ José Román de Jesus, *El desarrollo de las ciencias médicas y los servicios de salud en Puerto Rico durante el siglo de dominación de Los Estados Unidos* (Mayaguez, Publicaciones Puertorriqueñas, 2002).

⁵⁵ C. de Rivera Allende, “Women Health and Public Policy: Practices and Strategies in Puerto Rico” and A. Ramirez de Arellano, “Pink Collar Medicine: Implications of the Feminization of the Profession”.

In addition, a smaller body of work exists concerning the history of women and some institutional history (banks, trains, education, etc). This historiography is too vast to mention here, but I will mention a few key works that serve as repeated references for my writing.

A considerable amount has been written since the 1980s about the history of women in Puerto Rico during the twentieth century. Most of the work revolves around women in the work force.⁵⁶ I started out my research hoping to add to the history of women and gender. I would like to do this by not only expanding what might be considered female labor and professions (midwives) and how they interact and play out within a changing society, but also by discussing how women bring their children into the world and how concepts of their bodies change over time.

Several scholars based in the United States have recently published histories of Puerto Rico that follow United States academic tendencies to focus on less traditional

⁵⁶ Edna Acosta-Belen, ed, *The Puerto Rican Woman; Perspectives on Culture, History, and Society* (New York, Praeger, 1986); Luz del Alba Acevedo, "Género, trabajo asalariado y desarrollo industrial en Puerto Rico: la division sexual del trabajo en la manufactura," in María del Carmen Baerga, ed., *Género y trabajo: la industria de la aguja en Puerto Rico y el Caribe hispánico* (San Juan, Editorial of the University of Puerto Rico, 1993); Yamila Azize, ed., *La Mujer en Puerto Rico; Ensayos de investigación* (Río Piedras, Ediciones Huracán, 1987); María Barceló Miller, "Estrenando Togas: la profesionalización de la mujer en Puerto Rico, 1900-1930," *Revista del Instituto de Cultura Puertorriqueña* 99 (1990): 14-16; Laura Briggs, *Reproducing Empire*; Mario Cancel ed., *Historia y Género; vidas y relatos de mujeres en el Caribe* (San Juan, Asociación puertorriqueña de historiadores, Posdata, 1997); Alice Colón, Ana Luisa Dávila, María Dolores Frenos, Esther Vicente, *Políticas, visiones y voces en torno al aborto en Puerto Rico* (Puerto Rico, Centro de Investigaciones Sociales de la Universidad de Puerto Rico, 1999); Luisa Hernández-Angueira, *Mujeres puertorriqueñas, Welfare y globalización: desconstruyendo el estigma* (Puerto Rico, Publicaciones Puertorriqueñas, 2001); Carmen Luisa Justiniano, *Con valor y como de lugar; memorias de una jibara puertorriqueña* (San Juan, Editorial de la Universidad de Puerto Rico, 1999); Félix Matos, Linda Delgado eds., *Puerto Rican Women's History; New Perspectives* (New York, McSharpe, 1998); Annette Ramírez de Arellano, *Colonialism, Catholicism and Contraception*; Helen Safa, *De Mantenedas a Proveedoras* (San Juan, Editorial de la Universidad de Puerto Rico, 1998); Eileen Suárez Findlay, *Imposing Decency: The Politics of Sexuality and Race in Puerto Rico 1870-1920* (Durham, Duke University Press, 1999).

topics and to employ cultural and discursive analyses. Works by historians such as Laura Briggs, Eileen Findlay, and Teresita Martinez-Vergne are examples of this U.S. scholarship that have contributed new theories, approaches and themes to Puerto Rican history. They employ unconventional paths in order to discuss more familiar topics to Puerto Rican historiography such as class and power. Laura Briggs brings postcolonial theory into her historical analysis, which is unique to Puerto Rican history. The discussion of empire through the development of a history of sexual control and reproduction is also innovative. Eileen Findlay, in her book *Imposing Decency*, writes creatively about how sexual norms and practices served to define class and racial distinction and to construct social and political order in Puerto Rico between 1870 and 1920. Teresita Martinez-Vergne also uses a new vehicle, the *Casa de beneficencia* (charity institutions for the poor) of San Juan, to analyze how government officials' discourses on urban space managed to marginalize the poor and define the middle class. In the end, Martinez-Vergne in *Shaping the Discourse on Space* is interested in the nature of power in nineteenth-century Puerto Rico. Mostly due to language barriers, much of the U.S. scholarship remains outside of Puerto Rican universities. I would like to contribute towards bringing these academic experiences closer together and publish some of my findings in English and Spanish. Also, the history of birthing and the history of reproduction are rarely, if ever, told together. I see the history of birthing as part of the overarching category of the history of reproduction. Introducing birthing as a historical area of study within Puerto Rican historiography will enrich and broaden the overall discussion of reproduction in Puerto Rico.

Furthermore, in using birthing to address the broader changes related to industrialization and its dramatic historical shifts and how they might play out within the family and everyday practices, and by combining oral history, cultural history and medical-cultural anthropological scholarship, I aspire to offer an alternative contribution to Puerto Rican women's history, labor history and medical history.

The two best general text books on Puerto Rican political and economic history are Fernando Pico's *Historia General de Puerto Rico* and James Dietz' *Historia Económica de Puerto Rico*. These have become classic texts in university classrooms and are well regarded by historians for their accuracy. I have also referred to many other texts on a regular basis for information about the Popular Democratic Party, national movements and political history and development.⁵⁷

Overall, there is plenty of scholarship that informs my analysis on the transformations of birthing during the period of rapid industrialization in Puerto Rico, but there is little that will assist my construction of the actual history of birthing practices on

⁵⁷ Fernando Picó, *Historia General de Puerto Rico*; James Dietz, *Historia Económica de Puerto Rico*; Ivonne Acosta, *La mordaza: Puerto Rico 1948-1957* (Puerto Rico, Editorial Edil, 1998); Alvarez Curbelo and María Elena Rodríguez Silvia, eds., *Del nacionalismo al populismo* (Río Piedras, Ediciones Huracán, 1993); Rafael de Jesus Toro, *Historia económica de Puerto Rico* (Cincinnati, South-Western Publishing Co., 1982); Gervasio García, *Historia crítica, historia sin coartadas: algunos problemas de la historia de Puerto Rico* (Río Piedras, Ediciones Huracán, 1989); Emilio González Díaz, *El Partido Popular Democrático y el fin de siglo: ¿Qué queda del populismo?* (Río Piedras, Centro de investigaciones Sociales de la Universidad de Puerto Rico, 1999); Isar Pilar Godreau. "Missing the Mix; San Antón and the Racial Dynamics of 'Nationalism' in Puerto Rico" (PhD diss., Santa Cruz, University of California, Graduate School of Anthropology, 1999); Dagmar Guardiola Ortiz, *El trabajo social en Puerto Rico: ¿Asistencia o desarrollo?* (Puerto Rico, Decanato de estudios graduados e investigaciones Recinto de Río Piedras, 1998); Richard Brian Ferguson, "Class Transformations in Puerto Rico" (PhD diss., New York, Colombia University, Graduate School of Arts and Sciences, 1988); Gerardo Navas Figueroa, *La dialéctica del desarrollo nacional: el caso de Puerto Rico* (Río Piedras, Editorial Universitaria de la Universidad de Puerto Rico, 1978); Rafael Picó, *Nueva geografía de Puerto Rico; física económica y social* (Universidad de Puerto Rico, Editorial Universitaria, 1969); Lidia Roberts y Rosa Luisa Stefani, *Patterns of Living in Puerto Rican Families*; Orlando Sotomayor, *Poverty and Income Inequality in Puerto Rico 1970-1990* (San Juan, Centro de Investigaciones Sociales de la UPR, 1998).

the island. I see this as a challenge in the sense that I simultaneously construct the first history of birthing in Puerto Rico and try to contribute to a theoretical interpretation of cultural and ideological shifts within a society.

Structure

My dissertation is divided into five chapters organized chronologically. Each chapter covers one of five stages of birthing history. In each chapter I discuss the history of midwives, general medical education and obstetrics, models of birth, birthing laws, birthing practices, general health statistics, some variations in regions and trends, and the overall political, social and economic context and pace of “development.” I also include discussion and analysis of some pertinent governmental campaigns related to birthing and pregnancy.

I chose to open each chapter with a story that illustrates childbirth experiences or practices that were common of the period conferred in the chapter. The stories are drawn from a series of thirty interviews I completed in 2002 and 2005 during my research in Puerto Rico. There are several reasons for inserting a personal narrative at the beginning of each chapter. The stories set a tone and convey experiences that exemplify the characteristics of the particular timeframe covered in each chapter. It was important for me to include the voices of those whom I interviewed throughout each chapter.

I interviewed ten doctors who attended births from the 1950s until the 1990s. Most of them worked in the metropolitan area, formed part of the University of Puerto Rico faculty at some point, and specialized in obstetrics and gynecology, but I also interviewed a small group of doctors who worked in the rural areas. These were semi-

structured interviews that usually lasted from one to two hours. They were recorded in audio and later transcribed. In addition, I interviewed ten mothers who gave birth at home and in hospitals between the 1940s and 1960s. I was only able to interview one midwife who had worked as a comadrona auxiliar before the 1970s, for most of these women are no longer living. I did, however, interview the three midwives who worked after the 1980s doing homebirths. Most interviewees were selected through a referral system from previous interviews. Others came from my own research, experiences or conversations with family, friends and neighbors in Puerto Rico. In chapter five I include my own birthing story. The names of my informants have been changed with their permission to respect their confidentiality.

Beside my own interviews, I was able to access a series of interview notes and transcriptions done in the Southern region of the island in 2000, by undergraduate college students, as part of their course requirements on the history of Puerto Rico at the Interamerican University of Guayama. The students interviewed mothers who had birthed with midwives, as well as a few midwives who worked during the 1950s and 1960s.

The Chronological Framework

Midwifery progressively disappeared between 1950 and 1970, a period that coincides with aggressive industrialization, and resurfaced as the result of the work of five women in the 1980s, a period that coincides with the exhaustion of the industrial model and the rise of new social movements, among which feminism stands out. I have divided the history of birthing in Puerto Rico into five stages reflecting shifts in birthing

practices after 1948. Each early stage, between 1949- 1965, is defined by *where* mothers were giving birth and *who* attended their deliveries. The latter stages, when the births are fully medicalized, can be distinguished by changes in birthing practices and definitions within the hospital. Before 1953 home births under the care of a midwife predominated. In the second stage (1954-58), we can observe the first shifts indicating a tendency toward institutionalized and medicalized births. The third stage (1959-1965) is the most dramatic as far as birthing shifts: for the first time the number of hospital, medically assisted births surpassed the number the home-midwife-assisted births. In the fourth stage (1966-1977), hospitals consolidated their power, birthing became medicalized, new technologies were introduced, the fetus developed its own personhood and midwife-assisted homebirths disappeared from the public records altogether. In the final stage (1980-1990s), birthing continued to follow a technocratic model but a handful of midwives began attending homebirths and publicizing their work. These midwives (I call them *novoparteras* because although the term *partera* and *comadrona* were used during all these stages, *partera* has become more common recently) present themselves as related to the midwife of the past, but recast their practices and identities within the conceptual framework of modern-industrial values. For example, although they were determined to preserve their autonomy, they did not reject the tools of modern biomedicine. Beside the *novoparteras*, I discuss the rate of cesarean births, which rose to 25 through 50 per cent of all deliveries by the 1980s, compared to about 5 per cent during the 1950s. Another theme I trace in the last chapter is that of the climate of medical malpractice and the law, which obstetricians perceived to be overbearing.

Even within these general time frames, which characterize the entire island, there existed significant geographical discrepancies. Whereas during a given year, especially during in the first two stages, in some municipalities it was the rule to give birth at home, in others it was the exception. Given the fact that in Puerto Rico private and public hospitals have both played a significant role in birthing, I point out that the characters and practices involved in these scenarios also varied and generally responded to class differences. In private hospitals, for example, parturient women had longer hospital stays and delivered with more medical interventions than in public hospitals. Women in private hospitals were under the direct supervision of the doctors, whereas in municipal hospitals the nurses and midwives played a central role for many years.

I close the dissertation with a brief conclusion that sums up the factors that contributed to the the medicalization of childbirth practices in Puerto Rico between the 1940s and 1990s. I conclude with an epilogue that suggests that it is likely that childbirth practices will experience significant changes in the near future. We will probably see the numbers of obstetricians diminish due to the medico-legal climate and the cost of malpractice insurance and this will open up new possibilities for alternative birthing options for women in the coming decades.

CHAPTER ONE

STAGE ONE- BIRTHING AT HOME, 1948-1953

Tomasa's Story⁵⁸

Tomasa had been married for less than a year and was expecting her first child. She was eighteen and living with her in-laws. She knew she was pregnant when she stopped getting her period. Life in her small house in a rural, coastal town near Canovanas was calm and Tomasa filled her days tending to her home. She ground and brewed coffee early in the morning, fed the chickens, and began cooking, cleaning and washing. One early morning in 1952, she felt lighter than usual and kept particularly busy. Tomasa knew that her baby was due sometime soon, but could not be sure when. She had had a comfortable pregnancy and was able to go about her business as usual for the previous nine or so months. When her mother-in-law awoke that morning, she found Tomasa busy scrubbing the kitchen and preparing lunch. The in-laws joked about her light and happy demeanor.

That evening Tomasa felt strange. There was little to do after dark, and instead of lighting a lamp or a candle, she decided to retire for the day. That's when the *dolores*

⁵⁸ This story is an adaptation of the interview, Isabel Córdova, *Interview with Tomasa*, October 19, 2005.

(pains) began but she thought little of them and was embarrassed to say anything to her mother-in-law. She hated to complain. At ten o'clock she went to the kitchen, got an empty bottle (caneca) of rum and filled it with hot water to put on her belly. Her pains heated up (se calentaron los dolores) and she started to pray and cry quietly so as not to call attention to herself. A few hours later, when her mother in law came in the room to see what was happening, she took a good look at Tomasa, saw that she had started to leak water (amniotic fluid), and called her husband to go find their son, who was out, so that he would fetch Doña Julia, the local midwife.

Doña Julia walked in at one in the morning. She was dressed in white from head to toe. All of her hair was covered with a white handkerchief. Tomasa immediately recognized the deep wrinkles smiling down at her. She had seen Doña Julia in church many times and knew that she had assisted many of the women of the community with their babies. She had spoken on occasion with Doña Julia about her pregnancy and Doña Julia always had words of good, practical advice for her. Everyone knew that Doña Julia was officially registered as a midwife in Canovanas and she was well liked and respected in the community.

Doña Julia set down her black bag (maletín), leaned over and inspected Tomasa's belly with her hands, and then proceeded to wash her hands carefully. Once Doña Julia confirmed that Tomasa was well into her labor process by performing a vaginal tactile exam, she stepped out of the room. Doña Julia asked for some hot water, some towels, newspapers, and a wooden board and slipped back into the bedroom. She proceeded to wash Tomasa with boric water and shave her in preparation for her birth. She pulled out some sheets, covered the mattress in newspapers, laid a rubber sheet that Tomasa had

bought over the newspapers, dressed the bed in clean, white sheets and placed the wooden board under the mattress so it would provide Tomasa with better support when pushing.

Tomasa's contractions seemed to slow down. It was then that Doña Julia sent word to warm up some dark beer with rue (*ruda*) leaves.⁵⁹ As the water boiled, Doña Julia joked with Tomasa to put her at ease. She gave the warm drink to Tomasa with the intention of rekindling her contractions and moving along the labor process.

Tomasa's husband said little and interfered less. He trusted that Tomasa was in good hands. For the next hours, Doña Julia stayed at Tomasa's bedside rubbing her belly. Whenever Tomasa seemed in pain and desperate Doña Julia prayed. Finally, just before the sun came up, Tomasa gave birth to a healthy baby girl. Doña Julia cut the cord with a scissor that she had sterilized. She washed the baby and placed it on Tomasa's belly in order to coax out the placenta. She pressed and rubbed the area in order to assist in the delivery of the placenta.

Doña Julia carefully passed the baby on to the mother-in-law, for the father to see, and returned to clean and dress Tomasa so that she could rest. After a few hours the baby had fed from her mother's breast and all seemed well. Doña Julia gave the father a paper with all the necessary information needed to register the newborn and said her good-byes. Tomasa's husband thanked Doña Julia and paid her ten dollars.

For the next nine days Doña Julia would stop by briefly to inquire about the well being of the baby and mother. Tomasa would rest for a couple of days and keep the baby indoors after five in the afternoon for a full month. Tomasa had another eight children at home with Doña Julia.

⁵⁹ Scientific name for rue is *rutachalepensis*.

Introduction and Chapter Overview

Tomasa's story is based on one of the thirty open-ended, semi-structured interviews I completed between 2002 and 2007 with mothers, midwives, and doctors who worked or gave birth in Puerto Rico in years that correlate with this study. The story about the birth of Tomasa's first baby, represents the way the vast majority of rural and lower income women experienced childbirth in Puerto Rico between 1948 and 1953.

Until 1953 the midwife was the principal childbirth assistant for women in Puerto Rico. During the early nineteen thirties the Puerto Rican Department of Health initiated an effort to organize and meet with midwives in order to provide them with some training and collecting birth statistics systematically in accordance with licensing laws and regulations. Midwives were to meet in the town to which they were assigned on a monthly basis in what was called the *Club de Comadronas (Midwife's Club)*. This approach of reaching out to rural communities and providing social services throughout the island was consistent with broader New Deal efforts of social relief and government intervention born after the 1930s. Therefore, within this context, and understanding that neo-natal, maternity, and fertility rates and outcomes were indicators of standards of living, the Department of Health felt it needed to focus part of its attention on the effective collection of statistics and on improving reproduction related outcomes as well as holding health care providers accountable for their services. This meant addressing the existence of midwife-assisted homebirths.

Recognizing the need for midwives, the colonial island government began its first move toward intervening in the practice of midwifery from the nineteen thirties, but in 1948 a new government with new goals began putting into place new kinds of regulations

and institutions. These winds for change came under the paradigms of state-led industrialization and modernization, which eventually would phase out the midwife and place childbirth in the hands of physicians. Therefore between 1948 until 1953, although midwives and homebirths still predominated, new political, economic, and ideological structures appeared that would plant the seeds for the medicalization of childbirth and the disappearance of midwives.

Throughout Latin America, democracies were consolidated with wider popular participation, and modernization took center stage in state-led efforts. Historians often define this stage in Latin American history as a transition between modernity, often under a populist government, and industrial expansion or state-led industrialization.⁶⁰ Puerto Ricans were embarking on a populist, state-led industrialization effort after the mid-forties. The Popular Democratic Party (PPD), with the slogan "bread, land and liberty," and under the leadership of Luis Muñoz Marín, took on many of the characteristics of other Latin American populist governments. It had massive, far-reaching popular support all over the island. Beside their ambitious effort to industrialize the country, the PPD took up the task of formalizing its colonial relationship with the United States. Puerto Ricans voted on their first local constitution, under a locally elected government, yet under the constraints of the United States Federal government, during a time that was both hostile toward political dissidence and operating within a Puerto Rican populist government. The introduction of welfare, the expansion of public education and public health care, and the dissemination of the ideals of growth and equal opportunities for all constituted some of the principles upon which a new consensus was constructed through

⁶⁰ John Charles Chasteen, *Born In Blood and Fire* (New York, WW Norton and Company, 2001) ch. 8; Jorge Larrain, *Identity in Modern Latin America* (Cambridge, UK, Polity Press 2000) 22-3.

the state. Attaining popular consent through the interventionist state became fundamental to legitimating the colonial, capitalist project.⁶¹ For the first time in Puerto Rican history the new 1948 government of Luis Muñoz Marín had attained precisely this populist consent, which would serve to unify the population and transform life on the island in ways that were unprecedented.

Modernization for the government in postwar Puerto Rico entailed the dismantling of agrarian, traditional culture and values and substituting them with modern values and institutions strongly influenced by the social sciences, expressed in models, standards, and paradigms. Interest in normative structures was growing rapidly. The modern project, then, entailed the systematic specialization, organization, classification, and “scientific” study of the economic and the social.

As many scholars have pointed out, 1948 marked a watershed in political and economic history. What few scholars have explored is how these changes translate into everyday transformations of cultural practices and belief systems. The study of childbirth allows us to analyze the relationship between the broader project of industrialization and on the ground cultural practice and production.

This chapter covers the history of childbirth between 1948 and 1953, a moment when traditional childbirth practices predominated but where the seeds for change were planted. The *comadrona auxiliar*, a title given to practicing, registered midwives at the time, is a central character at the start of the chapter. After the section on *comadronas*, I discuss the role of laws and regulations, professional organizations, educational institutions, and broader socio-economic changes, as essential “seeds” for change. Finally, I delve into the training and professional organization of physicians through the

⁶¹ Larrain, *Identity*, 114.

establishment of the University of Puerto Rico's School of Medicine and the efforts of the Puerto Rican Medical Association. Alongside analysis of the transformations of birthing practices and the social relationship of those directly involved in childbirth, I also describe the existing common childbirth practices and attitudes, the services available to women during this period, and the type of training available to childbirth practitioners.

Childbirth between 1948 and 1953 was conceived of as a normal and expected part of everyday family life, in which medical intervention was either absent or minimal. It was a female activity that left most men, whether they be fathers or doctors, on the sidelines. Midwives and mothers-to-be were the chief knowledge bearers with regards to pregnancy, childbirth and rearing children. Class played a central role in determining where and with whom a woman was to birth. Public health, education, and welfare institutions were developing, but had not yet enveloped pregnancy and childbirth. The first four-year medical school opened in Puerto Rico in 1949, foreshadowing future changes in health and medical practice. Legal and licensure regulations were already influencing childbirth practices, and midwifery was under limited state supervision. Doctors, already well organized under the Medical Association of Puerto Rico (AMPR) from the beginning of the century, sought to move healthcare out of the home and into *biomedical* institutional spaces, while they guarded their autonomy and fought to keep local politics at bay.⁶² Before 1953, obstetric technologies were limited to an occasional lab test, some x-rays, forceps deliveries, rare cesarean section operations, some analgesics (demerol, scopolamine), episiotomies, and blood transfusions where they were

⁶² *Biomedicine* is the treatment of illness in accordance with the formal and institutional knowledge of the biological and other sciences.

available, but a great majority of women birthed in hospitals and homes without experiencing any of the above.

Between 1948 and 1953 childbirth practices were in great flux and though one might have been able to foresee, like so many other industrialized countries, a shift toward medicalization, traditional home birthing practices were still well in place. Industrialization and institutionalization processes were consolidating rapidly throughout the island, and birthing practices were certainly not immune to them.

While most women delivered at home in the 1940s, many women from more privileged social classes delivered their babies in hospitals, and even received prenatal care, although this was rare. Many women who birthed in hospitals had no idea they formed part of a small minority and assumed that all women in Puerto Rico did the same. These tended to be women from privileged social classes with above average educational levels. Women from more humble social strata, who birthed at home, likewise did so under the premise that it was the most normal and perhaps the only choice available to them at the time. Everyone they knew birthed at home. It was almost as if there existed two Puerto Ricos, each with no knowledge of the other.⁶³

The Comadrona Auxiliar

With the monetary backing of the federal government's *United States Children's Bureau- Child Health Services* maternal and children's services were centralized in 1946

⁶³ During my interviews with mothers who had given birth during this period almost all of them explained that they had given birth in the same way all other women they knew had done. Those women from more privileged and professional classes explained that they knew no one their age that had birthed at home and doubted there were even many midwife-attended homebirths at mid-century.

into the Health Department's Bureau of Maternal and Infant Hygiene. Services were offered in conjunction with health units from 76 urban and 85 rural communities.⁶⁴ Every health unit (unidad de salud) provided pre and post-natal clinics for mothers. These health units also housed the training sessions that fulfilled the prerequisites for obtaining auxiliary midwife permits. Even though prenatal care was offered, few women obtained pre-natal care and post-partum follow-up. It had not been common practice and women did not feel the need to see a doctor if they were not ill. Recognizing this and believing that prenatal care would improve maternal outcomes the Health Department sought to increase prenatal care and to centralize the statistics gathering systems.

From the beginning of the 1930s until the 1950s the Puerto Rican Health Department presented the Puerto Rican Legislature with proposals to establish training centers for midwives. The Health Department believed that without organizing midwives' services it would not be able to decrease rates of birthing complications and mortality, or to improve neonatal health or the island's overall conditions of health.⁶⁵

The Health Department at mid-century reported that there were over 1,500 auxiliary midwives working on the island.⁶⁶ This number represented only those midwives who participated in the trainings and registered with their local units every month after the 1930s. The vast majority delivered babies at the mothers' homes. We can also assume that there were midwives who moved outside of the state's radar. In 1949, for example, the Health Department estimated that there were over 200 "clandestine" midwives.⁶⁷

⁶⁴ Roberts and Stefani, *Patterns of Living*, 241-242.

⁶⁵ *Informe Anual del Departamento del Salud, 1952-53*, 214.

⁶⁶ *Informe Anual del Departamento de Salud de 1949-50*, 73.

⁶⁷ *Ibíd*, 80.

It is impossible to generalize about why or how midwives entered the practice. Some probably began by observing a doctor in a hospital setting, others trained by accompanying midwives in their family from a very early age, and yet others fell into midwifery through completely haphazard reasons. There are some accounts in a series of interviews from the University of Guayama of midwives who were assisting births well before being recruited or pressured by their municipalities to attend the monthly meetings and take the exam in order to become licensed as *comadronas auxiliaries*.⁶⁸ Most heeded this call out of fear or in hope of developing their prestige as midwives. Others, although in much smaller numbers, chose to forgo acquiring a license and avoid the law. One woman told interviewers in 2000 that she decided not to attend the meetings. In order to skirt the law she would receive the babies at birth and carry them with the placenta still attached to the umbilical cord to the closest hospital to have a doctor cut the cord. She never charged for her services. In this way she assumed no legal responsibility for practicing midwifery. Apparently she found no resistance or threats in the local hospitals.⁶⁹

Law 22 of 1931 was the first to employ the term *comadronas auxiliaries* and to regulate the practice of midwifery. This law led to the creation of the *Club de*

⁶⁸ The Guayama interviews are a set of sixty interviews that were generously made available to me by the Profesor Arturo Bird of the Interamerican University of Guayama. The interviews were carried out and documented by a group of undergraduate students for a project about Puerto Rican Midwives during their 2000-2001 course, HCHG-1010, “Historia de Puerto Rico; procesos históricos” offered by Professor Bird. Most of these interviews were of women who had birthed at home on several occasions with a midwife between 1938-1960. Three midwives were directly interviewed during this project. Since I was not able to obtain individual permission from each student, I will not cite or mention real names from these sources and will be limited to refer to them mostly as a whole. Most sources refer to women from the area or vicinities of Guayama on the Southeastern coast of the island. From now on I will refer to these interviews as *Guayama interviews*

⁶⁹ Guayama interviews.

Comadronas for the purposes of training and supervising midwives under the Puerto Rico Department of Health. The auxiliary midwife program had the dual intention of organizing, training and regulating midwives who were already practicing as well as recruiting future midwives to attend mainly home births. It was supervised by nine nurse-midwives who met every month with all the licensed midwives in the different municipalities across the island.

The auxiliary midwife was instructed by the Health Department's personnel about her responsibilities during the obligatory monthly meetings of the Midwives' Club, which were required for her certification. According to the Department of Health, she was required to follow the aseptic standards of hygiene, use gloves, and to refer high risk cases to qualified physicians. It was expected that midwife counsel the pregnant woman and prepare her for both her delivery and caring for her new baby. She occasionally registered the newborn or reminded the family to do so. In addition she was supposed to make postpartum visits. The midwife was also expected to take on some aspects of social work for any other family member in need of assistance. She kept a personal birthing registry, which she delivered to her Health Department supervisors every month. She was also to recruit new midwives and to report any woman practicing midwifery without the required permits, but I found no evidence of such practices.⁷⁰ Midwives' influence varied in each community.

Comadronas auxiliares had to pass a written exam in San Juan (the capital) and then attend the monthly meetings with their register-notebooks. In the notebooks they were to write the names of every parent and newborn whom they serviced. The

⁷⁰ Puerto Rican Health Department, *Material informativo sobre el programa de comadronas auxiliares*, Santurce, 1955.

notebooks were then turned in and inspected by their municipal supervisor. The Department of Infants and Hygiene issued an annual certification to every midwife who attended the Club meetings regularly and passed an oral examination. The certificate was signed by the District supervisor (usually a nurse) and the Chief of the Department of Infants and Hygiene.

After passing their written exam, the midwives received a button and an insignia. They were to buy a uniform and a medical bag from the Department of Infants and Hygiene. The insignia, uniform, and bag were to be used during every delivery. The uniform was white from head to toe. Midwives were to wear a cap and cover their mouths with a cloth mask when attending their deliveries. In their bags they carried tweezers, scissors, enemas, capsules for cleaning and disinfecting, silver nitrate drops, a mask, sheets, a scale, razors, tape measures, alcohol, gauze, a tray and metal or porcelain plates, cotton, clothes, postpartum pills and soap. Tomasa, the mother whose first childbirth opens this chapter, remembered her midwife. "She came, brought her black bag with her towels and her scissors. She was real clean. She was all registered in Canovanas. She arrived with her cap, like a handkerchief that covered all her hair."⁷¹ Interviewees consistently described midwives as wearing white and carrying their black bags.

By closely analyzing the language in the narratives of the Guayama interviews, we can learn more about the practice of midwifery.⁷² The first thing that we can note is

⁷¹ Córdova, *Interview with Tomasa*, 3. "Ella vino, traía su maletín con sus toallas y su tijeras. Ella era bien limpiecita. Ella estaba bien registrada en Canovanas. Llegaba de blanco con su gorra, como un pañuelo que le tapaba todo el pelo."

⁷² It is important to note that almost all the Guayama interviews of auxiliary midwives (comadronas) were done by students who were not familiar with the topic, had no previous experience with birthing and its terminologies and made many errors in the transcriptions. We

the fact that although the comadronas described similar situations, their use of language varied significantly.⁷³ There is little indication of a standardized language utilized by their profession, supporting the descriptions of midwives as solitary, self-directed practitioners. The terms that are repeated in a uniform manner by the different comadronas are those referring to the instruments that they used and their monthly meetings. The comadronas tended to refer to contractions and the onset of labor as “dolores” (pains) and “cuando le empezaban los dolores” (when the pains started). They also spoke commonly of teas and massages, but sometimes varied between “sobo” (rub down) and “masaje.” Beside this, their language referring to their practice varied greatly. Some comadronas spoke of the fetus or baby as “nenes,” others “muchachito” and “bebe.” All of these terms are rather informal ways of naming small children. They spoke of how they would listen to the “woman’s” heart and feel the baby. Sometimes more medical terms would be mentioned such as “eclampsia,” “placenta previa,” “hemorragia,” and “vertebras.” One comadrona refers specifically to language and tells her interviewer that “now adays” hospitals and doctors use “sophisticated vocabulary.”

Language was not the only area where we can observe a lack of systematic medical modeling. As we have discussed earlier, prenatal care was rare. The comadronas auxiliares rarely visited the mothers before birthing and did very little to prepare them for birth. The mothers followed no special diets and no particular rules before birthing. Very few women made appointments with a local hospital doctor before their due date. Unless

must also add that the women interviewed were mostly rather elderly, were reflecting about experiences from many years back and had been exposed to several decades of new cultural terminology. All of these factors play into their interviews and may well have altered or affected the accuracy of the narrative.

⁷³ I use the term *comadronas* when I am specifically referring to those midwives registered with the Health Department before 1970.

the mother-to-be felt her baby was in danger or she fell ill, she would rarely travel to a medical facility. Women of more privileged classes, with personal medical contacts, were much more likely to seek regular medical care during their pregnancies. Some women had previous relationships with their midwives, but often, the first significant contact with their midwives would begin with the onset of labor.

It is particularly interesting to note the consistency with which the women interviewed by the Interamerican University at Guayama students described the practices of the midwives in their birthing experiences. Without exception they spoke of massages given by the midwives. Massages and the *crede* (abdominal massage done over the belly to aid in the expulsion of the placenta after birth) were done with bare hands over the abdomen of the mother during the labor. This way both the baby's position was determined and the mother was aided. The mothers whom I interviewed also spoke invariably of this sort of massage. Nilsa said that her midwife "brought oil and started to massage the belly...and rubbed and rubbed and rubbed with oil" to assist with her labor process.⁷⁴ Olive oil was usually used for the massage. Women described their doctors and nurses performing this sort of massage in hospital settings as well. Midwives located the baby's heartbeat was located by placing the ear over the abdomen of the mother.

Most midwives gave mothers different sorts of teas to assist with the birthing process and contractions. But more than the use of specific herbs, midwives and mothers seemed to turn to any sort of warm liquid for the mother to drink with the belief that it would heat up the contractions, or "calentar los dolores" (heat up the pains) and speed up the labor process. Tomasa claimed that her midwife would "heat up some beer with a

⁷⁴ Isabel Córdova, *Interview with Nilsa*. October 22, 2005, minute 17.

ruda leaf...or mint...something warm."⁷⁵ Vanesa said that her midwife would "give me coffee...something to warm me up...something warm."⁷⁶

According to the Guayama interviews, the interviews I carried out, and official documentation, it seems that most of the sheets, cloths and clothes that were used by the midwives were boiled for an hour to sterilize them to have them ready before arriving at the mother's home. Their instruments such as scissors and tweezers were also boiled or placed on plates to soak in alcohol and later lit on fire before using. It is likely that mothers cleaned diapers by boiling them and that folk knowledge included some forms of asepsis but most of these practices were taught and stressed during the monthly meetings at the Midwives' Club.

Once in the home, in preparation for childbirth, the midwife would bathe the mother entirely and carefully clean and shave the area of the vulva. A bed was then prepared with clean sheets. If the bed was too soft or unavailable, a board would be placed under the mattress or a bed would be made on the floor. Before receiving the baby, the midwife would wash her hands and arms with an antiseptic capsule or regular soap. Enemas were sometimes applied to the mother in preparation for birth.⁷⁷ Some midwives were instructed by the Health Department not to use enemas and did not do so.⁷⁸

Postpartum, the midwife would proceed to check, clean, weigh and measure the newborn. The Guayama interviews mentioned that mothers would be cleaned and given a pill that the Department of Health required, but I found no evidence of this mysterious

⁷⁵ Córdova, *Interview with Tomasa*, 5.

⁷⁶ Isabel Córdova, *Interview with Vanesa*, November 26, 2005, 12.

⁷⁷ See Córdova 2005 interviews of mothers (Tomasa, Carmenchi, Nilsa, Vanesa, Victoria, Patricia, Ingrid) for further details and description of their deliveries and preparation.

⁷⁸ Isabel Córdova, *Interview with Penchi*, July 24, 2007.

pill in any of my interviews with mothers, midwives or doctors. Some Guayama midwives claimed that it prevented postpartum infections and other stated that it relieved pain. Silver nitrate was then applied to the baby's eyes, sometimes in the presence of a witness. This was done because at this point it was common for the mother to be distracted, tired or asleep and she could not be dependable if called upon to testify in case the midwife was questioned. It was legally possible for a Department of Health supervisor to stop by the mother's house after a birth. This was never reported as having taken place but the concern that it could happen was very present in the Guayama interviews with midwives. The midwife would usually visit the household for several days after the birth to inquire if all was well, sometimes wash the baby, and clean the belly button until the remaining cord fell off.

Government documents explicitly state that midwives worked under government supervision but required no salary from the government. Midwives did not normally receive a monthly salary from the government.⁷⁹ A few doctors mentioned during their interviews that there were midwives working as salaried municipal employees in hospitals during the 1950s.⁸⁰ More commonly their pay depended upon the good will, resources, and disposition of the families they served. In the best circumstances they might receive twenty dollars, but for the most part they received between five and fifteen dollars. Payment often depended on what the family could offer at the moment. Often after working long and uncomfortable hours, they were left empty handed. In sum, the labor of the midwife mirrored that of other workers in the informal sectors. It functioned

⁷⁹ I did find some evidence of municipalities paying their midwives five dollars for every registered birth.

⁸⁰ Isabel Córdova, *Interview with Villamil*, 17 October 2005, 16.

more as a supplemental family income than the salary of a head of household or professional.

Like midwives, doctors also tended to charge a few dollars for regular home visits, claimed that they would never turn a patient away due to lack of funds, and many only earned government salaries of a few hundred dollars a month at the time. In some cases doctors worked for low salaries and even volunteered their time at the Medical School.⁸¹

Midwives worked alone, and though most seemed to fulfill their legal requirements, they did not have much of a sense of being directly supervised by the Department of Health. This perception was also true for the mothers under their care. I found no evidence of a midwife or mother receiving an actual visit from a supervisor. When asked if their midwives were supervised, mothers almost always responded negatively, though most were aware that their midwives were licensed. Mothers reported that midwives followed the norms established by the Department of Maternal and Infant Hygiene (capsules, pills, shaving, silver nitrate).

Of the sixty Guayama interviews and twenty interviews of my own with mothers and comadronas, each of whom described multiple birthing experiences, no one mentioned a single emergency that was not handled successfully. No deaths or serious complications that resulted in morbidity were reported, despite the high maternal mortality rate of that time. Everyone stated that in the event of an emergency the woman was laid on a hammock or on a large chair and carried to closest hospital. The option of

⁸¹ For reference to salaries and payment methods refer to Córdova interviews 2005 with doctors Villamil, 8; Castillo, 5; Tomas, 9.

an ambulance was rarely mentioned, though some did mention being able to borrow a neighbor's vehicle.

Many women had their first few children in the 1940s at home and those born later in a hospital. They invariably described home births as more human and pleasant experiences than those in hospitals. The only unpleasant and problematic events described by these women were ones that transpired in hospitals. Government documents support the conclusion that their experiences followed a wider trend. According to government statistics, midwives had better outcomes than doctors in hospitals during the late 1940s and initial years of the 1950s. During the late 1940s, of the total maternal deaths, 73 per cent occurred in hospitals.⁸² If we consider that women were truly being transferred in case of complications or emergencies, then we can account for the higher mortality rates at hospitals, but it is not likely to justify the enormous disparities.

Women often felt better tended to and less alone with midwives. Yet in spite of seeing their homebirths as positive experiences, when the mothers were asked where women should give birth almost all answered that the hospital was the proper space. Tomasa, for example, described all of her homebirths as pleasant experiences with no complications. She spoke of her midwife in extremely positive terms. In fact, she explained that "whenever we lost our nerve [during labor] she would tell us, 'oh no, you are going to have to go to the hospital'...And because we didn't want to go to the hospital, well we would make an effort."⁸³ Yet, when I asked her what she would recommend to

⁸² Departamento de Salud, *Informe anual del director de sanidad al honorable gobernador de Puerto Rico de 1947-48*, 67.

⁸³ Córdova, *Interview with Tomasa*, 6. "...si nos poníamos cobardes ella nos decía : 'a no pues tienes que ir pa'l hospital, porque esto no se puede quedar así'" . Y como no queríamos ir pa'l hospital, pues poníamos de la parte de nosotros."

future mothers she responded that they should seek medical assistance because "things have gotten so complicated."⁸⁴ .

We can conclude then that the comadrona of the mid-twentieth century worked alone and in relative isolation. Each comadrona worked within her community, with no significant communication with midwives in other communities. No national organization for midwives united them beyond local monthly meetings for training and collecting statistics that were initiated by the government in the 1930s. After this, comadronas began to display shared techniques and approaches in the practice. The Department of Health's *Club de Comadronas* project had definite effects on the comadrona auxiliar. The title itself that was assigned legally to the midwife is very telling. They were officially perceived of as auxiliaries or assistants to doctors, under the supervision of the Puerto Rican Department of Health. We can testify to the Department's effects on the comadronas in certain practices that are narrated in the interviews under consideration. The use of postpartum medication (the mysterious pill), the silver nitrate eye drops, shaving and use of uniforms, caps, and gloves are evidence of the *Club's* influence. The comadronas were subjected to the Department's requirements.

At the same time, the level of supervision was limited and was hardly noticed in the actual practice of the comadronas auxiliares and their clients. No one interviewed was able to identify a case of direct supervision of the comadronas. Comadronas were able to continue their personal practices such as massages and teas. Some comadronas used gloves, but some others admitted to not being able to work well with them and thus disregarded them. They took on what they considered to be necessary and useful from

⁸⁴ Córdova, *Interview with Tomasa*, 13.

what they were instructed in the Department of Maternal and Infant Hygiene and added it to their established repertoire.

The comadronas auxiliares were not prepared to form a united front and claim their rights as a professional group before the government and medical class. They did not seek support from each other, nor did they turn to establishing international connections, as happened in a later period. Their education was largely based on practical experience and popular wisdom. Proof of their lack of standardized practice and unity can be found in their use of language.

The relationship with their clients was mostly community based. In many cases they met their clients for the first time when the mother was in labor. Prenatal care was not practiced. Their clients were varied and could come from all sorts of social extractions and backgrounds, though most families were from modest social backgrounds.

The relationship between autonomy, the law and the clientele directly affects the practice of midwifery. Because the comadrona auxiliar was not professionally organized nor prepared to defend her professional autonomy her practice and social standing weakened. She did not adapt her profession to the changing demands of the population and the shifts that the new urban-industrial presence dictated on the island. Nor did she find ways of inserting midwifery into the new, higher paying, career options available for women in other areas. It was more viable for a woman to study nursing or education in order to make a living than to work as a midwife. Moreover, the practice of midwifery never entered in the social imaginary of legitimate modern professions. Some midwives

retired out of fear or age, and others because they understood that their services were no longer in demand in the new world of modern medicine.

The health department acknowledged the midwife's service as a legitimate one, even though it desired, in the long run, to move laboring women into institutions under a medical specialist's supervision.⁸⁵ The world of modern medicine was represented by the hospital. Whether a woman accessed the institutional medical spaces to birth varied by class and region: the wealthier and more urban a woman was, the more likely she would birth her children in a hospital. The practitioners who served in these different spaces, also varied.

Overview of Birthing Distributions

If we look closer at the birth providers, we will find three providers whose influence varied depending on the birthing location. Table 1 shows the distribution of births tended to by midwives (63%), doctors (25%) and nurses (12%) in 1951, according to where the delivery took place. Midwives assisted 99 per cent of home births, but only 15 per cent of births in public hospitals, and none in private hospitals.⁸⁶ Nurses played a significant role in public hospitals only, taking charge of at least a third of the deliveries. In municipal hospitals, as opposed to district hospitals, doctors and nurses attended almost the same number of deliveries (just over 8,000 each) and midwives attended 3,774

⁸⁵ Puerto Rico Department of Health, *Material informativo sobre el programa de comadronas auxiliares*, 1.

⁸⁶ *Informe Anual del Departamento de Salud del 1951*, 113.

Table 1: Distribution of Births by Place and Provider, P.R., 1951 (78,207 total births)

Person who tended the birthing	Home (59%-46,293)	Public hospital (31%- 24,581)	Private hospital (9%- 7,333)
Doctors (19,695=25%)	.7% (526)	49% (12,015)	98% (7,154)
Midwives (49,445=63%)	99% (45,671)	15% (3,774)	0
Nurses (9,067=12%)	Less than 0.3% (96)	36% (8,792)	2% (179)

Source: Health Department Annual Report, 1951, p.113

of the 20,008 (19%) deliveries.⁸⁷ Doctors dominated the private institutional spaces, delivering almost all of the babies there. The number of women who gave birth in private institutions in comparison to public hospitals was low in 1951.⁸⁸ Overall, though, the midwife, without a doubt, was the primary childbirth provider even though hospitals and health centers already dotted the Puerto Rican landscape and most towns counted on a "town doctor."

The health infrastructure to support institutional, government sponsored medicine existed and was expanding. The groundwork was laid out for childbirth practice to change in favor of the hospital. The population on the island was responding to many changes that would reconfigure their daily lives and all of these changes would alter the socio-cultural frameworks of families in favor of medicalized childbirth.

⁸⁷ Ibid.

⁸⁸ Of the 78,000 births in 1951, only 7,300 occurred in private hospitals, Ibid.

Seeds for Change

General Changes in Overall Health and Conditions of Living

Political, social, cultural and economic changes were sweeping the island at an unprecedented pace in the 1940s and 1950s. As part of these processes, the seeds for change in childbirth were planted. Therefore, let us review some data from the late 1940s that reveal the extent of these changes.

Prior to 1948, Puerto Rico functioned as a traditional colony, with a governor appointed by the president of the United States as the highest local figure of state authority. The first locally elected and populist governor took local office in 1948, and a constitution was drawn up in 1951 in a politically embattled context where dissent was often repressed. The newly elected Popular Democratic Party, with the support of the United States, forged a plan for aggressive industrial development with the hope of positioning Puerto Rico within the Western, developed world. As a result, large portions of the population felt a sense of hope and the possibility for renewal, while some others experienced a sense of nationalist loss and repression. Ironically, while many voted to cement Puerto Rico's relationship with the United States by maintaining its protected status, local national pride was strong as many returned from the war and others boarded planes headed for New York City in search of work.

Nevertheless, Puerto Rico in the mid and latter forties was a primarily rural, poor country with little industrial development. Over a third of its adult population had not gone through the formal education system.⁸⁹ The poorer a family, the less education it

⁸⁹ Roberts and Stefani, *Patterns of Living*, 17. This was a study based on 1,044 extensive interviews done in 1946 for the development of the Home Economics curriculum of the UPR, with families representing different social and geographical sectors throughout the island.

received. Only a third of the population had a fourth grade education.⁹⁰ One fourth of mothers worked for wages outside of the home, and mothers had an average of six to seven children. Rural families were usually larger than urban ones.⁹¹ Over a fourth of those children born to low-income families (grossing under \$500 annually) did not live past their adolescent years.⁹² Life expectancy increased as the mother's education increased.

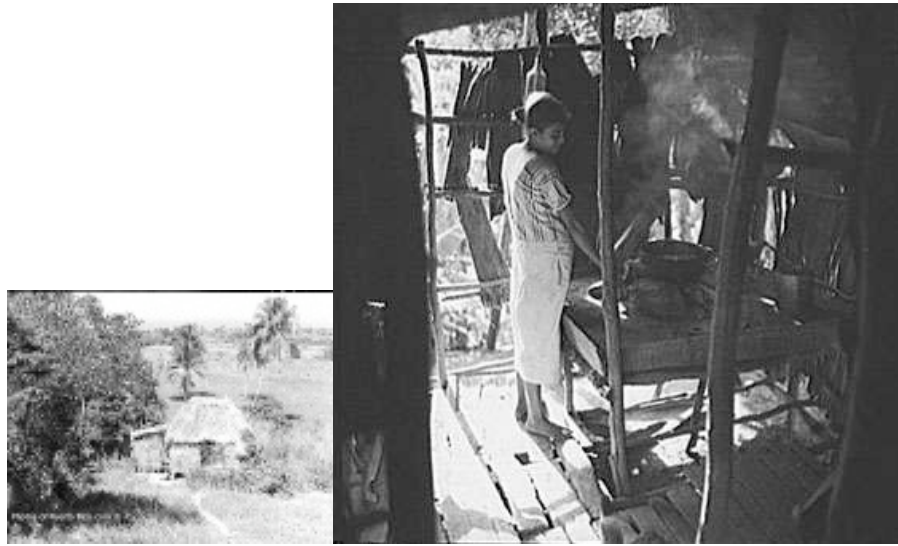


Figure 1: A *bohío* and a *fogón* in 1941 Puerto Rico. Source: photosofpuertorico.com

Housing structures and facilities varied. Few homes were built completely in cement. In the 1940s, 10 per cent of rural homes were straw *bohíos*, similar to the pre-Columbian dwellings of the indigenous population. Almost 60 per cent of the population had make-shift kitchens (*fogón*) in open, outdoor areas close to the home.⁹³ Only 1 per cent of homes contained electric stoves and eleven percent had refrigerators.⁹⁴ After many years of public health campaigns pushing for the construction of latrines, there still remained

⁹⁰ *Ibid.*

⁹¹ *Ibid.*, 23.

⁹² *Ibid.*, 26.

⁹³ *Ibid.*, 56.

⁹⁴ *Ibid.*, 57, 64.

close to 20 per cent of homes without these facilities, and a mere 20 per cent of homes that actually housed a toilet.⁹⁵ In general, few homes could rely on potable water and a sewage system, forcing forty percent of families to collect water from nearby rivers or wells.⁹⁶

Just over ten years later, Puerto Ricans could drink from any faucet on the island, life expectancy had increased by ten years and the number of doctors had almost tripled.⁹⁷ Freeways and cars began criss-crossing the island. By the early 1970s over 70 per cent of households had toilets, almost every house contained at least one television set and nearly 95 per cent owned a refrigerator. By then, about 90 per cent of the population was literate as well.⁹⁸ Between the 1940s and 1960s public school attendance doubled and university level attendance tripled.⁹⁹ Maternal mortality rates dropped from 319 per every 100,000 deliveries in 1945 to eight-five in 1958 and general mortality rates were cut in half for the same time period.¹⁰⁰ The main causes of death went from diarrhea and tropical diseases to cancer, heart ailments and accidents. If life, and therefore culture in Puerto Rico, was in an impressive state of flux, it should come as no surprise that childbirth practices and paradigms would experience similar transformations.

Legal Controls and Regulations

⁹⁵ Ibid., 115.

⁹⁶ Ibid., 138.

⁹⁷ Arbona, *Borrador para un discurso*.

⁹⁸ Dietz, 327.

⁹⁹ Ferguson, 400.

¹⁰⁰ Oficina de Planificación, *Informe Anual de Estadísticas Vitales de 1985, 1987*, 13.

Although the disappearance of midwifery and home births in Puerto Rico was due mostly to a series of changes inherent in the transition towards a modern, technological and industrial society, legislative and legal-medical campaigns sped up the process. Laws and regulations, as well as educational requirements moved society in the direction of tighter social, rational, and standardized control. These legal requirements favored biomedical institutions and physicians. The country counted on biomedicine in order to improve the health of a nation that was sickly, underdeveloped and working below appropriate levels of productivity. Biomedicine would provide the stability needed to make Puerto Rico competitive with other developed countries.¹⁰¹

The legal history of birthing regulations demonstrates how legal and cultural interpretations concerning professions and their practices varied at different moments in history. In order to effectively communicate the relationships between society, culture and the law I will discuss regulations dating back much earlier than the mid-twentieth century. By analyzing the history of legal controls over birthing practices I will be able to demonstrate how attitudes and expectations regarding childbirth changed. In addition, childbirth controls and regulations were important in determining what profession and what kind of practice eventually prevailed.

¹⁰¹ According to Gramsci, one of the most important functions of the modern state is to “elevate the great mass of the population to a particular cultural and moral level that corresponds to the developmental need of the productive forces and thus the interests of the dominant classes,” which in this case also included the United States. Antonio Gramsci, *La política y el Estado Moderno* (Barcelona, Ediciones Península, 1971) 174, author’s translation. This is achieved to a great extent through judicial and educational institutions. Althusser points out that “in more complex societies a division of labor occurs along with a division of the ideological apparatus and power is disseminated and specialized.” Louis Althusser, *Ideología y aparatos ideológicos del Estado* (Buenos Aires, Ediciones Nueva Visión, 1974) 36-37, author’s translation.

The law in many ways molds cultural practices and attitudes. It can serve as a vehicle of ideological transmission and diffusion.¹⁰² Laws have the power of affecting lay and professional relationships. One represses one's behavior in order to adhere or accommodate to what is stipulated legally; this then affects the manner in which different actors or groups, addressed in a particular law, relate to each other, which in turn will influence the attitudes of those same people involved.¹⁰³ Worldviews and belief systems, historically determined elements, are reflected in the law just as are collective and intellectual manifestations.¹⁰⁴

There are different options for regulating professional practice. One option might respect the principles and workings of those groups that it seeks to regulate intact. For example, Raymond DeVries describes the difference between what he calls *hostile* and *friendly* licensing in his book, *Regulating Birth: Midwives, Medicine and the Law*. *Friendly* licensing includes individual practitioners in the decision making process and is controlled by the members of the profession itself. *Hostile* licensing, in contrast, places control in the hands of professionals who are external to the group that is being regulated.¹⁰⁵ The latter was the case for Puerto Rican midwives. This weakens the profession and practices of the midwives because it positions them under the jurisdiction of those foreign to their practices and interests. In the Puerto Rican case, professionals

¹⁰² Ibid.

¹⁰³ For further discussion on the relationship between medicine, the law and culture see Raymond DeVries, *Regulating Birth*, 13-14; Michel Foucault, *Discipline and Punishment: Birth of the Prison*, vol.3 (New York, Second Vintage Books, 1995). Also for a general overview concerning Critical Legal Theory and the relationship between law and change refer to, Robert Gordon, "Critical Legal Histories," *Stanford Law Review* 36, no.1/2 (January 1984) 57-125.

¹⁰⁴ Hughes Portelli, *Gramsci y el bloque histórico* (Buenos Aires, Siglo XXI, 1973) 18.

¹⁰⁵ DeVries, *Regulating Birth*, 29.

need to heed one more level of authority than professionals from most other countries; the imperial metropole.

Before the United States took over the island, it was the Spanish crown that held jurisdiction over Puerto Rico. Late eighteenth century Spanish laws, specifically *Ordenanzas*, established titles for doctors, surgeons, bleeders and midwives. A 1804 law required that midwives pass an examination that tested their knowledge and practical skills and that they prove their status as widows or married women.¹⁰⁶ Aspiring midwives had to present permission from their husbands, proof of baptism, and of good standing and behavior (*buena vida y costumbres*) from their priests, proof of having 3 years of “hands on” experience under the supervision of a surgeon or certified midwife, and demonstrate their “pure blood” (*limpieza de sangre*) status.¹⁰⁷ This regulation also stipulated that midwives should refrain from undertaking long trips inappropriate to their sex, for women were to stay close to the home in order to comply with the gender norms.¹⁰⁸

These laws responded to the interests of the Spanish governing bodies and the belief systems of the more affluent social groups of that given time. The main concerns of the state revolved around practical experience, ecclesiastic moral, racial hierarchies and appropriate feminine conduct. A midwife who was to offer her professional services had to have had previous experiences with birthing, demonstrate that she behaved in a

¹⁰⁶ Law III, Title XII of book VIII, chapter 16 of the 1804 Orders (*Ordenanzas*), Arana Soto, *Historia de la medicina puertorriqueña*, 617.

¹⁰⁷ Arana-Soto, 618. Everyone was registered (in local churches usually) at birth according to his or her racial status. These categories were subjective in many ways. They often depended on favors or personal judgments of the official who registered the individual. *Limpieza de sangre* was closely equated to “whiteness” or of Spanish descent. Originally *limpieza de sangre* referred to a person's relationship to Catholicism.

¹⁰⁸ Ibid.

dignified and moral manner approved by her priest, function under the supervision and protection of her husband and be as white as possible.¹⁰⁹ The language and stipulations of the *Ordenanza* treated midwives in a matter of fact fashion and might not be considered a clear effort toward hostile licensing, but the law was not formulated by midwives and certainly excluded unmarried women of African ancestry.

This law opened up the possibility for women to train as midwives under the supervision of other midwives, which permitted the profession to attain a certain level of professional autonomy. Nearly a century later (1888), the Puerto Rican Athenaeum (*Ateneo*), a cultural and intellectual center, founded the Institution of Superior Education where some postsecondary education titles were offered. Among these was that of midwifery.¹¹⁰ This Institute examined a group of midwives in 1892 and graduated 12 women who later served as midwives.¹¹¹ Attitudes toward midwives seemed cordial at minimum, but this would not continue to be so in the following century.

Physician-historian Manuel Quevedo Baez, a doctor and historian who founded and led the Medical Association of Puerto Rico, writing in 1946, explains that at the turn of the century there were many towns on the island without access to biomedical services. He points out that the field of obstetrics was “abandoned to the mercy of women with no instruction” without the “foggiest idea” of what the art of birthing entailed and with no knowledge of asepsis or personal hygiene. “Ironically,” Quevedo Baez wrote, he himself was born in the hands of one of these “flamboyant midwives.”

¹⁰⁹ The law refers to *limpieza de sangre* (pure blood), indicating a preference for Spanish descendency, but there was never a guarantee or possibility of any racial purity.

¹¹⁰ Lydia Perez and Mildred Rivera, *Enfermería en Puerto Rico*, 169. The *Ateneo Puertorriqueño* was a cultural institution for the promotion of the arts and sciences under government auspices.

¹¹¹ *Ibid.*

Happily he did not suffer the consequences of what he then called “an atrocity.”¹¹²

Moreover the mothers in these “dark” times who “so easily rendered their children to the world” did not suffer from puerperal infections or complications.¹¹³

Quevedo's prejudice and blatantly negative attitudes toward midwives were contradicted by his admission that the high rates of puerperal fever became more frequent after medical asepsis and antiseptics were more widely practiced. Although he associated midwives, not doctors, with filth and inconsistencies in fact doctors at the time were not rigorous with their practice of asepsis and held alarming track records.¹¹⁴ In contrast to the views of doctors and government officials, Carmen Luisa Justiniano, in her testimonial novel about growing up in rural Puerto Rico in the first part of the twentieth century, *Con valor y a como dé lugar; memorias de una jíbara puertorriqueña*, describes the hygiene of midwives. She describes the hygiene methods and medicinal knowledge passed on to her by her grandmother just after 1930.

The first thing she taught me while attending a laboring woman was the hygiene of the midwife herself, and how the use of gloves, unknown to campesinas, ... was necessary, real important or [mandated by] law that our clothes were clean and that our hands and arms be immaculately cleaned with soap and water. Fingernails also had to be short and clean... Cutting the umbilical cord was another job that had to be carefully done, to avoid hemorrhaging and infections... The scissor used had to be washed with rum and submerged in boiling water, or if not passed through a flame of a lamp or candle... This strip [to tie the cord] should be sterilized well... Also Rosemary leaves would be roasted and a disinfectant powder would be made from it to cure the area that was cut... After the

¹¹² I am using quotation marks here when using direct translations from the same selections of Quevedo's writings as above.

¹¹³ Quevedo Baez, *Historia de la medicina en Puerto Rico*, 264-65.

¹¹⁴ Arney, *Power and the Profession of Obstetrics*, 44; Díaz Ortiz and Cabrera Mont, “El servicio de las parteras,” 74.

birth the mother should stay in bed for several days, taking into consideration her hygiene and nutrition¹¹⁵

Measures for social control include the registering of specialized guilds, such as the Puerto Rican Medical Association, the granting of licenses and their related educational requirements, and the standardization of services and protocols that certain sectors must obey in order to be considered professional. For the most part, these measures are articulated by those with access to political and social power structures. Professional guilds, recognized by the government, and/or those having access to the necessary resources needed to lobby and pressure the government, expectedly were the most successful in influencing and directing laws. Those without these resources or representation, such as midwives, were not able to directly influence the legal decisions by which they had to abide.

One of the most organized and powerful groups of the Puerto Rican medical class has been the Medical Association of Puerto Rico (AMPR). It was founded in 1902 at the same time that many other professional, labor and artisan guilds and unions were developing in the country.¹¹⁶ The Association established close ties with the government and exercised a political function on the island from the start. At some point before 1946, the Association added a Legislative Committee to its organizational structure.¹¹⁷ This Committee was one of the more active groups within the Association. There is ample documentation surrounding the reports and talks offered to the local, legislative

¹¹⁵ Carmen Luisa Justiniano, *Con valor y a como dé lugar; memorias de una jibara puertorriqueña* (San Juan, Editorial de la Universidad de Puerto Rico, 1999) 284-85.

¹¹⁶ Gervasio Garcia, *Historia sin coartada*, 67-96; Medical Association of Puerto Rico, *Memorias, 1902-1989*.

¹¹⁷ *Annual Report of the Medical Association of Puerto Rico of 1946*, 4-5, mentions communications with government representatives in the highest positions and page 16 reports on the Legislative Committee.

government branches in which the Association took part.¹¹⁸ In 1948 it sponsored a radio show about health problems and also organized several conferences for parents and schoolteachers.¹¹⁹ A year later, in addition to its professional bulletin, the Public Relations Committee published and distributed, free of charge, *El Heraldito Médico* to political leaders, teachers, students and other professionals.¹²⁰ The Puerto Rican Medical Association was affiliated to the American Medical Association. It sponsored the construction of buildings and libraries, organized hospitals, drew up and submitted laws, created a space for itself in local newspapers and acquired airtime on radio and television.¹²¹

The Medical Association successfully lobbied for a law that established an examination board in 1903.¹²² The regulation of midwifery was included under this law (1903) and in 1904 the Board of Medical Examiners certified the first midwife.¹²³ The Board of Medical Examiners amended the law in 1915, adding new requirements (completion of the eighth grade and proof of having practiced in a hospital).¹²⁴ A decade later another (1925) law required midwives to achieve the status of graduate nurse (usually required a high school degree) as a prerequisite for taking certification exams.¹²⁵

¹¹⁸ See example, *Medical Association of Puerto Rico Report to the House of Representatives of 1947 and 1953*.

¹¹⁹ *Annual Report of the Medical Association of Puerto Rico, 1948*, 4.

¹²⁰ *Annual Report of the Medical Association of Puerto Rico 1947*, 4.

¹²¹ Asociación Médica de Puerto Rico [AMPR], *Memorias 1902-1989*, see also the AMPR annual reports under "public relations."

¹²² *Leyes de Puerto Rico Anotadas (PR annotated laws) [LEPRA]*, Law 3 of 1903.

¹²³ Perez and Rivera, *Enfermería en Puerto Rico*, 172.

¹²⁴ *Ibid.* Physicians convinced lawmakers to pass Law 73 in 1923, a law that changed the name of the Board to the Tribunal of Medical Examiners. In 1931, Law 22 was created to regulate medical practice, repealing the 1923 Law on The Tribunal of Medical Examiners.

¹²⁵ *Ibid.*, 173.

All of these laws played a fundamental role in the legal practice of midwives in Puerto Rico by placing standards of licensure in the hands of doctors, a form of hostile licensing.

In 1931 the Governor,¹²⁶ following local Senate recommendations and proposals by the Medical Association of Puerto Rico, according to law #22 of 1931, appointed seven doctors to serve on the Board/Tribunal of Medical Examiners for a four year term. The Tribunal was authorized to distribute licenses for the following professions: surgeon, osteopath, intern and midwife. The cost of the licenses was \$25 for doctors and \$5 for midwives and interns. Article 20, referring to midwives, stated that in order to practice a prospective midwife was required to:

be of age; to have good health; to be of good moral conduct and mentally sound; to present an eighth grade diploma from...Porto Rico...present a license of graduate nurse and a midwife's diploma obtained after studying theory and practice for not less than a year , and to have assisted, under professional direction, not less than fifty childbirths...in one of the hospitals or clinics duly recognized by the Board [sic] of Medical Examiners. After the applicants have been accepted, they shall pass a theoretical examination in obstetrics, gynecology, and pediatrics and a practical examination in an obstetric clinic...That such license shall authorize [midwives] to attend only normal childbirths¹²⁷

According to this law, the tribunal would have the power to withdraw or cancel a license if a midwife committed "fraud or deceit during the practice of her profession...committed a felony, was a confirmed alcoholic...or was addicted to the use of narcotics...or assisted ...in...a criminal abortion..., malpractice...[or] immoral and

¹²⁶ This is the highest Puerto Rican political office due to the colonial political structure under U.S. jurisdiction.

¹²⁷ Law 22 of 1931, 221.

dishonorable conduct.”¹²⁸ These were high professional standards that deviated little from those placed on physicians.

This law authorized the certification of assistants to midwives for the first time, although there was never a significant group of women who actually fulfilled what was stipulated in this law by acting as assistants to midwives. Instead, there were over one thousand licensed “auxiliary midwives” or “assistant midwives” who worked as primary birth attendants. Auxiliary midwives actually worked alone and with no on-site supervision. The law described them as assistants but in actuality they were those listed in later government reports as officially tending to most of the homebirths in Puerto Rico. These women attended monthly workshops and meetings led by licensed midwives. Law 22 did not specify the requirements for auxiliary midwives. In this case the law had the intent to regulate a profession that never came to fruition. Instead, the law set the stage for the regulation of the auxiliary midwife, who did come to play a key role in childbirth.

That year (1931) the *Negociado de Higiene Infantil* (Department of Infant Hygiene) began training midwives through courses taught by nurses trained in obstetrics.¹²⁹ Auxiliary midwives received certification upon the completion of courses and an oral examination. In 1935 the Midwives Club was organized, which held required monthly meetings around the island for local midwives, who did indeed attend and report their deliveries.¹³⁰ These certifications gave them license to practice as childbirth attendants.

¹²⁸ Ibid, 225.

¹²⁹ Puerto Rican Department of Health, *Material informativo*.

¹³⁰ Diaz and Cabrera Mont, “El servicio de las parteras,” 70.

The license is the end result of the interaction between medicine and the law.¹³¹ Licensing has the purpose of regulating and establishing standards for medical practice to follow as well as protecting citizens from abuse. It establishes limits and accepted procedures. At the same time it can create monopolies and consolidate professional power, inhibit social change within its own realm of operation, protect disciplines, and defend the interests of those in power or who have access to the power and decision making structures.¹³² Social relations are in part shaped this way. Licensing serves to legitimize or de-legitimate.

In 1947 law 390 further defined the Board of Nurse Examiners and acknowledged the practice of practical and auxiliary midwives.¹³³ This law established that

“[g]raduate nurses¹³⁴ shall be authorized to practice as assistant midwives, and the Department of Health shall issue to them the proper license...the Department of Health shall be authorized to issue a license to any practical midwife to practice as assistant midwife, with such preparation and under such regulations as said Department may prescribe...in any place where the services of an assistant midwife are needed and there are no graduate nurses who practice as assistant midwives.”¹³⁵

This ambiguous law did not define terms or practices of auxiliary midwives but it seemed to acknowledge both the need for and the presence of practical midwives, much as the previous 1931 law had done. The term *practical* midwife seems to refer to those midwives who had been self-trained and assisting births in Puerto Rico long before the existence of this law. The passage of this law probably responded to the scarcity of

¹³¹ De Vries, *Regulating*, 15.

¹³² *Ibid*, 4-7.

¹³³ In 1947 Law 390 was approved to amend the second paragraph of section 9 in the 77th law, creating the Board of Nurse Examiners of 1930, amended in 1937.

¹³⁴ The term "graduate nurse" refers to nurses with specialized four year university training and also those nurses with specialized high school or vocational training.

¹³⁵ Law 390 of 1947, LEPR, 751.

medical providers in most of the island and the desperation of the state to provide understaffed healthcare centers with medical personnel. It was a response to the scarcity of birthing services available to women in Puerto Rico. It made more sense to pull providers from the existing local resources and work with them. Nevertheless, this law was not willing to let go of biomedical professional hierarchies. Practical and auxiliary midwives could only practice where graduate nurse midwives were unavailable. It is doubtful that nurses themselves had organized professionally to obtain access to midwifery as they were already attending over ten percent of births in Puerto Rico and would have little reason to dedicate themselves exclusively to midwifery.

The potential impact of this law became evident years later. In 1951 the Commissioner of Health, Juan A. Pons, revised and approved the regulations that were to order the practice of midwives, under the authority of the 1931 and 1947 law. Four years later the Department of Hygiene published a report on the Auxiliary Midwife Program (*Material informativo sobre el programa de comadronas auxiliares*). It opened with tones that resonated with Dr. Quevedo's opinions concerning turn of the century midwives. The Department described midwives as being “a group of illiterate and ignorant women imprisoned in a world of superstition” and went on to say that classes to take them out of their state of ignorance would be organized.¹³⁶ This, despite the fact that hundreds of midwives were already attending government-led training in local midwives' clubs. At the same time, this document admitted that midwives had a certain prestige, especially in "marginal communities."¹³⁷

¹³⁶ Department of Health, *Material Informativo*, 1.

¹³⁷ *Ibid*, 1 (in section titled, *La labor de la comadrona...comunidad*).

The Health Department saw the role of the midwife as one of support for the pregnant women and her family. Her job was to advise and help the woman prepare for her birth, pregnancy, and motherhood. "From the public health point of view, the auxiliary midwife is a determinant and effective factor as she has been trained on the health of both the baby and the mother at birth; avoiding possible complications."¹³⁸ The report listed the obligations of the auxiliary midwife, including the registration of the newborn, making postpartum visits, doing social work, attending normal births, offering resources according to the needs of the family, turning in their birth registration cards monthly, recruiting other midwives and aiding in the control of illegal midwives.¹³⁹ Midwives were instructed about asepsis and about how to refer difficult births to hospitals. It was also during these same years that an independent school sponsored by the Department of Health for the training of obstetric nurses was opened.¹⁴⁰

When the Secretary of Health, Guillermo Arbona, revised the regulations for auxiliary midwives in 1951 under law 22 of 1931, he changed the minimum age for midwife practice from 21 to 18 years and established that the midwife had to obtain her license from the Department of Health Tribunal, be a U.S. citizen, be a moral woman "of good name," complete the training offered through the Public Health Unit and pass an exam or be a graduate nurse with experience in obstetrics. She had to demonstrate intelligence and interest, know how to write appropriately, attend the monthly meetings of the Health Department, be respectful to her health superiors, work in the municipality

¹³⁸ Ibid, 2-3.

¹³⁹ Ibid.

¹⁴⁰ Perez y Rivera, *Enfermería en Puerto Rico*, 175.

that she was assigned and apply a silver nitrate solution to the newborns' eyes.¹⁴¹

Furthermore she was prohibited from treating women with swollen feet or hands (which is common among pregnant woman), previous surgical interventions, or who presented hemorrhaging or a prolapsed umbilical cord. This list of limitations was extensive. The 1951 law did not specify what a moral women of good name was, but we know that many midwives came from less privileged sectors of society with very different customs and beliefs from those exercised by their professional or administrative superiors. This presented a problem in the sense that many of their birthing methods or lifestyles could be understood as being in conflict with these requirements. In fact, well over a hundred midwife certificates were rescinded each year from the late forties through the early fifties, but the reasons are unknown.¹⁴²

Midwives' obligations were almost all geared toward the support of physicians and the state. In this sense they were expected to fulfill the roles that have been traditionally defined by notions of gender. They gave families emotional support, made referrals to authorized medical and social agencies, and completed registry and reporting paperwork. They were only permitted to exercise their more specialized, birth related knowledge if it did not fall under high-risk definitions.

Midwives in Puerto Rico were at disadvantage in terms of their relation to power. The interaction between medicine and the law provided a network of controls, regulations and educational standards that structured and organized the professions related to

¹⁴¹ Silver Nitrate is a solution used still today to prevent the spread of the mother's possible venereal infections to the baby's eyes during birth.

¹⁴² *Department of Health Annual Report of 1947* (107 permits cancelled), 213; *Department of Health Annual Report of 1951-52* (168 permits cancelled), 106; *Department of Health Annual Report of 1952-53* (200 permits cancelled), 93. In the 1949-50 *Department of Health Annual Report*, there are 1,547 auxiliary midwives listed and 380 in courses in order to receive a permit, 73.

birthing, as well as birth itself, according to its biomedical understandings. Through the history of legislative measures related to childbirth, we can trace the changing cultural values and focuses that eventually squeezed midwives into extinction. This is a history of how physicians with biomedical power were better positioned to express and represent the changing face of Puerto Rican, industrial society to the detriment of other health related professions such as midwives.

In Puerto Rico midwives have been trained under “official,” medical models since 1931. If midwives instead had access to independent schools where they could have operated and practiced within the realm of their own methods and models, then they would have graduated direct entry¹⁴³ midwives instead of obstetric nurses or auxiliaries. These midwives could have feasibly established their own examination measures and standards of practice and rigor and insured the quality of their practice on their own terms and later have a say in when and how to present their own proposals to the appropriate governmental bodies, as the medical profession was doing by the 1950s.

The Push for a Medical School

In the process of making a profession official, educational structures are created to consolidate the functioning and control of that profession. In the same way that processes toward licensing may be hostile or friendly, there also existed educational procedures that affected the profession in different ways. Midwifery was never recognized as a legitimate profession within the parameters of the new, modern-industrial

¹⁴³ *Direct-entry midwives* were those educated by other midwives through hands-on observation and assistance and without having taken any formal nursing instruction.

Puerto Rican society, and therefore never had an independent educational structure to support its formation. Doctors in medicine, on the other hand, did have both educational and professional institutions, which served to consolidate, legitimate and develop their profession.

Though doctors and institutionalized medical options were becoming quite visible and seemed to be expanding in the early 1950s, few could have imagined the drastic changes that birthing would undergo in the subsequent decade. Before 1950, anyone who wished to follow a career in medicine had to leave the country for training in medicine. The island boasted a major research and training center for tropical disease, The School of Tropical Medicine, which had been in operation since 1926. Until 1950, however, there was no medical school capable of producing U.S. Board-certified physicians. This all began to change quickly when administrative medical leaders and educators set the wheels in motion for the creation of a medical school. The creation of the medical school would change the face of medical practice and services throughout the island.

The Puerto Rican Medical Association held a roundtable discussion during its 1948 convention to discuss the possible establishment of a medical school. They heard statements from the local Commissioner of Health, the Chancellor of the University of Puerto Rico, and several prominent doctors who held administrative positions on the island. Juan Pons, the commissioner of health, presented a strong case for establishing a medical school. He claimed that tuberculosis and diarrheal diseases, the leading causes of death at that time, were social diseases and that, according to the World Health Organization, every human had an inalienable right to feeling well.¹⁴⁴ To these claims he

¹⁴⁴ Juan Pons, "Why a Medical School for Puerto Rico," *Boletín de la Asociación Médica de Puerto Rico* XVI, no. 1 (Jan 1949) 6-7.

added that the United States estimated that there should be a doctor for every 600-900 people, yet in 1949 Puerto Rico there were a total of 696 physicians, yielding one doctor for every 3,009 people.¹⁴⁵ Pons called for an expansion of medical services in order to reach the middle, working and indigent classes, who had little or no access to adequate medical care. He concluded that Puerto Rico needed to train more good physicians with knowledge of their own, local conditions and that this could only be done at home.¹⁴⁶

In addition to Pons' heartfelt plea for a medical school, Dr. Costa Mandry, medical historian and then director of the Ponce Pila Clinic, provided a brief history of previous attempts at establishing medical education in Puerto Rico. He reminded the audience that in 1892, a few years before the United States took over the island, the *Ateneo* of Puerto Rico, an intellectual and cultural center, began medical instruction in anatomy, obstetrics, physiology and hygiene. This effort ceased during the Cuban-Spanish-American War.¹⁴⁷ In 1922 a group of Puerto Rican doctors attended a dinner at the Columbia University Club and aroused enough interest among Columbia's officials to push a bill through in May 1923 to authorize any large U.S. university to establish branches of medical colleges in Puerto Rico and funds were appropriated for a commission to study the topic. Columbia University united with local doctors and established the School of Tropic Medicine in San Juan. Later, in 1934 another bill to establish a medical school was introduced in the local Senate, but lack of funding deterred the effort.¹⁴⁸ In 1943, University of Puerto Rico's President Jaime Benitez appointed a group of prominent Puerto Rican doctors to report on the possibilities of

¹⁴⁵ Ibid.

¹⁴⁶ Ibid, 11.

¹⁴⁷ O. Costa Mandry, "Endeavors to Establish a Medical School in Puerto Rico," *Boletín de la Asociación Médica de Puerto Rico* 41, no. 1 (January 1949) 14.

¹⁴⁸ Ibid.

establishing a medical school, which resulted in the recommendation to create one within the University of Puerto Rico's system.

The following year the Puerto Rican Legislature passed a bill allocating 500,000 dollars for a medical school.¹⁴⁹ Doctor Costa closed his remarks by making a few dramatic points. He stated that 70 per cent of the deceased in Puerto Rico had not seen a doctor for their last illness and that in most areas of the territory there were shortages of doctors, specialists, and many vacant positions in the Department of Health in general. According to him, 38 percent of doctors worked in the San Juan area while there were towns with over 77,000 inhabitants without any doctors.¹⁵⁰

Chancellor Benitez, along with other influential leaders in medicine, stated their opinions about opening a school of medicine at that 1948 Puerto Rican Medical Association (AMPR) meeting. Benitez presented the position of the University of Puerto Rico, stating that it was in favor of a medical school in Puerto Rico, but that it did not have to be under the auspices of the University of Puerto Rico.¹⁵¹ Guillermo Arbona, the director of the School of Public Health in the School of Tropical Medicine, assured those present that the Puerto Rican public supported the establishment of a medical school but also attempted to explain the "lukewarm" position that the Puerto Rican Medical Association had assumed on the subject. Arbona claimed that doctors were afraid that politics and lack of funds would hamper efforts to build a medical school. They worried that medical standards might diminish and competition might increase if local access to

¹⁴⁹ Ibid, 15.

¹⁵⁰ Jaime Benitez, "The Position of the University of Puerto Rico," *Boletín de la Asociación Médica de Puerto Rico* 41, no. 1 (January 1949) 26.

¹⁵¹ Benitez indicated that two medical schools would be excessive and referred to the retired Dr. Lambert, who directed medical research for the Rockefeller Foundation, as a resource to turn to for the creation of this future medical school. Ibid.

medical education were expanded.¹⁵² On the other hand, Arbona informed his audience that there already existed a curriculum and library of medicine at the School of Tropical Medicine that would suffice for the first two years of medical study. In addition, Puerto Rico could count on its twenty-two years of past medical research and the construction of medical sites by the Insular Health Department as well as many other hospitals for the training of their medical students. The San Juan City Hospital, for example, had recently been approved by the American Medical Association and would be an already existing, appropriate site for training. Puerto Rico also could draw from the sixty-five (of a total of 852) doctors on the island that had been trained in "acceptable" medical schools to train future students in medicine.¹⁵³ Arbona believed that all of these factors put Puerto Rico in a good position to establish a qualified medical school.

The one dissonant voice at that 1948 meeting was that of Enrique Kopisch, from the Department of Pathology of the School of Tropical Medicine. His basic premise was that more doctors did not necessarily equate to better healthcare and that it would be cheaper to continue to send Puerto Ricans to train in United States medical schools. He stressed how common it was for doctors to stay in urban centers and provided the example of Cuba, which boasted an excellent ratio of doctors to people, but in which 58 per cent of the doctors were in Havana, leaving many peasants with no healthcare. In Kopisch's opinion, the medical problems in Puerto Rico hinged on poverty and low levels

¹⁵² Guillermo Arbona, "Present Facilities," *Boletín de la Asociación Médica de Puerto Rico* 41, no. 1 (January 1949) 20.

¹⁵³ *Ibid.*, 19. I would like to point out the discrepancy in reported total of physicians in this conference among those presenting. I believe this is an indication of the lack of solid institutionalization of universal criteria as well as methodology of data collection, representative of the time.

of education, which would not disappear with a medical school or by having more doctors.

The apprehension surrounding the medical school expressed by Kopisch and the Medical Association did in part become cause for concern at different levels by the 1950s and 60s for many. There would be a school of medicine, more doctors, more intervention by the state in medical affairs, a permanent scrambling for money, space and resources, and constant difficulty with the distribution of medical staff outside of the metropolitan areas.

The School of Medicine

The School of Medicine of the University of Puerto Rico opened for the academic year of 1949-1950 as an extension of the School of Tropical Medicine, which already held clinical instruction in Venereal Diseases, Pediatrics, Obstetrics, Tuberculosis, Pathology, Epidemiology, Tropical Dermatology, and Tropical Deficiency Diseases. The School initially worked in consultation with Columbia University. The new School of Medicine began its first year curriculum with courses in Histology, Embryology, Neuro - Anatomy, Biochemistry and Nutrition, Physiology, Biostatistics, First Aid and Psychiatry. Classes met from Monday through Saturday. Tuition was set at 1,200 dollars a year.¹⁵⁴

As each group of medical students moved through its medical training, the curriculum expanded and new faculty was hired. The fourth year curriculum was in place by June of 1953, with two-month clinics in Medicine (internal), Surgery, Pediatrics,

¹⁵⁴ University of Puerto Rico, *Bulletin of the University of Puerto Rico School of Medicine, Announcements for the Academic Year 1950-51*, Rio Piedras, Puerto Rico, January 1951, 19.

and Obstetrics and Gynecology, and one month devoted to Public Health, Chest Diseases, Psychiatry and medical specialties. Students would then complete an additional two months of training outside of the Medical School. By this time the medical school had made arrangements with the San Juan Municipal Hospital, San Juan Presbyterian Hospital, the Bayamon District Hospital and the San Patricio Veteran's Hospital for clinical instruction.

The connections between the medical school in Puerto Rico and other schools in the rest of the world were both significant and surprisingly limited. Links with the United States were solid and continuous. In contrast, there seemed to be a notable discord between some of the departments in the University of Puerto Rico's School of Medicine and the School of Public Health. This discord would become more severe in time. The University of Puerto Rico School of Public Health clearly visualized part of its mission as extending medical training to neighboring countries. Spanish speaking students from all of Latin America were welcomed by the school and attended courses there. In fact, one could claim that Public Health in Puerto Rico had an explicit internationalist focus, without losing its local commitment. This was not so when it came to the training of physicians.

Medical professors and students were deeply engaged in two main geographical arenas: Puerto Rico and the United States. At the same time, there was a long-standing custom of travel to Mexico and Spain with the goal of attaining medical training and later returning to Puerto Rico to practice. Though there were scattered visits from European, Latin American, and Caribbean doctors and administrators, almost all direct interaction at the University of Puerto Rico School of Medicine occurred between Puerto Rico and the

United States. Both the School of Tropical Medicine decades earlier and the University of Puerto Rico School of Medicine were born in consultation with Columbia University and supported by allies from powerful organizations such as the Rockefeller Foundation. As a territory of the United States, Puerto Rico was subject to the jurisdiction of federal controls, licensing, and educational accreditation. From the early fifties, as the medical school was taking shape, several University of Puerto Rico medical professors received grants to study methods and organization in United States universities such as Columbia, Harvard, Tulane, and the University of Minnesota. Dr. Fuster, full time University of Puerto Rico faculty and the head of the Obstetrics and Gynecology department, was one of these grantees.

The Medical Association of Puerto Rico's Educational Campaign Against Folk Healers

The Medical Association of Puerto Rico (AMPR), made up of local physicians, had been working closely with existing governmental power structures since the beginning of the twentieth century. The AMPR began a generalized campaign in the Spring of 1948 with the intention of educating the Puerto Rican people about using institutional medical services. These organized physicians feared that the public at large was not accessing modern medical services and instead following traditional practices of home healing and seeking the aid of *curanderos* (traditional healers). *El Mundo* newspaper published an article quoting local physicians claiming that Puerto Ricans were living in a fog of ignorance by turning to *curanderos* and shying away from the science of medicine. *Curanderos* were described by those doctors representing the AMPR as swindling, deceiving charlatans. They urged people through radio programs to leave

their homes when they fell ill and seek the aid of physicians and pharmacists.¹⁵⁵ Even though there seemed to be no specific mention of the midwife in this campaign, biomedical attitudes toward lay healers were clear. Perhaps since most midwives were operating under governmental and medical supervision and licensing, they were not specifically targeted. Either way, the Medical Association was committed to re-directing public opinion in favor of institutional medicine.

Attitudes and Patterns of Use Among Providers and Mothers

Conceptual frameworks concerning birthing and the need for intervention and monitoring at mid-century were clearly different from those at the end of the twentieth century.¹⁵⁶ During the period from 1948-1953 the number of medical interventions, other than Demerol, episiotomies, and forceps, was low. Cesarean sections did not reach ten percent and the majority of births were documented as normal and spontaneous.¹⁵⁷ Keeping interventions to a minimum reflected the doctor's success level, according to government and medical authorities at that time.¹⁵⁸ Obstetricians were trained to use

¹⁵⁵ See articles from *El Mundo* in Newspaper Archives of the Puerto Rican Collection of the University of Puerto Rico's Medical Sciences Campus. "Doctor Astor denuncia los danos causados por los curanderos," *El Mundo*, 11 May 1948.

¹⁵⁶ During the 1990s, interventions such as the use of sedation, analgesics, anesthesia, uterotonics (to stimulate contractions), cesarean sections, episiotomies (a cut in the pelvic floor during delivery) were all routine procedures in all hospitals.

¹⁵⁷ *Informe Anual del Departamento de Salud del 1947-48*, 210, 285, 287, 292; *Informe Anual del Departamento de Salud del 1949-50, 1951-52*, 109.

¹⁵⁸ Among the few articles published on the topic in the *Boletín de la Asociación Médica de Puerto Rico* during this time, two of them provide clues as to what would have been considered acceptable medical intervention in childbirth. Frank Walsh, "Analgesia and Anesthesia in Obsterics", *Boletín de la Asociación Médica de Puerto Rico* XLII (May 1950) 294-298, concludes that sedation and anesthesia cause fetal complications and are harmful for premature deliveries. In Simpson, Zimmerman and Jesurun, "Routine Extraperitoneal Approach for Cesarean Section", *Boletín de la Asociación Médica de Puerto Rico* XLII, no. 8 (August 1950) 490-494, it mentions that a cesarean rate of 5 per cent would be the acceptable limit. According to

forceps and many doctors resorted to them on a regular basis, but generalists, who attended many births, did not resort to them as often. In fact, doctors who practiced and trained during the 1950s and 1960s often criticize young obstetricians for their unwillingness and lack of knowledge concerning forceps and other childbirth maneuvers.¹⁵⁹ Doctors could turn to xrays, simple lab tests, and stethoscopes for prenatal care and monitoring maternal-fetal development. Use of pain management varied greatly. Demerol was probably the most common drug administered for pain and some doctors reported using Pentothal, scopolamine and even spinal blocks. Doctors administered analgesics themselves and could not count on anesthesiologists, as they were very few in number and therefore dedicated their efforts to major surgery.

The majority of doctors during this time were general practitioners. General practitioners were doctors with a broad preparation, but without particular sub-specialization or highly technical training. They did not rely on laboratories and machines to make a diagnosis. They practiced family medicine. During their medical education physicians received some training in obstetrics and many accumulated a great deal of experience with labor and delivery.

Perceptions about midwives were vague and inconsistent in the 1950s. The Health Department believed that “particularly in rural zones, slums, and housing projects, the midwife enjoyed a certain social prestige.”¹⁶⁰ Few doctors were actually interested in taking on the burdens of labor and delivery and were happy to leave childbirth to midwives. Of the doctors interviewed for this project, all ten reported having trusted the

these obstetricians, vaginal delivery would be the safest for 95 per cent of all obstetric cases. Also, please see Córdova 2005 interviews of Doctors Castillo, 20; Ramirez minute 30; Onis; and Mulero, 24.

¹⁵⁹ See Córdova 2005 interviews Castillo, 20, 28; Onis; Villamil, 24; Cordero; Tomas, 13.

¹⁶⁰ Departamento de Salud, *Material informativo*, 2.

work of the comadronas auxiliares and the nurses.¹⁶¹ Many of them claimed that there were midwives and nurses who were well versed in childbirth practices. Women with more money, especially in urban areas, preferred accessing the hospital's more formal environment to using midwifery services. At private hospitals, where women from more privileged sectors birthed, there was little space for the midwife. There, the role of science and professional expertise already held sway.

Within elite circles, private hospitals represented progress and therefore to give birth in them communicated social status. Only those who could pay out of pocket or had private insurance could afford private services, which not only permitted longer stays and direct medical supervision, but also private and semi private spaces, unavailable in government centers. But this access to hospitals and social clout perhaps played into birthing practices in less conscious ways than we might assume. Those outside of that kind of healthcare access did not seem resentful nor did they strive to access these hospital services for their birthing needs.¹⁶²

Though it is difficult to make geographical generalizations because there are so many exceptions, patterns of use and access also varied between rural and urban spaces, which also tended to reflect class difference. Often, the problem with making regional generalizations is that within particular classifications of sectors of the island it is common to find pockets or neighborhoods that contrast starkly with mainstream classifications. For instance, nestled within an area that might be considered predominantly urban, developed, and upper middle class, there will be small *barriadas* or

¹⁶¹ See Córdova 2005 interviews: Astor, 16; Castillo, 12; Villamil, 16, 18; Tomas, 19, Cordero.

¹⁶² During my interviews with doctors and mothers I would always ask about the patient demographics and why certain services were used instead of others that were available at the time. All mothers seemed satisfied with what had been available at the time and no one expressed desires to access childbirth services outside of what they had used.

neighborhoods that resemble very underdeveloped, poverty-stricken, rural sectors. Urban, subsidized housing projects also sprung up around the island within areas that do not share its demographics. Furthermore, during the first three stages that we will be discussing in this dissertation, rural Puerto Ricans moved in great numbers to urban centers both on the island and the U.S. mainland carrying, as well as disrupting, their cultural practices and belief systems. In the mid-forties, over 90 per cent of rural mothers birthed at home, whereas just over 70 per cent of urban mothers did the same. As was mentioned above, those mothers with the highest levels of education and income from urban areas were the most likely to utilize a hospital setting for childbirth.

The Health Department and Puerto Rican law before 1953 allowed midwives to oversee “normal” and low-risk births, almost as an unavoidable measure, until the institutionalization of birthing was complete. In other words, even though it was accepted that these women could handle uncomplicated births, the Department of Health did not consider it ideal.¹⁶³ The midwife represented vestiges of backwardness not supported by the modern- industrial project.¹⁶⁴ She did not respond to the demands of scientific rigor that the medical “expert” represented. The hospital, with its access to new, though limited technologies, cleanliness and orderly image, traced the horizon to follow towards the future.¹⁶⁵ According to the paradigm of industrial progress, the midwife was superfluous. But, as long as the desired level of progress was not attained, the midwife continued to provide a useful service, serving almost as a bandage.

¹⁶³ Department of Health, *Material Informativo*.

¹⁶⁴ Department of Health, *Material Informativo informativo*, 1.

¹⁶⁵ I use the term "supposed" here because many hospitals actually lacked medical technology, space, cleanliness and order despite the legal and medical demand for it.

Conclusions

Among the defining characteristics of this stage of the history of birthing in Puerto Rico were the centrality of the midwife and homebirths, scarce interventions carried out with respects to pregnancy and delivery, and the very early stages of medical-institutional expansion. By 1948, doctors had already accumulated several decades of experience in professional organization and self-representation through groups such the Puerto Rican Medical Association. Midwives, on the other hand, responded to periodic calls from the Health Department but had not managed to engage in self-organized efforts to represent or promote their professional interests. Regulations and licensing laws also left midwifery at a disadvantage vis-à-vis physicians. Childbirth was left to what was seen by medical practitioners and families as a natural and expected female process that in rare cases could produce unexpected and pathological results, but that would, by and large, be an all around successful event. This was the case even though maternal mortality rates were high. This might have been the case because death was probably considered a normal part of life as well. Doctors were trained outside of Puerto Rico and most practiced general medicine, which included obstetrics and gynecology. The women who did not deliver their babies at home would predominantly deliver in public hospitals, many of which were fraught with deficiencies.

Doctors at this time were not exclusive truth bearers of expert knowledge. Mothers, fathers, midwives, the state, and even doctors regularly considered the midwife, as well as the female body as experts in childbearing. Whether people believe this expertise was learned through informal or formal education, achieved through experience, or born of innate female knowledge, it was valuable enough to hold a space

of socially accepted power during childbirth for the majority of laboring women. Midwives were loosely regulated by the state and although their practices demonstrated a limited standardized influence from medical and state-led institutions, they usually practiced alone, using their individual discretion. Their contact with mothers was almost exclusively limited to labor, delivery and immediate post-partum. They were part of the communities they served, but did not necessarily form social network systems distinct from those of other members of the community.

Childbirth itself was not yet defined as a pathological, high-risk event in need of strict regulation and standardization, but there were already some classification efforts in place, which served to distinguish between normal and abnormal births. Most births were assumed to be normal. The pregnant body was not monitored, nor penetrated regularly by any sort of medical provider or complicated technology, whether that be the clinic staff, the physician, or the midwife. It was a body capable of birth and assumed to be able to withstand some hardship and ultimately in the hands of God or nature.

CHAPTER TWO

STAGE TWO- TRANSITIONING TOWARD HOSPITAL BIRTHS, 1954-1958

Doña Penchi's Story¹⁶⁶

Doña Penchi had spent the day preparing for the monthly comadrona meeting at the health center. She took great pride in keeping the contents of her black medical case in prime condition. She had washed her sheets and diapers and left them over hot vapors until they glistened. Once they were dry and ironed, Doña Penchi folded the four diaper cloths carefully and placed them in the white linen bags she had sewn, and later did the same with the two sets of sheets. Next, she placed her scissors and tweezers in metal bowls on the clean floor, covered them in alcohol, and lit a match to them in order to sterilize them. She laid out her gauze, post-partum pills, silver nitrate drops, rubber sheet, balance, and "sublimada" capsules (for hygienic cleansing). Everything was then packed up individually and neatly in her black bag just like the first day she purchased it at the health unit. As she took a last peek inside, she breathed in the sterile aroma that was becoming so familiar in her household. She closed her bag securely and placed it out of the way of her children.

¹⁶⁶ Story based on interview, Córdova, *Interview with Doña Penchi*.

Doña Penchi felt ready for the possibility of her supervisor selecting her bag to inspect in front of all the other midwives that month. She was, after all, the youngest and newest of the group at forty-one and knew that the veteran midwives were not all that happy to have more competition in the area. Everyone seemed cordial enough, but they kept to themselves and never addressed Penchi directly with work related subjects or concerns.

Doña Penchi remembered when she approached Nurse Moreno, the area supervisor of the Comadrona Auxiliar Program, about training to become a midwife one day while she was visiting the Health Unit. Moreno exclaimed that it was precisely strong women like her who were needed to train as midwives and invited Penchi to their next meeting. Every month, for over a year, Doña Penchi attended the meetings with the text book that the Health Department had provided, listen to Moreno as she gave her class, and return home.

Once Penchi was ready, she took a written exam, which she passed, and proceeded to buy her bag, insignia, and white uniform. She received her midwifery diploma in 1956. It was not long after that when her services were first solicited. She would receive five dollars from the municipality for every birth registered in her book every month. Each family she served would also either pay her another five dollars or give her some sort of compensation usually in the form of animals or produce.

The next day, after she finished her morning chores at home, she put on her white skirt, blouse, and shoes, grabbed her bag and book, and headed out to town. Once she arrived she could hear the women already reciting their oath,

...before God and in the presence of my colleagues, to
guard the life of all mother and child before, during

and after labor and delivery...I will help all mother,
who might need medical services to access
them...promise...to keep all family secret that may be
entrusted to me...

As she sat down, she chimed in, "I will always have my bag prepared and I will
make cleanliness my guide and end. So help me God." Doña Penchi knew the routine
well. She took in a deep breath and began to sing the Club Anthem along with the others.

Our prestige is to fulfill our duties,
keep a clean uniform and medical bag too.
The midwife wishes to do her job,
delivering healthy children and infection-free mothers.

We care for baby's eyes with all our heart
with silver nitrate drops we end infections.
The midwife wishes to do her job,
delivering healthy children and infection-free mothers.

We wash our hands well with a brush, soap and water...

As Doña Penchi sang, her thoughts turned to her work as a comadrona auxiliar in
her rural town of Corozal. She was proud of her skill and felt satisfied with the results
she was having by helping so many poor mothers bring their children into the world.
Because she served God and counted on his presence she felt confident all would
continue well. Even so, as a midwife, she made sure to follow the rules established by
the state and refer to the hospital any mother who presented severe bleeding or who was
in labor while the baby was in a traverse or unsafe position to deliver. Her clients in
Corozal would see a doctor in the town Health Unit for prenatal care but were always told
to seek out a midwife for their delivery as there was not enough room in the local hospital
to tend to all of them. She met some of her clients at the Health Units, others knew her
from around town and yet others sought her out without having ever met her. She
assisted up to three mothers per month.

Doña Penchi's work as a midwife ended years later after moving closer to the San Juan area, where no one knew her and women would no longer request her services. There were no monthly comadrona meetings in the area and women there traveled to the hospital to give birth. This suited Doña Penchi just fine. She was older and less willing to be interrupted at all hours of the night in order to attend a birth. None of her children wished to train as midwives and she knew she had been the last midwife to train under the comadrona auxiliar program of the Department of Health in Corozal. Many of her grandchildren, however, would take up medical careers as doctors, nurses and dentists.

Introduction and Chapter Overview

The seeds of change were planted before 1953. Up until then, the majority of births occurred in homes with midwives, but after the mid 1950s, the total number of births occurring in hospitals surpassed those at home for the first time. The years between 1954 and 1958 were characterized by unequal patterns of change toward hospital births. Although the setting for the majority of island births changed, midwives maintained their position as the primary birth attendant between 1954 and 1958. There were still many midwives, such as Doña Penchi, who were delivering babies at home, but they were already aware that there were no new recruits following in their footsteps. By 1954 it became clear that birthing in Puerto Rico was headed away from the home and into institutionalized spaces. This was a transitional period where institutions and expert knowledge were consolidating their power piece by piece at a swift but uneven rate.

Puerto Rican society was moving away from a closed, internally focused domestic sphere to an outwardly looking one where many family issues could be resolved by external specialists with expert knowledge. Practices such as birthing, for example, once taken care of in the home, moved to public spaces managed by experts.

Puerto Rico was operating less as a predominantly agrarian, rural society and more as an urbanized one based on manufacturing.¹⁶⁷ The social structure that often revolved around a “casa grande” (sugar plantation estate) as well as the smaller mountain farms (coffee), all organized under an agricultural system, had been unraveling for some time. Just as Doña Penchi did in our opening story, the population migrated toward urban centers and the isolated sense of rural intimacy lost its hold over much of the island. This was also the peak of out-migration to the United States.¹⁶⁸ At the same time, families turned their hopes toward the newly formed state and its Popular Democratic Party projects in order to overcome poverty and “underdevelopment.” Many trusted that the Popular Democratic Party leadership would fulfill their promises for a “better Puerto Rico.” The plan of industrialization, *Operation Bootstrap*, was to raise the standard of living, bring order and social peace, and increase production.¹⁶⁹

The story of industrialization, urbanization, and development is a familiar one to any twentieth century scholar of Latin America. In Puerto Rico, though, the social and economic changes occurred faster and covered more geographic and class terrain than in most other countries. Why did San Juan not follow the urban-liberal development boom of cities such as Rio de Janeiro, Buenos Aires and Mexico City at the turn of the century

¹⁶⁷ Dietz, 258.

¹⁶⁸ Most of the migration was promoted by the local government and supported by the United States in hopes of providing an escape to unemployment, overpopulation and underdevelopment.

¹⁶⁹ González Díaz, *El Partido Popular Democrático*, 59-97.

or during the first decade of the century? Why was it that when the industrial project became a local and federal priority after WWII it could take root in just a couple of decades, whereas a similar process took over a hundred years in Europe and in the United States?

One of the explanations for the late and rapid changes related to industrialization is that significant and mostly unforeseen obstacles, including natural disasters and the colonial relationship to the United States, had aborted a process of industrialization that otherwise might have begun decades earlier.¹⁷⁰ Furthermore, the industrialization project was initially successful because it was a combined venture bringing together a new, local leadership with a majority following from all areas of the island, which included and reached out to the rural sectors and the post-war imperial initiatives coming from the North. And finally, Puerto Rico's size and infrastructure also facilitated quick and far-reaching change.

Urban living requires political and social structures focused more on bureaucratic, public norms than family norms.¹⁷¹ The family was ceasing to be the primary unit of production, as it had been. It was transforming because of the restructuring of the labor system, for example. Factory work pushed the family into new cultural systems and modes of living.¹⁷² To these changes we should add the large numbers of Puerto Ricans migrating to the continental United States in search of work

¹⁷⁰ The Puerto Rican economy never took off after the two major hurricanes of San Ciriaco (1899) and San Felipe (1928), which destroyed the island and its crops, the economy became entirely dependent on the U.S. and had unfavorable colonial conditions (Foraker and Jones Acts: money conversion disadvantage, U.S. shipping monopoly, imported prime material, foreign monocultures such as sugar controlled economy, taxes), and the Great Depression hit Puerto Rico harder than the U.S.

¹⁷¹ Paolo, Macry, *La sociedad contemporánea: una introducción histórica* (Barcelona, Editorial Ariel, 1997) 93.

¹⁷² Macry, 111.

and a better life. The family and neighborhood were less self-sufficient. Health, nutrition, and employment were no longer provided exclusively within the domestic sphere. Many families started looking outward for their basic needs, toward the state and public sectors.

The great majority of Puerto Ricans strongly supported the progress and modernity, via industrialization, that the Puerto Rican Popular Party promoted. Science and technical experts were cornerstones in these plans for progress. Social science boomed and experts were attracted to the island. They trained and consulted on ways to collect and interpret data and suggested paths toward development. Within this the general atmosphere of change, there were no significant social forces in place that offered alternatives to the ideas or structures related to science-based truth claims and biomedical expertise. Much of this was due to the fact that ideas related to progress and science had not manifested themselves merely on ideological realms but were sustained with concrete results that everyone could see and experience for themselves. The quality of life and health standards had been improving all over the island at the same time that the Popular Democratic Party's industrial project was growing. There was a general sense that Puerto Rico actually could join the modern, developed world.

In, *Historia económica de Puerto Rico*, Rafael de Jesus, a member of the Popular Democratic Party, describes modern societies and their characteristics in ways that mirrored ideas espoused by the Popular Democratic Party leadership. He argues that what every PPD leader agreed upon was that Puerto Rico needed to achieve significant increases in production and material wellbeing. To achieve this, technology based on scientific knowledge became generalized. Subsistence agriculture was replaced by

commercial exploitation and paid labor. This was accompanied by urban growth and the creation of widespread manufacturing. Education and literacy were universalized, extended families became less common, and the nuclear family began to replace this previous model, among other things.¹⁷³ Another author and PPD and urban planning scholar, Navas, claimed that regardless of differences among them, Popular Democratic Party members believed in economic growth and development through scientific methods and planning.¹⁷⁴ The Popular Democratic Party aimed to distribute material and social wealth to greater sectors of society under a democratic banner representing the “free world.”

Thus, if Puerto Rico was to progress as “la gran familia” (the great family), the metaphor Governor Muñoz Marín oftentimes employed when referring to the population of Puerto Rico, local attitudes and individual behavior within each home would also have to change by adapting to modern concepts of democracy, development and order.¹⁷⁵ For this to happen, social harmony had to be secured.¹⁷⁶ Political unrest that characterized the 1950s¹⁷⁷ and the vastly uneven levels of development with impoverished urban pockets

¹⁷³ Rafael de Jesus Toro, *Historia económica de Puerto Rico* (Cincinnati, South-Western Publishing Co., 1982) 158-60.

¹⁷⁴ Gerardo Navas, who received his PhD from the University of California, Berkeley in 1972 and later went on to teach in and direct the University of Puerto Rico School of Urban Planning, in his 1978 publication, *La dialéctica del desarrollo nacional*, analyzes precisely the same industrialization period of the 1950s and 1960s. More specifically, he discusses the changes that unfolded within the Popular Democratic Party leadership. His model of development and modernity is similar to the one presented by de Jesus. Gerardo Navas, *La dialéctica del desarrollo nacional: el caso de Puerto Rico* (Río Piedras, Editorial Universitaria de la Universidad de Puerto Rico, 1978) 114-15.

¹⁷⁵ The discourse of “la gran familia” harks back to the latter XIXth century hacendado class and their aspirations to separate from Spain and push for a unified harmonious front that overlooked any class, racial or national differences. For further information see Juan Gelpi, *Literatura y paternalismo en Puerto Rico* (San Juan, Editorial Universidad de Puerto Rico, [1993] 2005) 99.

¹⁷⁶ González, *El Partido Popular Democrático*, 61.

¹⁷⁷ The 1930s and 50s witnessed significant clashes and confrontations with the Puerto Rican Nationalist Party as well as other pro-independence organizations with both local and U.S.

threatened the peaceful image that the island needed to attract foreign capital and assure a "democratic" society capable of avoiding "communist" rebellion. This philosophy of modern development is evident in the Popular Democratic Party's *Catechism of the People*, which states: "One must give the people all opportunities for good health and education, because a healthy and prepared man is able to produce more for his own welfare and for the social prosperity of all."¹⁷⁸

After the Second World War, scientific advances affected healthcare all around the world. Pharmacology made significant strides and presented the options of oral contraceptives, antibiotics, and vaccines.¹⁷⁹ This enhanced the credibility of the medical model in developed countries. The countries that aimed to join the list of developed countries, such as Puerto Rico, knew that adapting this medical model would bring them closer to their goals. Biomedicine took longer to become institutionalized in developing countries, as one might assume. This partly explains why in the 1950s when in the United States nearly all babies were born in hospitals, in Puerto Rico that was not yet the case.¹⁸⁰ Informal healthcare providers in developing countries (or areas), such as midwives, were still in demand where technocratic medicine had less reach.

Long before the 1950s, churches, then municipalities, and later the central government, registered births and gathered basic data about its population. However, it

government forces. These clashes resulted in repressive laws, imprisonment, attempts against the U.S. Congress and even massacres. For more information see Acosta, *La mordaza* and Picó, *Historia*.

¹⁷⁸ Popular Democratic Party, *Catequismo del pueblo*, 1944, 10.

¹⁷⁹ Contraceptives (1950s), vaccines (1949) and antibiotics start to be used widely in Puerto Rico after WWII, Rigau, *Historia*, 362-3.

¹⁸⁰ Fraser, *African American*, 37, points out that in the U.S. this was true for the anglo population but not the case for African American southern babies, who were still born at home with midwives. Therefore the history of birthing in the U.S. would be quite different if broken down by region, class and race. Overall 88 per cent of U.S. babies were born in hospitals by 1950 according to Leavitt, *Brought to Bed*, 171.

was not until after the 1960s that vital statistics and demographic studies became a cornerstone of bureaucracy with entire departments dedicated to them. This was an indication of an attempt to organize, regulate, and manage society. Even registered midwives were required to carry and use a basic record book of the births that they attended. Once a baby was registered, the government could identify the place of birth and include it in the general records of vital statistics. Data collection was part of the search for order and classification that was needed in order to increase production in an advanced capitalist society. By placing these responsibilities in the hands of the government and its institutions, such as the Department of Health, the authority and power to keep, gather and distribute information shifted from the local parish to the central state government. Hospitals took on important bureaucratic functions as part of this process, generating enormous quantities of statistics and health records.

The labor force also underwent significant changes. The female labor force was growing at faster rates than the male labor force.¹⁸¹ Many men lost job opportunities in agriculture as the economy abandoned huge portions of the agriculture sector and concentrated efforts in manufacturing, and were unable to find new alternatives. Unemployment became a clear problem as Operation Bootstrap progressed, but more new job opportunities did arise for women than men, especially in the garment, service, sales, and office occupational sectors.¹⁸² More women were taking jobs outside of the home. The formal participation of Puerto Rican women in the labor force fluctuated

¹⁸¹ Helen Safa, "Female Employment and the Social Reproduction of the Puerto Rican Working Class," in *The Puerto Rican Woman; Perspectives on Culture, History, and Society* ed. Edna Acosta-Belen, 89 (New York, Praeger, 1986).

¹⁸² Marcia Rivera, "The Development of Capitalism in Puerto Rico and the Incorporation of Women into the Labor Force," in *The Puerto Rican Woman; Perspectives on Culture, History, and Society* ed. Edna Acosta-Belen, 42 (New York, Praeger, 1986).

between 20 and 30 per cent throughout the entire period covered in this study, over double what it had been at the beginning of the century.¹⁸³

The fertility of Puerto Rican women worried the Puerto Rican and the United States governments, social reformers and social scientists. Scholars have identified this period as one where medical intervention around family planning began escalating to new levels with the introduction of the oral contraceptive pill and female sterilizations. This unfolded in a context in which overpopulation was seen by intellectuals and government leaders as threat to Puerto Rican development and democracy. The government promoted mass migration to the United States in order to facilitate economic development and curtail overpopulation.¹⁸⁴ Malthusian theories weighed heavy on the island and social problems were often blamed on high fertility levels and high population density. Despite all of these new efforts and concerns about fertility, only a minority of Puerto Rican women sought contraception before 1958.¹⁸⁵ Even so, news that science and medicine could be placed in the hands of women, families, and governments to limit female fertility in the form of devices, pills, and operations spread throughout the island.

During the mid 1950s the Department of Health initiated a program to reorganize health services by regions, thereby coordinating all of the dispersed health services with those provided by the Department of Social Welfare. It took several years for this to take place and was not until the early 1960s that it was fully implemented. It was called the "Regionalization of Health". Each of five district hospitals was to serve as the nucleus for one region. Municipalities also ran services in local medical units. On a municipal level,

¹⁸³ Isabel Picó, "The History of Women's Struggle for Equality," in *The Puerto Rican Woman; Perspectives on Culture, History, and Society* ed. Edna Acosta-Belen, 47 (New York, Praeger, 1986).

¹⁸⁴ See Briggs. *Reproducing Empire*, ch. 4.

¹⁸⁵ *Ibid.*, 122.

it was not uncommon to see over half of local budgets dedicated to medical services as well. Municipalities spent an average of 32 per cent of their budgets on health care.¹⁸⁶

Among of the distinguishing characteristics of the period covered in this chapter are the uneven patterns of change toward hospital birthing that unfolded on the island between 1959 and 1965. Following the general move toward institutionalized and industrialized, urban spaces, birthing practices, professionals, and settings were all in a staggered transition toward institutional expertise. I will analyze the uneven patterns of change in birthing choices on a regional level, the uneven process of professionalization of predominantly female careers -nursing, nurse-midwifery and midwifery- and the those which were predominantly male -medical practice, and explain some of the differences between the public and private sphere. The relationship among federal, commonwealth, and municipal governments with childbirth practitioners and the medical school are included in this chapter with the hope of shedding some light on the way in which they all influenced one another. I also take some time to examine the relationship between the social class and place of training of doctors and whether they choose work in the public or the private sectors. The state of medical interventions and medical perceptions about childbirth also form a part of this chapter.

¹⁸⁶ School of Public Health and Administrative Medicine of Columbia University and the Puerto Rican Department of Health, *La asistencia médico-hospitalaria en Puerto Rico; resumen y recomendaciones del informe rendido al honorable gobernador y la legislatura del Estado Libre Asociado*, Santurce, Puerto Rico, 1960, 17. In the mid 1950s there was a public health unit in every municipality (76) except Culebra, as well as 114 rural subunits. The seventy-six public health units were grouped for administrative purposes into thirty-three sanitary districts. There were thirteen urban subunits in the larger cities and twenty-one health centers operated with hospital units, which rendered services to the medically indigent only. The Maternal and Child Health Bureau was in charge of all maternal care services, including the midwifery program. Puerto Rico Department of Health and Juan Pons, *Puerto Rico Public Health Plan Submitted to the U.S. Public Health Service U.S. Children's Bureau, 1955-56-1956-57*. San Juan, Puerto Rico, 2.

Overview Birthing

Between 1954 and 1958 midwives were attending to a slight majority of births in Puerto Rico. The Health Department still counted on their services and not only acknowledged their importance, but thought that there would always exist a need, no matter how small, for midwives to respond to an occasional call for help. Nevertheless, an ever-diminishing number of women were training to be midwives and the number of meetings and training sessions fluctuated after the mid 1950s, and then diminished significantly. Doña Penchi's story recounted at the beginning of the chapter illustrates this process. We will recall that Doña Penchi trained during this period, and that once she moved to San Juan she was unable to find a place to attend her monthly meetings. She eventually stopped working as a midwife because there wasn't an infrastructure to support her services.

As we can observe in Table 2.2, overall, statistics were changing in the hospital setting as well. Doctors were delivering more babies and nurses were delivering appreciably fewer. In 1954 (Table 2.1) the number of hospital babies delivered by nurses went down 15 per cent from 1951, whereas the percentage of babies

Table 2.1: Distribution of Births by Birth Attendant and Location, P.R., 1953-54.

AT HOME (48.6% of total births reported)	IN THE HOSPITAL (51.4% of total births reported)
Midwives 100%	12% (1951-15%)
Doctors ----	67%
Nurses ----	21% (1951-36%)

Source: *Informe Anual del Departamento de Salud de 1953-54*, p. 81

delivered by midwives fell only 3 per cent. Overall, midwives delivered over half of all the babies born, followed by physicians, who delivered about a third of the births on the island in 1954. Table 2.2 compares the general changes over the years between 1951 and 1954 according to the childbirth practitioner who attended the delivery.

Table 2.2: 1951 and 1954 Comparison of Overall Distribution According to Birth Attendant

	Doctors	Midwives	Nurses
1951	25%	63%	12%
1954	34%	55%	11%

In just three years doctors increased the percentage of babies they delivered by almost 10 per cent and midwives reduced their numbers by about the same percentage.

As health conditions on the island improved, fertility rates declined. While the 1950s and 1960s were marked by the discourse of a population "explosion," in which both government and civic leaders from the United States and Puerto Rico blamed poverty and underdevelopment for high fertility rates, the truth was that health and the general standard of living were improving and fertility was declining.¹⁸⁷ In 1956 the rate of births for every 1,000 inhabitants was 34.8, and it continued dropping throughout the rest of the century, reaching 15.3 in 1999.¹⁸⁸ The rate of maternal mortality that same

¹⁸⁷ For further discussion on overpopulation discourses see Briggs, *Reproducing Empire*, ch. 4.

¹⁸⁸ Oficina de Planificación, Evaluación e Informes, *Informe anual de estadísticas vitales de 1985*. San Juan, June, 1987, 13a.

year was 112.6 for every 100,000 live births and continued dropping until the 1970s.¹⁸⁹
 Fetal deaths followed a similar pattern as well (see Table 2.3).

Table 2.3: Selection of Demographic Statistics, P.R., 1945-1985.

Year	General Mortality Rates p/ 1,000	Infant Mortality p/ 1,000	Maternal Mortality p/ 100,000	Birthrate p/ 1,000
*1945	14.1	93.4	319	42.2
*1948	12.2	78.5	291.8	40.8
*1953	8.2	63.3	183.5	35.1
*1958	7.0	53.7	85.4	33.1
1963	7.0	44.8	54.3	31.1
1967	6.4	32.7	36.7	26.9
1976	6.6	20.2	12.3	24.1
1985	7.1	14.9	12.6	19.4

Source: *Informe Anual de Estadísticas Vitales de 1985* of the Planning Office Publisher in 1987, p.13^a.

*years that correspond to the first two stages or chapters covered in this study when the midwife was the primary birth attendant.

Maternal and neonatal survival rates improved alongside general health rates.

Birth-related statistics improved as childbirth moved into a hospital setting. This can lead one to conclude that this was due to a shift toward medicalized birthing. However, if we observe these numbers carefully this relationship becomes more complex. Birthing outcomes began improving even during the years when home births and midwife-attended births outnumbered those in hospitals under the care of doctors. The most radical improvements in the general standard of living in Puerto Rico occurred between the early 1940s and the early 1970s. Infectious diseases diminished, diets improved, sanitary conditions improved, education became more widespread and salaries increased. The widespread use of hospitals and the general medicalization of society took hold

¹⁸⁹ In 1960 it dropped from 89 to 50 for every 100,000 live births and later went up again until 1966, *Ibid*.

toward the end of this time period. Therefore, we should not assume that institutionalized biomedicine was a primary or singular force behind the health and quality of life improvement, but rather a product of and contributor to the general changes occurring on the island during the industrialization period.

The hospital was not always an attractive option for the general population. Health centers were often small and offered little more to assist women with their deliveries than they could find in their homes.¹⁹⁰ In Puerto Rico, during the 1950s, conditions at the different medical sites varied widely. The law that regulated and licensed hospitals on the island came into effect in 1950 and by the end of the decade only 14 per cent of the existing hospitals had managed to obtain a license. Almost all hospitals were operating under provisional licenses, which required yearly renewals.¹⁹¹ The conditions at many clinics and hospital sites had not changed radically over the previous decades. Many sites were in a deplorable state. They had little or no medicine or equipment, decaying buildings, mosquitoes and bugs, absolutely minimal record keeping, poor sanitation, and broken down facilities such as bathrooms and drainage.¹⁹² Therefore it should come as little surprise perhaps that homes and midwives would seem sensible, preferred options for bringing new babies into the world for many families. In a lot of ways, despite the real advances in health and the push toward modernizing services, change came swiftly but not at an equal rate for all.

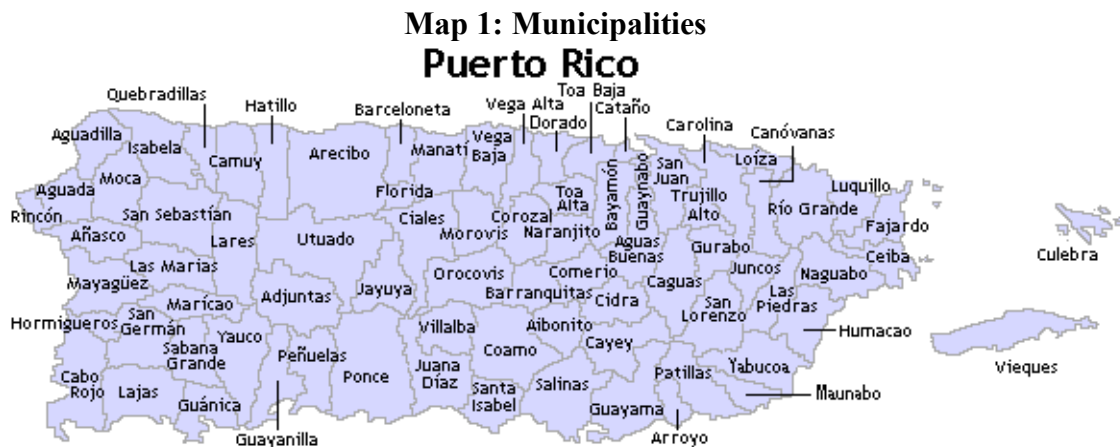
¹⁹⁰ Isabel Córdova, *Interview with Mulero*, October 13, 2005.

¹⁹¹ School of Public Health, *La asistencia medico-hospitalaria*, 27.

¹⁹² See descriptions and examples, School of Public Health, *La asistencia medico-hospitalaria*, 93-103.

Overview of Birthing Practices by Region

Bringing together the general information concerning birthing practices we learn that most births were taking place in hospitals for the first time in the 1950s but that midwives continued to assist the majority of deliveries. Nevertheless, this glosses over some significant disparities that persevered during these same years. These differences would not last through to the 1970s. According to the *1953-54 Health Department Annual Report*, in thirty-two of the island municipalities midwives assisted more than double the number of total births attended to in hospitals.¹⁹³ Even though, in general terms, more women in urban areas used the hospital to give birth than in rural areas, this was not always the case. The municipalities where hospital births doubled those performed at home actually included both urban and rural municipalities.¹⁹⁴ In Caguas and Guaynabo, for example, the number of at-home versus at-hospital births was almost equal (See Table 2.4, below, for birthing distributions by municipality).¹⁹⁵



© Joe Delgado

www.linktopr.com/map_pr_towns.html

¹⁹³ *Informe Anual del Departamento de Salud de 1953-54*, p. 203

¹⁹⁴ These were: Bayamón, Ceiba, Dorado, Fajardo, Naguabo, Río Grande, Río Piedras, San Juan, Trujillo Alto, and Vieques; representing both rural and urban areas.

¹⁹⁵ *Informe Anual del Departamento de Salud de 1953-54*, p. 203

Table 2.4: Births by Municipalities, Birthing Place, and Birth Attendant, P.R., 1953-54 (by selected municipalities and ranked from highest hospital birth rates to lowest)

<i>Municipality</i>	Total births	Born in hospital	*Born outside hospital	*Assisted by doctor	*Assisted by nurse	*Assisted by midwife	*Assisted by others
Río Piedras	5,513	4,722 (86%)	791	65	39	687	
Fajardo	469	396 (84%)	73	1	7	65	
Utua	1,461	357 (84%)	1,104	4	14	1,083	3
Ceiba	195	158 (81%)	37	1	---	35	1
Dorado	371	301 (81%)	70	3	4	63	
Vieques	212	167 (79%)	45	3	4	38	
Trujillo Alto	424	332 (78%)	92	6	---	86	
Bayamón	2,025	1,473 (73%)	552	8	12	532	
San Juan	7,567	5,356 (71%)	2,211	76	1	2,118	16
Naguabo	575	406 (71%)	169	---	3	162	4
Río Grande	383	260 (68%)	123	1	2	119	1
Mayagüez	2,617	1,673 (64%)	944	30	1	912	1
Guaynabo	871	464 (53%)	407	1	2	403	1
Caguas	2,147	1,041 (48%)	1,106	4	7	1,095	
Ponce	4,720	1,664 (35%)	3,056	4	10	3,041	1
Cayey	1,461	498 (34%)	968	4	5	950	4
Yabucoa	1,119	367 (33%)	752	5	13	722	12
San Sebastián	1,257	309 (25%)	948	34	3	891	20
San Lorenzo	1,107	248 (22%)	859	2	7	850	
Guayama	1,219	264 (22%)	955	1	112	842	
Moca	767	157 (21%)	610	11	---	592	7
Orocovis	892	151 (17%)	741	7	---	732	2
Vega Baja	1,021	178 (17%)	843	10	---	833	
Vega Alta	522	83 (16%)	439	1	---	438	
Yauco	1,350	134 (10%)	1,216	8	1	1,207	

Source: *Health Department Annual Report, 1953-54*, p. 203-4

*only includes births at home

The municipalities that showed a high number of deliveries assisted by midwives included a variety of municipalities like Guayama, a rural coastal area in the South; San Juan and Ponce, the two largest cities; and San Sebastián, a rural, mountain region from the center of the island.¹⁹⁶ Even though in cities such as Mayagüez, Caguas (not fully

¹⁹⁶ This was also true of Yauco, Mayagüez, Caguas, Utua and Vega Baja.

urban at the time), and San Juan more women gave birth at hospitals, the number of births under the care of midwives remained high. In San Juan, for example, out of a total of 5,356 births, 2,118 were tended to by midwives. In Yauco and in Utuado, both rural mountain regions, the majority of births took place at home with midwives.¹⁹⁷

The municipality of Ponce deserves special attention. The presence of midwives there during this period was impressive even though it was a major urban area with important hospitals (see Table 2.1). In 1954 there were 1,664 hospital births and 3,056 home births; 3,041 of those home births under the care of midwives.¹⁹⁸ This municipality also presented high incidences of deaths and birth-related complications in and out of hospitals. Even though at the beginning of the 1950s Ponceñas, for the most part, did not give birth at hospitals, this changed a few short years later. The change from home to hospital birthing was abrupt.

Ponce (South) follows the path of many rural towns, especially those of the Southern area (such as Salinas, Santa Isabel, and Guayama) where midwives maintained their importance longer than in other urban centers. At the same time, Ponce was a municipality that possessed renowned medical facilities. It is important to emphasize that the period which reflects the most dramatic movements towards hospitalized births starts in 1954, where we first observe that hospital births surpass those at home as a whole. Even though women in Ponce persisted more than other urban municipalities in using midwives when delivering their babies, they also reflected a pronounced veer towards the hospital during the same period as the rest of the country. What is true is that the Southern area was the last to set aside home births with midwives.

¹⁹⁷ *Informe Anual del Departamento de Salud de 1953-54*, 203.

¹⁹⁸ *Ibid.*

Table 2.5: Births in Ponce According to Location of Delivery, P.R., 1953-1962

Year	At hospital	At home
1953-54	35%	65%
1954-55	45%	55%
1956-57	47%	53%
1959-60	69%	31%
1961-62	75%	25%

Sources: *Health Department Annual Reports 1954-55*, p. 204

**In 1954, 29% of births in San Juan are at home and 71% at hospitals, and in Mayagüez 36% are at home and 64% at hospitals.

Even though Ponce deserves an exhaustive micro-study beyond the possibilities of this investigation, I will venture to suggest some ideas about its unique patterns. The Southern area has a different social and cultural structure than the rest of the island. The sugar cane economy maintained its influence until after the 1950s. According to scholars of this area, such as Isar Godreau, Sidney Mintz, and Richard Ferguson, the artisan, handicraft, and autonomous traditions had a strong cultural influence.¹⁹⁹ Communities were less inclined to adapt or dismantle their traditions intact. This was a conservative zone with numerous community pockets that were isolated from one another. Birthing practices and customs might not have been easily accepted or incorporated into the hospital setting. The hospital probably discredited or disregarded the know-how and rituals of the midwife and family.

The 1950s proved to be a time where old paradigms were particularly challenged. According to Richard Ferguson, up until 1950 Santa Isabel, a town near Ponce that has a

¹⁹⁹ Ferguson, "Class transformations;" Godreau, "Missing the Mix;" Sidney Mintz, *Worker in the Cane: A Puerto Rican Life History* (New York: Norton, 1974).

similar history of birthing practices and social structures, demonstrated little diversity with regards to social classes, practices, and values. All of this began to change in the 1950s, when many war veterans returned and many farm workers migrated to the United States in search of jobs, which were locally scarce. These men brought new ideas influenced by the United States (where births occurred in hospitals) back home upon their return. At the same time, a new professional class began to develop (mainly in education and in health), which was willing to accept the new industrialization tendencies and whose members refused to return to the cane fields and to what they saw as outdated customs.

Communities throughout the island were slowly becoming more urban and relying more on professional services. Medicine followed these tendencies and doctors presented themselves as expert healthcare providers.

Modernizing Training for Birthing Professionals

People place their trust in and seek help from those they consider knowledgeable. In this sense, after midcentury in Puerto Rico, knowledge was moving into the domain of professionally (institutionally) trained experts, who specialized in a particular field of knowledge. Experts could monitor, control, and take care of those subjects that were deemed culturally valuable. Since the value of children was changing as families got smaller, moved to cities, and became more nuclear, their care was moved into the hands of the proper authorities. Grandmothers' or mothers' wisdom on childrearing, nutrition,

and labor, no longer sufficed. Obstetricians, educators, psychologists and pediatricians began to have the upper hand in these areas.

After the mid-fifties the practice of midwifery had lost some socio-cultural legitimacy while biomedical providers had gained it. Female and informal knowledge became increasingly irrelevant. Often, professions gain power and social legitimacy when what they do becomes related to concepts of risk. By associating childbirth with risk or identifying, naming, and classifying diseases, doctors gained prestige and power easily by presenting themselves as able to manage these situations.²⁰⁰

By law and training, midwives were either coerced or convinced into deferring complicated or abnormal births to medical institutions and doctors. They in turn would inform their clients to do the same, situating themselves in a subservient rank within a new professional, social order.

As a result of Operation Bootstrap, social order became more complex, conforming to capitalist forms of production, as labor was more intensely sub-categorized, specialized and monitored. The formation of experts became paramount to maintaining efficiency and legitimacy. The medical school, for example was accredited and funded in its first year of existence and Puerto Rico was soon graduating its own, local doctors. The demand for doctors by this time was much higher than could be met by the number graduating. Therefore, in the early 1950s, midwives and nurses needed to step in where there were no doctors available.

Medical support staff needed to meet the new medical standards that the medical school had demanded of its physicians, but it would not be easy as the everyday,

²⁰⁰ Raymond DeVries, "A Cross-National View of the Status of Midwives," in *Gender, Work and Medicine*, eds. Elaine Riska and Katrina Wegar, 143 (Sage Publications, London, 1993).

overwhelming healthcare demands would weigh nursing down. Notions of gender would undercut efforts to professionalize nurses, and resistance to new professions, such as nurse-midwives, would hinder the recasting of midwifery within biomedicine. For these and many other reasons, the formation of the maternity personnel related to birthing varied greatly.

Comadronas Auxiliares

At mid-century the Secretary of Health, Juan Pons declared that “[t]hrough the improvement of the training of auxiliary midwives we shall be better prepared to reduce maternal and infant mortality rates. The nurse midwife training program already established will be, perhaps, our best method to accomplish our objectives.”²⁰¹ He recognized that midwives were an essential part of the government's plan to improve maternal and infant mortality and morbidity rates, but he also mentioned another group of medical personnel: the nurse-midwife. He alluded to the gap the auxiliary midwives were filling in more remote areas and hinted at the need to create a new sort of midwife, equipped to operate as institutional support staff. Dr. Pons explained that,

46 per cent of the total deliveries were home deliveries...a fact that has to be considered of great value, since our statistics depend entirely upon [the midwives'] performance...They contributed also with 4,861 deliveries in municipal hospitals which constituted 6.3 per cent of all deliveries. That is, in total they performed 52.3 per cent of the 77,160 births for this fiscal year.²⁰²

²⁰¹ Puerto Rico Department of Health and Juan Pons, *Puerto Rico Public Health Plan Submitted to the U.S. Public Health Service U.S. Children's Bureau, 1955-56-1956-57*, San Juan, Puerto Rico, 1.

²⁰² *Ibid.*, 17.

Furthermore, the Department of Health had declared the first midwives' week in 1953 in recognition of their labor, just as the numbers of midwives began to decline.²⁰³

Regardless of the fact that midwives continued to attend the majority of the births, after 1953, the numbers of comadronas auxiliares went down from 1,500 in 1950 to 1,100 in 1953 and continued their decline thereafter.²⁰⁴ As one would expect, the number of apprentices also diminished. They dropped to half of what they had been the year before 1955 (181 apprentices).²⁰⁵ While midwives were still in demand and the Health Department regarded them as key players in maternal health, fewer and fewer women were registering to serve as midwives. We saw this in the opening story of Doña Penchi. These midwives never organized, actively recruited or advocated for their permanence in the system.

Nurses

Nurses seemed somewhere in the middle between doctors and midwives. They too served as support for doctors and filled serious gaps in the system, and rarely attained the training, pay, and institutional support they really needed. The difference between the level of professional organization among nurses in comparison to doctors was significant. Nursing education and work conditions also varied greatly from those of physicians. Gender differences and medical hierarchies can account for many of these differences.

²⁰³ *Informe Anual del Departamento de Salud de 1953-54*, 76.

²⁰⁴ *Ibid.*, 80. In the 1949-50 Department of Health Annual Report, there are 1,547 auxiliary midwives listed and 380 in courses in order to receive a permit, 73.

²⁰⁵ *Informe Anual del Departamento de Salud de 1955-56*, 43.

Nurses were women and the vast majority of physicians were men in the nineteen fifties. This had not always been true. In 1899 half of the nurses in Puerto Rico were male.²⁰⁶

The dearth of nurses and meager nurse training had haunted Puerto Rican medicine for years. There had been a higher demand for nurses than actual nurses available to work and very few nurses had any significant formal medical training. Salaries for nurses were lower than administrative staff in hospitals and rarely surpassed 180 dollars a month in the late 1950s. During this time, more than 60 per cent of the nursing staff consisted of auxiliary personnel, most of who had no formal training in nursing.²⁰⁷

Graduate nurses, especially those with a post-high school degree, who made up the smallest group of all the nurses, were a very mobile group, like much of Puerto Rico's population during the 1950s. Most graduate nurses either migrated to the United States or always considered it as a possibility. Like doctors, even if the women who studied nursing were from small towns, as most were, they sought nursing positions and eventually moved to the San Juan metropolitan area.

In June of 1958 the Puerto Rican Legislature passed Resolution 99 authorizing and funding a two-year study on the use and conditions of medical services on the island. The goal was to end up with recommendations for a long-range plan for improvement. Accordingly, the Puerto Rican Health Department, the University of Puerto Rico School of Public Health and Medical Administration, and Columbia University organized a diverse research team and undertook an ambitious and telling study from the summer of

²⁰⁶ Isabel Picó, "The History of Women's Struggle for Equality," in *The Puerto Rican Woman; Perspectives on Culture, History, and Society*, ed. Edna Acosta-Belen, 51 (New York, Praeger, 1986).

²⁰⁷ School of Public Health, *La asistencia medico-hospitalaria*, 38-9.

1958 through 1960.²⁰⁸ Health professionals were also interviewed for this same study. The project reported that nurses were drawn into the profession by the desire to serve others and for religious motives. These motivations seem similar to those stated by midwives. Many were attracted to the scientific nature of the profession.²⁰⁹ The one factor that seemed to motivate most to go into nursing was having a friend in the same field.²¹⁰ Most nurses worked for the government and found that government service actually provided more advantages than private service, such as retirement, vacation and job security.²¹¹ We will see later that this diverged from the opinions of doctors.

There were many places where one could obtain training in nursing and the curriculum did not vary much. The problem was that most of these places were actually medical institutions instead of educational institutions. The immense demand for nurses seemed to dictate much of the training, pushing students to carry out most of their training in clinical settings, where they would put in twenty to forty hours a week, leaving little time and energy for study. This meant that training was driven by clinical demand instead of a pre-established educational program and that learning was compromised in order to fill hospital needs. To further exacerbate the situation, over half of nursing instructors in the late 1950s failed to fulfill the basic requirements needed to teach in higher education and many had not even completed their own basic degrees.²¹² With this kind of scenario in nursing education it should have been of no surprise to see

²⁰⁸ This extensive study also selected 2,951 families who were surveyed from all areas of the island. Just over half the families were from rural zones and a few less from rural zones. Half of the families were placed in a low-income bracket with limited educational levels and 12 per cent from a high income and educational bracket. School of Public Health, *La asistencia medico-hospitalaria en Puerto Rico*, 4.

²⁰⁹ Ibid., 41.

²¹⁰ Ibid., 44.

²¹¹ Ibid., 43.

²¹² Ibid., 46-7.

more and more students failing their board exams. After 1954, exam scores dropped significantly every year until the close of the decade.²¹³ The nursing programs that were growing at rapid rates were those of "enfermería práctica" (practical nursing) under the control of vocational schools of the Department of Public Education.²¹⁴ Many or all of these factors weighed against the reputation of nursing. Like most female professions, nursing was driven by practical need and experience and was subservient to higher male positions of authority and supervision.

Just as the midwife was related to practical training and used by the public medical system to treat uncomplicated pregnancies that doctors and hospitals were unable to attend, most nurses were also trapped in the practical needs and demands of the health system. Their salaries and training were often rudimentary and ranked very low. Yet nurses worked in institutional settings, whereas midwives worked in the private home while reporting to public institutions. The nurse-midwife program was promoted by the government but had trouble taking off and maintaining itself while confronting much resistance from nurses and doctors.

Nurse-Midwives

During the early 1950s, in the midst of the previously mentioned Regionalization process of the health system, a recognized administrator in public health, John Grant, consulting for the Rockefeller Foundation and now working for the Puerto Rican government, decided to recruit women to oversee and lead a project for nurse-midwives

²¹³ The information here only includes from 1954-1958. School of Public Health, *La asistencia medico-hospitalaria*, 47.

²¹⁴ *Ibid.*, 50.

on the island.²¹⁵ Locally, Dr. Pons and Dr. Arbona also supported this effort. Miriam Castro de Castañeda was recruited to train in the United States for such a purpose.

Castro de Castañeda, always an excellent student, had in 1948 received the devastating news that she had not been accepted into the Women's Medical College in Virginia.²¹⁶ Instead, she was coaxed by a nursing professor to apply to an innovative graduate nursing program in Yale University as a stepping stone to medical school.

Dr. Grant became aware of Castro through mutual friends and went to meet with her at Yale. There he asked her about her future plans. When she informed him of her desire to study medicine he told her that Puerto Rico did not need more doctors and proceeded to narrate a story on the poor health outcomes of mothers and babies and how Puerto Rico was in the mist of a "Regionalization Program" which focused on preventative medicine. He spoke to her about hemorrhaging mothers dying alone in childbirth and how nurse-midwives were the solution to these problems.²¹⁷ After insisting some more and following up on his conversation with several phone calls, Grant convinced Castro to accept a scholarship to study nurse-midwifery at the Maternity Center in New York, where most patients were Puerto Rican, while combining it with a degree in public health-/nurse-midwifery at Johns Hopkins University. First, she earned her Masters in Public Health and Nursing in the mid-fifties from Yale University. During these later studies she was able to return to Puerto Rico to conduct research in 1958 as a consultant with the Medical School. Eventually she moved back to Puerto Rico to lead a long campaign to keep the nurse-midwife program alive.²¹⁸

²¹⁵ Isabel Córdova, *Interview with Miriam Castro de Castañeda*, September 27, 2005, 3.

²¹⁶ *Ibid.*, 1-2.

²¹⁷ *Ibid.*, 3.

²¹⁸ *Ibid.*, 4.

In the meantime, by 1953, the Health Department established a training center for obstetric nurses under the “Negociado de Salud Materno-Infantil” (Bureau for Maternal and Child Health), located in the Public Health Unit of Las Monjas in Hato Rey. Four nurses with college degrees had been sent to the United States to the Maternity Center in New York as well, to train for six months in obstetric nursing so they could return to staff the nurse-midwife program.²¹⁹ This program was originally an independent program in midwifery to prepare nurses to attend women in any setting, including the home. These four nurses however were never able to practice or steer their practice toward home-based care, as they had planned, once they returned to Puerto Rico to work for the Department of Health.²²⁰

To participate in the nurse-midwife program one needed to be a graduate nurse, but in Puerto Rico the term "graduate" refers mostly to nurses with a high school or college degree. The training consisted of a one-year internship in maternity services and assisting a minimum of fifty births. The nurse-midwives also had to pass the exam given by the Medical Examination Board. Between four or five licenses were issued annually by this means, hardly enough to cover growing demands in obstetrics.²²¹

Because this program was not affiliated with any medical school or medical training center but rather under the Health Department, which is a governmental department and not a center for education, it ran into problems immediately. In 1958, in response to these problems, Miriam Castro, along with obstetricians and doctors Eduardo Arandes, Iván Peregrina and Guillermo Arbona, proposed creating a school for nurse-

²¹⁹ Puerto Rico Department of Health, *Puerto Rico Public Health Plan Submitted to the U.S. Public Health Service U.S. Children's Bureau, 1955-56-1956-57*. 20; Córdova, *Interview with Miriam Castro de Casteñeda*, 9.

²²⁰ Cordova, *Interview with Miriam*, 10.

²²¹ Juan Pons, *Informe del ELA a la XIV Conferencia Sanitaria Panamericana*, 1954, 18.

midwives within the School of Medicine.²²² The University of Puerto Rico School of Nursing had been Castro's obvious first choice, but they rejected the proposal for training nurse-midwives, and only then did she turned to the School of Medicine.²²³ A few years later the program was transferred from the Monjas public health unit to the medical school.

The situation and training of nurses, nurse-midwives, and comadronas auxiliares was rather precarious during the 1950s. By contrast, the medical school was graduating more doctors and growing rapidly. At the time, affiliation with the School of Medicine seemed like a strategic move toward stabilizing the nurse-midwife program.

The School of Medicine

In 1956, the University of Puerto Rico School of Medicine put out a *Four Year Progress Report*, in which Dean Hinman wrote that the

undergraduate medical instruction has been average; postgraduate medical instruction has been nil; public health graduate instruction has been at an amazing rate [sic]; certain phases of the research program have expanded at an astonishing rate. Service to the public has been gratifying.²²⁴

Financial support for the school had grown significantly, despite of the persistent clamor over the lack of resources. Hinman reported that local government monies had increased from \$835,000 in 1952 to \$940,000 in 1955 and that monies from elsewhere had started at \$11,900 and increased to \$430,780 for the same years. Research publications had also

²²² Córdova, *Interview with Miriam*, 11

²²³ Ibid.

²²⁴ School of Medicine and School of Tropical Medicine of the University of Puerto Rico, *Four Year Progress Report*, 17.

boomed from thirty-seven to ninety-three during that four-year period.²²⁵ By 1958 the basic budget and the teaching and research grants budgets each had neared the one million dollar mark.²²⁶ The massive increase after 1954 was primarily due to funds from the National Institute of Health allocated by the United States Congress.²²⁷

By the academic year of 1953-54, the medical school had been admitted as an affiliated member of the Association of Medical Colleges and approved as a four year medical school by the Council on Medical Education and Hospitals of the United States. In June of 1954 the school graduated its first group of forty-five doctors in medicine. That same year, five seniors at the school of medicine received two-month clerkships²²⁸ at Columbia University. Of the graduating class, twenty-two interned in the United States and the remaining twenty-three interned in Puerto Rico.²²⁹ In 1955 the school planned to admit fifty-two students per year.

Of the total student body, 121 counted on some sort of scholarship funding. Two thirds of the students had received government assistance, thereby obligating them to repay the scholarship by working for the government upon completion of their degrees. In the late 1950s over a third of the younger generation of doctors had had at least a part of their medical education financed by scholarships.²³⁰

²²⁵ Ibid.,17

²²⁶ School of Medicine and Tropical Medicine of the University of Puerto Rico, *Educational Development and Program Objective*, September 1958, Annex 1.

²²⁷ Ibid., Annex 1-2.

²²⁸ Clerkship provided hands on clinical training to medical students before receiving their degrees.

²²⁹ In 1952, 127 of the total of 141 medical students lived in student dormitories.

²³⁰ Jack Elinson, "The Physician's Dilemma in Puerto Rico," *Journal of Health and Human Behavior* 3, no. 1 (Special issue on medical care, Spring 1962) 16. Presented at an American Public Health Association meeting in Nov 13, 1961.

Medical students studied topics related to obstetrics and gynecology in all four of their years of schooling. First year students covered embryology, second-year obstetrics, and third and fourth-years rotated in clerkships that included obstetrics and gynecology. In 1957, the curriculum began requiring seniors to do a formal presentation of twenty to thirty minutes to fellow students and staff during their obstetrics and gynecology clerkship. Obstetrics had been introduced as a specialized subject and given curricular importance.

The School of Medicine was involved with several research projects in the areas of reproduction from the early 1950s. The Department of Obstetrics was in charge of overseeing a research project on the metabolism of progesterone in 1954. Other research monies assigned to the University of Puerto Rico School of Medicine coming from the United States included a 16,000 dollar grant to research uterine cancer. This grant was provided by the Department of Health. The Worcester Foundation allotted 10,000 dollars to the School for research on reproduction and had none other than the Director, Dr. Pincus, developer of the birth control pill, paid at least one visit to the campus before making this decision. This placed the School of Medicine in direct interaction with the 1950s development of the birth control pill and its experimentation on the island before releasing it to United States mainstream markets. The history of United States birth control is directly linked to the oral hormonal contraceptive research done on the island of Puerto Rico and the contributions of Dr. Pincus.²³¹

University of Puerto Rico doctors also initiated important local research projects. During the late 1950s, the Obstetrics and Gynecology Department undertook a long term

²³¹ *University of Puerto Rico School of Medicine Annual Report 1954-55*, 28-9.

project with the purpose of studying multiple pregnancies and another to study cesarean sections done in the San Juan City Hospital over the course of the previous 10 years.²³²

Beside research and federal government funding, The University of Puerto Rico Obstetrics and Gynecology Department could count on visits from prominent United States doctors every year. These doctors would give lectures, visit patients with students, and interact with staff and students on many levels. The connection between the United States and Puerto Rico was intense. During this initial decade in the school's history the University of Puerto Rico Department of Obstetrics and Gynecology received visits from Harvard, Cornell, Columbia, George Washington, Cook County, Jefferson, and Buffalo University physicians. During the 1957-58 academic year, the School of Medicine also had visitors from the West Indies Medical College. In this case, the visit was for observational reasons because a medical school had recently been founded in Jamaica and the University of Puerto Rico served as a possible model for similar efforts in the region.

Physicians holding teaching positions in the Medical School's Obstetrics and Gynecology Department played important roles in island associations and organizations during the 1950s. It was not unusual for obstetrics and gynecology university staff to take on roles of leadership in their local clubs and medical associations. Puerto Rican doctors usually formed part of groups that held social prestige and political clout yet no remuneration. Dr. Gil, Chief of Obstetrics and gynecology at the San Juan City Hospital in 1957, was also the President of the Toastmasters Club, and a fellow of American College of Obstetricians and Gynecologists (ACOG). He gave many talks at schools and non-medical gatherings against family planning. He took a particularly extreme stance

²³² *University of Puerto Rico School of Medicine Annual Report 1957-58*, 143.

considering birth control, including the rhythm method, to be morally and socially harmful. Dr. Pelegrina, who would later head the Department, was the President of the obstetrics and gynecology section of the Puerto Rican Medical Association and an American College of Obstetricians and Gynecologists fellow during the same year. Dr. Diaz Carrazo was the President of the Santurce Exchange Club and Dr. García García formed part of the Commission of Legislation and Public Relations of the Puerto Rican Medical Association and served as President of the Commission of Health and Welfare of the San Juan Lion's Club.²³³

Teaching staff at the Medical School could count on low pay, few resources and teaching space, and plenty of long hours of work. The Department of Obstetrics did not have enough resources, regardless of the significant increase in the budget, to offer more than a couple of full-time appointments during their first ten years of existence.²³⁴ This meant that professors had to dedicate their time to private medical practice if they wanted a comfortable living wage. The School of Medicine was doing well and growing quickly, but still had some room to grow, improve and stabilize.

Medical Intervention During Childbirth

Slowly, more medically trained birthing specialists began offering their services on the island. The San Juan City Hospital approved a three year residency program in

²³³ *Ibid.*, 96, 116.

²³⁴ School of Medicine and Tropical Medicine of the University of Puerto Rico, *Educational Development and Program Objective*, September 1958, Annex 1.

obstetrics and gynecology in 1952.²³⁵ Articles on obstetrics and gynecology began appearing in the Medical Association's bulletin. Topics included anemia during pregnancy, inductions, use of x-rays in prenatal care, major gynecological surgical procedures commonly practiced, pain relief during labor, and obstetrics and gynecology practices that lead to brain damage in newborns. They were authored by both local and mainland doctors. The specialization of obstetrics was developing in tandem with a demand for trained biomedical birthing experts in hospital settings.

Even so, medical interventions during labor and delivery did not vary greatly from the previous period discussed in chapter one. Episiotomies were still common and cesarean sections were still rare. Sterilizations and hysterectomies, however, were on the rise. Removing women's uteruses to relieve symptoms related to vaginal relaxation and prolapsed uteruses became, by the mid 1950s, the most common major gynecology surgery in Puerto Rico. This procedure was practiced twice as much in Puerto Rico than in most states in the United States. Obstetric professor David Holmes from the University of Puerto Rico attributed this fact to the high multiparity rates of Puerto Rican women. He also lamented that there were no new techniques or procedures available to obstetrics and gynecology doctors in the last fifty years.²³⁶

As far as inducing labor, doctors suggested that only women with a mature cervix ready to birth and an engaged fetus should be induced and only if the baby or women was in some kind of danger. Induction was practiced by either manually breaking water or by

²³⁵ David Holmes Chafey, "Review of Major Gynecological Surgery," *Boletín de la Asociación Médica de Puerto Rico* 48, no. 11 (November 1956) 451.

²³⁶ *Ibid.*, 451-7

administering pitocin (oxytocin).²³⁷ Even though pitocin was used with some regularity, it was still in experimental stages.²³⁸ It has not been uncommon in medical practice to use medical procedures, instruments, and drugs before researching them or before their approval. Warm enemas also were suggested to induce labor. Medical indications for induction and cesarean sections included preclamsia, problems with diabetes or RH incompatibility, and cephalopelvic disproportion. Absolute and relative contraindications included prematurity, fetal distress, high station of the fetus' head, previous incision in the uterus, increased tension in the uterus, abnormal bleeding, parity greater than five, and a mother over age thirty-five.²³⁹ During inductions, doctors suggested using analgesics such as demerol, morphine, atropine and scopolamine.²⁴⁰ These doctors did recognize in writings published in Puerto Rico that inductions and the medications accompanying them could cause depressed respiration in the infant, tears in the cervix, ruptures of the uterus, smothering of the fetus, and increased bleeding in the uterus.²⁴¹

The Puerto Rican Medical Association published an article from a chief United States naval obstetrician in 1956 promoting twilight sleep deliveries.²⁴² I have found no evidence that this sort of procedure ever became commonplace in Puerto Rico beyond select private practitioners like doctor Castillo, who practiced in the San Juan area in the Ashford Presbyterian Hospital and would resort to concoctions of demerol and

²³⁷ J. Rodriguez Olmo, "Inducción del parto," *Boletín de la Asociación Médica de Puerto Rico* 47, no. 2 (1955) 65-69.

²³⁸ William Finn, "Induction and Stimulation of Labor," *Boletín de la Asociación Médica de Puerto Rico* 48, no. 9 (September 1956) 361.

²³⁸ Finn, 361.

²³⁹ *Ibid.*, 361.

²⁴⁰ *Ibid.*, 368.

²⁴¹ *Ibid.*, 368, 369.

²⁴² Twilight sleep is when morphine and scopolamine are administered to the parturient (with or without other drugs) during labor leaving her with no memory of her labor and delivery process.

scopolamine during his deliveries, often at the patient's request. He had been trained in Harvard and specialized in Boston's Bringham Women's Hospital and served mothers from affluent social backgrounds. In the United States this method of pain and anxiety relief had been in practice for many decades. According to a *Puerto Rican Medical Association Bulletin* 1956 article, there had been "an increasing demand for painless labor from the pregnant woman" in the United States.²⁴³

Medical historians, such as Wolf and Leavitt, have contended that United States women have had a particular terror of pain during birth and have either deferred to doctors for or demanded pain relief from doctors for many decades. Wolf argues that the problem with the medical attempts at pain relief up until the 1960s was that male doctors, whether at home or in the hospital setting, had very little understanding of the actual pain and sensations experienced during childbirth, thereby administering pain relief rather senselessly.²⁴⁴ Furthermore, the need or perceived need for pain relief justified specialized medical intervention and gave obstetricians a respected space in both the medical world and labor and delivery. At the same time, women were willing to cede their power of negotiation to specialists and ended up very grateful for having been spared from the excruciating burden of pain toward the final stages of labor. Women, with no other point of reference, came to believe they were unable to tolerate the pushing stage of labor, where the baby finally was expelled. Though Leavitt makes a similar

²⁴³ Rafael Quinquilla, "Thorazine in Obstetric Analgesia," *Boletín de la Asociación Médica de Puerto Rico* 48, no. 6 (1956) 239.

²⁴⁴ Wolf, "'Might Glad to Gasp the Gas'," *Health: An Interdisciplinary Journal for the Social Study of Health, Illness and Medicine*, no. 6 (2002) 367.

argument, she claims that doctors had been administering ether and chloroform since the mid 1800s, but that they also used it during the first stage of labor.²⁴⁵

This sort of dynamic is important to understand as it is an example of the ways in which medical practice and perception speak to one another and redefine each other in ways which have little to do with scientific, objective, or disinterested research, which we often assume support medical practice. Though every birthing experience is different, almost all women who have experienced labor and delivery without medication describe the pushing stage as the least painful but perhaps the most intense.²⁴⁶ Perhaps because it is the stage during which women bare down, work particularly hard, and make the most noise, United States doctors had assumed it was when women needed their help the most. What is usually the most painful and trying stage of labor is during transition, when completing the final centimeters of dilation, right before the second stage of "pushing" occurs. It is therefore easy for parturients to believe that because labor has gotten harder and more painful that it would only get worse instead of less painful. If we add the impression they might have of expulsing a human seven pound baby out of what is usually a rather small, intimate, and delicate orifice, it would be easy to assume that the most "horrifying" part of labor would be this second stage. This is precisely when the obstetrician in the United States tended to medicate the mother to oblivion, extract the baby with forceps, and later hand the baby over to an untraumatized, grateful mother.²⁴⁷

Debates among Puerto Rican obstetricians about the appropriate or accepted interventions during pregnancy and childbirth were ongoing. Many physicians hung on to the idea that the less the better and a few had moved into the more extreme spectrum

²⁴⁵ Leavitt, *Brought to Bed*, 118, 121, 140.

²⁴⁶ Wolf, briefly summarizes pain studies in, "*Might Glad to Gasp the Gas*," 367-8.

²⁴⁷ *Ibid.*

such as twilight sleep. There was also a new trend toward performing hysterectomies in order to alleviate some gynecological complaints. There seemed to be little communication among specialists. Doctor Rifkinson, a University of Puerto Rico professor and neurologist, warned about routine obstetrical practices that could be damaging to the newborn in a 1957 article in the Puerto Rico Medical Association Bulletin. He was concerned about how little medical students were being taught about the importance of blood and oxygen flow to infants during labor and delivery. He criticized the common obstetrics and gynecology practices such as clamping the cord immediately after labor, inducing labor days or a week before full term, using narcotics and anesthesia during labor, and performing unnecessary cesarean sections, as all of these procedures were known by neurologists to have detrimental effects on newborn brains and in some cases even lead to doubling neonatal death rates.²⁴⁸ Most doctors used anesthesia sparingly for pain relief during childbirth in Puerto Rico at this time. Doctor Castillo, the same obstetrician mentioned above, who had practiced from the early 1950s, claimed that because there was only one anesthesiologist in San Juan in the mid-fifties, he would only be called for cesarean operative cases.

None of the mothers I interviewed or spoke to informally, who gave birth to their children in the 1950s ever described their experiences as particularly terrifying or excruciating. Almost everyone speaks of labor pains, but I have seen and heard little evidence indicating fears of birthing comparable to those described by United States scholars. This might explain why perhaps Puerto Rican doctors might have been intervening less during childbirth. Fear and tension have been clearly linked to greater

²⁴⁸ Nathan Rifkinson, "Obstetrical Practices and Brain Damage of the Newborn," *Boletín de la Asociación Médica de Puerto Rico* 68, no. 7 (January 1957) 37-40.

complications and pain in childbirth. If Puerto Rican mothers are less anxious or negative about the birth process, they might actually experience less pain. We can make the assumption that fear and pain were not factors motivating Puerto Rican women to deliver in the hospital in the same way they motivated many women in earlier decades in the United States.

Public Vs Private: 1950s Patterns of Medical Usage and Services

Because the structure of medical services in Puerto Rico is so different from that of the United States and birthing practices varies between the public and private sectors, it is worthwhile to elaborate on some of the specific characteristics of the public and private medical sectors. Several official, independent systems providing medical services operated in Puerto Rico simultaneously: the ELA (State) Department of Health, the municipal governments, and the Fondo del Seguro del Estado, which together provided close to two thirds of all hospital services. Private hospitals provided the remaining third. The Federal Government (U.S.) also provided a small percentage of services to veterans and their families. The local government occasionally contracted private services, which meant that 90 per cent of all hospital costs were covered by the government.²⁴⁹ State public hospital and dispensary services were provided through five District Hospitals, thirty-three hospital units in the Health Centers, six tuberculosis hospitals, a psychiatric hospital, and a hospital for leprosy.

As part of the same study done from 1958-1960 by the Department of Health and Columbia University on medical services mentioned earlier, a study of 500 physicians

²⁴⁹ School of Public Health, *La asistencia médico-hospitalaria*, 13-15.

who had received their degrees after 1940 was also undertaken in the summer of 1959.²⁵⁰ This included almost all of the physicians with more recent degrees practicing at the time. Half of them were working for the government and half were in private practice. Each physician was interviewed separately for a duration of one to two hours concerning their practice, training, and attitudes toward service and the future of their medical practice. The results of the investigation carried out with Puerto Rican doctors crossed the ocean and made its way into discussions among public health workers and intellectuals in the United States.²⁵¹

In spite of the apparent interest on the part of the municipalities in improving health services, these studies revealed a widespread concern from both doctors and patients about the state of affairs in municipal health centers. Municipal hospitals and health centers were reported as attending a higher number of patients than they were equipped to handle. They did not count on adequate physical structures and space, and were low on supplies, equipment and staff. Staff was underpaid and municipal employees were not protected by the Personnel Law in place at the state level. Professional staff, like doctors, were paid through the state and often rotated for periods of time into non-urban municipalities and yet it was very difficult to attract quality technicians, doctors, nurses and other medical staff to many of the rural municipalities. If this were not enough, medicine was often dispatched without proper prescriptions in the municipalities and resources were allocated inconsistently.²⁵²

But what doctors and the general public seemed to see as the gravest of all problems that municipal health centers faced was that of the split in authority between the

²⁵⁰ Ibid.

²⁵¹ Elinson, *The Physician's Dilemma*, 14-20.

²⁵² School of Public Health, *La asistencia medico-hospitalaria*, 18-19.

Health Department or "modern medical professional advances" and local mayors.²⁵³

Doctors described deep tensions and continuous conflicts with local politics and mayors.

"Many Physicians believe[d] there [was] too much political interference with the practice of medicine in Puerto Rico."²⁵⁴ They were referring specifically to the seventy plus mayors on the island who disposed of their local resources as they wished. Reports were made of mayors distributing medicine or using ambulances as part of political campaigns and personnel were certainly at the mercy of political shifts and personal political preferences. Doctors reported the friction with mayors as one of the main reasons for leaving the public sector. Such was the state of affairs between doctors and mayors in the late 1950s, that the Governor had appointed the then Secretary of Health to head a committee to look into the mayor-physician relationship, among other things.²⁵⁵

Toward the end of the 1950s, 58 per cent of all medical visits were made to governmental dispensaries, 35 per cent to private medical offices, and 7 per cent received home visits from doctors.²⁵⁶ As one might imagine, those visiting private offices and receiving medical visits came from the higher income brackets. On the other hand, almost all those that had sought medicinal services in the previous three months incurred their own out of pocket medical expenses. Most of the expenditure was for medication.²⁵⁷ Few people had medical insurance at this time. Eighty-two per cent of families interviewed had no health insurance at all. Others had at least one member

²⁵³ Ibid., 19; Elinson, *The Physician's Dilemma*, 19.

²⁵⁴ Ibid., 19.

²⁵⁵ Ibid.

²⁵⁶ School of Public Health, *La asistencia medico-hospitalaria*, 5.

²⁵⁷ Ibid.

covered by health insurance. Blue Cross and the Teachers Association Health Plan were the most common plans among the few who had any insurance at all.²⁵⁸

Whether district, federal, private or non-profit hospitals were used, the government covered nearly 90 per cent of all the expenses. Seventy per cent of hospitalized patients stayed in large common rooms, 20 per cent in semi-private rooms, and only 11 per cent enjoyed private quarters. The average cost per patient per day in general and district hospitals was barely over seven dollars, a third of what was spent in the United States.²⁵⁹ Most Health Centers (Centros de Salud) around the island were actually being used at around half of their capacity, raising costs per patient.²⁶⁰ The reason for the low occupancy was usually the duplication of services. For example, government clinics were often built within a few miles of each other and municipal and *Fondo del seguro del estado* (similar to worker's compensation) medical institutions would be located in a same geographical area.

Surgery and obstetrics were listed as the most common reasons for hospitalizations, each composing close to 20 per cent of all hospitalizations. Interestingly, most of those admitted for surgery and obstetrics came from the higher income groups and the remaining hospitalizations had higher rates among the lower income group.²⁶¹ We know that the higher the level of education and income, the smaller the family size during this time.

Other practices that varied between private and public hospitals were postpartum stays. Private hospitals lodged 60 per cent of new mothers between eight and ten days,

²⁵⁸ Ibid., 11.

²⁵⁹ Ibid., 53.

²⁶⁰ Ibid., 62.

²⁶¹ Ibid., 8.

whereas in public hospitals the same percent of mothers stayed for approximately five days. Private hospitals kept only 2 per cent of their maternity patients for five days.²⁶²

Class and regional differences played out in other significant ways as far as the type of services accessed and opinion toward public services. Opinions about governmental services versus private practice were split. Two-thirds of those interviewed in urban areas understood that government institutions were as good or better than private ones. Rural residents were divided almost evenly on the same issue. This was probably due to the fact that the top research and medical government institutions were located in metropolitan areas.²⁶³ The type of medical providers sought by patients was mediated by class as well. Spiritists have been a long-standing health care alternative in Puerto Rico. In the late 1950s, close to a third of those from the lower socio-economic brackets, and 5 per cent of those from the highest bracket, had consulted spiritists for their health care needs. Patients in rural areas were more likely to visit a spiritist than a pharmacist.²⁶⁴ In general, most people sought medical help locally, but over a third were actually hospitalized outside of their zone of residence.²⁶⁵

A marked cleavage between private and public practices and practitioners existed, as wealthier patients were much more likely to access private medical services. There were also some class differences between doctors serving government agencies and those in private practice. In Puerto Rico at the time, most doctors working under full-time government contracts also carried out some private practice and most of those in private practice carried some sort of government workload. "Government service is more

²⁶² *Informe Anual del Departamento de Salud de 1947-48*, 379.

²⁶³ School of Public Health, *La asistencia medico-hospitalaria*, 8.

²⁶⁴ *Ibid.*, 12.

²⁶⁵ *Ibid.*, 13.

attractive to physicians from middle class families and private practice to physicians from wealthy families." Interestingly, the small minority of physicians who came from poor families were also more likely to be in private practice. Two thirds of young physicians reported coming from upper middle class or wealthy families.²⁶⁶

The likelihood of physicians working within the government system also depended on the location of their educational training and internships. Most Puerto Rican doctors trained in the 1940s and 1950s received their undergraduate training outside of Puerto Rico; primarily in the continental United States. Those trained in the United States were the least likely to work in the public sector. United States medicine has been predominantly private overall. On the other hand, most Puerto Rican doctors had interned in Puerto Rico and only one fourth served their internships in the United States.²⁶⁷

Public medicine had a much greater role in Puerto Rico during this time than in the United States. The reasons doctors were attracted to either private or public practice also varied. In general, though, doctors in Puerto Rico agreed that the advantages of private practice included higher salaries in the long run, more independence, better work conditions and relations with patients, higher public, social, and medical prestige, and a higher sense of security. Government service offered a few of its own advantages in the eyes of doctors despite knowing that on general terms government salaries were half of private practice salaries. It offered better pay in the initial years of practice, provided opportunities to be of service to the community, to do interesting work and to study,

²⁶⁶ Elinson, *The Physician's Dilemma*, 17.

²⁶⁷ The physicians who most tended to serve the public system were the ones who interned in countries outside the United States system altogether and public service was the least attractive to physicians who interned in the continental United States. *Ibid.*, 18.

made for a better home life and vacations and arranged for retirement benefits.²⁶⁸ Private practice felt more secure to Puerto Rican physicians, whereas in the United States it was government employment that offered a greater sense of security to their doctors.²⁶⁹

Conclusions

By 1958 there were over 1,400 doctors practicing in Puerto Rico and just over 1,000 auxiliary midwives. The number of doctors had doubled and the number of midwives had dropped by four hundred since the beginning of the decade. Moreover, there were only a handful of new midwives in training ready to renew and continue their practice while the medical school attained full credentials, had graduated its first few classes of physicians and was attaining funding increases. Women in medicine, such as nurses and nurse-midwives, were still struggling to assert their professional training and rank. The Department of Health had come to recognize the labor of midwives, gave them credit for many of the improved maternal health statistics, and, on paper planned to strengthen the midwifery program. It did very little, however, in practice to keep the comadrona program alive. The Puerto Rican Department of Health also promoted the training of nurse-midwives, with little success.

More babies were born in the hands of midwives than doctors and nurses but for the first time in Puerto Rican history, the number of babies born in a hospital setting surpassed those born at home. This was true of the totality of births throughout the island, but is not true if we look at each municipality or geographical area separately. In some municipalities most women were birthing at home and in others the majority were

²⁶⁸ Ibid., 15.

²⁶⁹ Ibid.

birthing in hospitals. Despite these apparent discrepancies, what seemed more consistent was that there were few women ready to take over the job of the now older midwives. Midwifery seemed doomed to become extinct.

The majority of physicians were still general practitioners, but the specialty of obstetrics was showing only modest growth in numbers, medical debates, residencies and general medical education. Most doctors worked in the public sector, where the majority of hospital births took place. Doctors from wealthy backgrounds, as well as those trained in the United States, preferred working in the private sector, where their patients too were from more privileged socio-economic sectors. Doctors, as a whole, were more often than not hesitant to intervene much during labor and delivery, even though many did perform episiotomies with the idea that it aided women and because it was easier for them to suture than a spontaneous tear.

Very few women did tear spontaneously and only a low percentage of mothers were classified as having any significant complication during their deliveries. Women, doctors, nurses and midwives doubted little about the ability of the parturient to birth and most assumed things would go well if nature was left to run its course and the mother had had a good pregnancy, even though infant and maternal mortality rates were still high. The medical establishment worried about hemorrhaging, cephalopelvic disproportions, anemia, and diabetes to some degree, but would not expect any of these problems to come up often. Doctors who had cesarean rates over 5 per cent were sometimes described as "butchers" by their colleagues.²⁷⁰

Several mothers and midwives I interviewed half a century later suggested that women in the 1950s had fewer complications and had no problems birthing at home

²⁷⁰ Isabel Córdova, Interview with Castillo, September 8, 2005, 20.

because women took less medication and there were fewer diseases than today. Doña Penchi, whose story opened this chapter, explained that women began birthing in hospitals because of all the new diseases that did not exist when she was delivering babies.²⁷¹ Tomasa, the mother from the first chapter, claimed that

today things get more complicated every day and we are not like before. So many medicines and stuff that make the baby crossvert [sic], invert this and that...I have catalogued it as it being because of the many things people take to avoid children."²⁷²

These comments communicate some of the ideas these women had about childbirth. To them, childbirth had been a simple, natural process but had changed, gotten complicated, and now needed to occur in the hospital setting. In other words, modern living and access to drugs, birth control and chemicals had interfered in the body of mothers and increased their birthing and health risks. The perceptions of these two women represent how concepts about maternity and childbirth change over time, rather than describing actual biological changes that mothers experienced. It would be this kind of recasting of childbirth that would move it definitively to a medicalized setting.

²⁷¹ Córdova, *Interview with Penchi*, final section.

²⁷² Córdova, *Interview with Tomasa*, 13.

CHAPTER THREE

STAGE THREE- HOSPITAL BIRTHS, 1959-1965

Ingrid's Story²⁷³

Ingrid had her first three children at home with a midwife without experiencing any complications. Even though she was aware that some women were already giving birth in the hospital, she had turned to a trusted comadrona auxiliar to tend to her, just as all her friends and family had done. Ingrid's first child had been born in 1953, in a rural Southeastern town in Puerto Rico. Ingrid recalled that for her first labor and delivery, when she had felt her first contractions her husband went to call for the comadrona. She had arrived with her white clothes and black bag. The comadrona had stayed by Ingrid's side for three days, giving her teas, rubbing her belly, and looking after her until after the delivery of her first baby girl.

Normally, after the first couple of months without menstruating and suspecting she might be pregnant, Ingrid went to the government clinic and began her prenatal care. The nurses tested her urine to verify the pregnancy, gave her vitamins, weighed her, measured her belly, took her blood pressure, and gave her any pertinent advice. For x-

²⁷³ This story is an adaptation of an interview, Isabel Córdova, *Interview with Ingrid*, December 27, 2005.

rays or more elaborate tests and procedures, Ingrid had to travel for two hours to the Humacao hospital. The nurses were well aware that most of the women they saw at the clinic were still choosing to birth at home in that area, but things were changing at great speed and many of the same women who had birthed their first few children at home sought out the hospital for subsequent births.

Ingrid ended up in the hospital shortly after delivering her fourth child at home, attended by her midwife. All went well in the delivery. After the baby was out, however, the placenta hung on stubbornly and the midwife began to worry. Instead of trying to pull or manually push it out the midwife decided to cut the umbilical cord and prepare the mother and baby for transport to the hospital. Not willing to risk any complications, she accompanied Ingrid to the hospital. Once there, the midwife informed the hospital staff of the situation and left Ingrid in its care. The doctor manually pulled the placenta out of Ingrid's uterus. Luckily for all, there were no obvious post-partum complications. These would come after her next child, in 1960.

Three days after having her fifth child at home, with no apparent difficulties, Ingrid began hemorrhaging. Ingrid thought she had failed to properly take care of herself as she should have after giving birth, but she had four other children to look after. Her husband had come home from laboring in the sugar mill for a few days, as was his custom, in order to be present for the birth of his fifth child. When he realized that Ingrid was bleeding, he ran to seek help. Her mother and some neighbor women who were giving her a hand for a few days prepared a hammock and tied it to a long stick in order to transport Ingrid down the road. She was then taken in a neighbor's car to the closest hospital in town, given a blood transfusion, and sent to a larger hospital in Humacao

where she remained for a few more days. Ingrid was lucky to escape the dangers of postpartum-hemorrhaging, a common cause of maternal deaths in the 1950s and 1960s. Her doctor warned her that it was no longer safe for her to have babies at home.

Ingrid went on to have her sixth child in the local hospital a couple of years later. She felt safer in the hospital, close to nurses and medical equipment. The doctor and nurses did little different than the midwife had done at home during the first two stages of labor other than connect her to an I.V. She wasn't given an episiotomy or put to sleep, and forceps were not used. Things got complicated, though, during her third stage of labor. The baby was out and well, but, once again, she didn't seem to be expelling the placenta. The doctor decided to reach in for it and pull it out himself, completing her final stage of childbirth. The next two of Ingrid's children were brought into the world in much the same way.

After giving birth and taking her newborns to her follow-up appointments at the public health unit, nurses usually informed her of family planning options. Yet Ingrid, like almost all women she knew, did little to avoid getting pregnant. Multiple pregnancies were the norm in her town: one of her neighbors gave birth twenty-two times. Ingrid was aware that she had access to birth control and did pick up a pack of pills following one of her medical visits, but only took them for about one month. She became pregnant ten times and had eight children, most of whom were about two years apart. Perhaps this spacing occurred because she breastfed for the first year or so or perhaps it was just the way her body worked.