A Qualitative Study of Fourteen African Countries' Nursing Workforce and Labor Market

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RUNNING HEAD: A Qualitative Analysis of ECSA Nursing Market

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Study design: LH, PJ

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Manuscript writing: AB, PJ, LH

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ECSA Nurse Education and Labour Market Analysis Key Informant Interview Guide

Note to Interviewer: Read the Informed Consent Script. If given permission, use the audio recorder device *to record respondent's* answers. Otherwise, take notes to capture the responses.

Part I: Costs/Financing of Nursing Education

- 1. Describe how nursing education is funded.
 - a. Probes:
 - ♦ What are the main financing gaps to fund nursing education in the region?
 - Describe the participation of public and private sectors in the financing of nursing education. And what would be the way forward.
 - ❖ What are the main cost drivers of nursing education?
 - Describe any inputs that schools have on the amount or distribution of public subsidies for nursing education
- 2. Describe costs of nursing education to nursing students
 - a. Probes:
 - **❖** What are direct costs?

- ❖ What are indirect costs?
- Describe any incentive or scholarship programs
- ❖ Describe how costs differ for public and private nursing schools

Part II: Educational Institutional Capacity

3. Describe the system used to track number of approved/accredited nursing education programs.

a. Probe

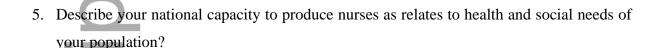
❖ Describe the challenges to accurately account for the number of pogroms in your country?

4. Describe any institutional challenges associated with educating nurses in your country?

a. Probes:

- Consider infrastructure and resource challenges (libraries, computers, skills labs, faculty office space, classrooms, etc) and describe creative solutions you have seen to these challenges?
- ❖ Describe the mechanisms used to recruit and retain faculty in your country? What concerns do faculty have about educating the next generation of nurses?
- How are nursing students selected and supported throughout their nursing education?
- Describe nursing students' experience at their clinical sites?
 - What is the impact of clinical experiences on nursing graduates' skills and knowledge?
 - How do you grade your country's clinical experiences for nursing students and how would you change clinical experiences if you could?

- How does number and quality of clinical faculty impact nursing students' clinical experiences and placements?
- ❖ What is the process for updating/maintaining nursing curricula?



Part III: Status of the Nursing Profession

6. Describe your country's nursing workforce (numbers, quality, etc.)

a. Probes:

- What is the impact of your country's nursing workforce on health and social welfare?
- ❖ What is the impact of your country's nursing workforce on economic growth?
- What is the impact of your country's nursing workforce on gender equity?
- 7. How is the nursing profession perceived in your country?

a. Probes:

- ❖ How are different nursing specialties perceived by communities?
- ❖ How are advanced nursing degrees perceived by communities?
- ❖ What is a nurse's role in your communities?
 - Describe any differences between how community members, the government/leadership, and nurses view the role of a nurse in your country.

- 8. What is the impact that professional nursing status has on nursing student applicant numbers and quality?
 - a. Probes:
 - What could the nursing profession do to attract more qualified applicants?
 - What career ladders exist, or what opportunities are there to improve career ladders?
 - ❖ What alternative careers or professions do prospective nursing students consider?
- 9. Describe the relationship between the status of the nursing profession and the nursing scope of practice.

Part IV: Economic Factors

- 10. Describe factors that influence the decision or ability to pursue a nursing education.
 - a. Probes:
 - Describe how socioeconomic factors impact prospective students' decision or ability to pursue nursing education.
- 11. Describe how graduating nursing students transition into a paid nursing position.
 - a. Probes:
 - ❖ What type of positions are available to new graduate nurses (are there enough positions available)
 - Describe your national capacity to produce nurses as it relates to the number of paid jobs available to new graduate nurses
 - ❖ How does the number of available nursing jobs relate to the health and social needs of your population / communities?

- Describe differences between public and private jobs
- o Describe differences between rural and urban communities
- 12. Describe nursing compensation in your country.
 - a. Probes:
 - * How does professional compensation affect the supply of nurses in your country?
 - What is the relationship of professional compensation to geographic, socioeconomic, and clinical roles?
 - ❖ Are compensation mechanisms reliable? Are there differences between urban/rural or levels of the health system?
 - Describes how gender influences may influence compensation?
- 13. What is the perceived return on an investment in nursing education?
 - a. Probes:
 - ❖ How do nurses perceive their return on investment in nursing education?
 - Describe differences in perceived return on investment between levels of nursing education?
 - Describe differences in perceived return on investment between new graduate nurses and veteran nurses?
 - How does the government and civil society perceive return on investment in nursing education?
 - What is the value proposition associated with a career in nursing?
- Part V: Professional Roles
 - 14. Describe the current professional roles assumed by nurses in your health system.
 - a. Probes:

**	How is	the 1	nurse'	s role	e and	scope	of r	ractice	chang	ging	in	your	countr	y ?

- How are changes in role and scope of practice affecting the demand for nursing services?
- 15. What are the most important factors impacting nurse availability and retention in your country?
 - a. Probes:
 - How and/or when does a nurse typically move out of the clinical workforce?
 - ❖ Where do nurses go when they leave the clinical workforce (become faculty, switch professions, retire, etc.)?
 - ❖ How does migration and movement after graduation affect the nursing profession and availability of nurses in your country?
- 16. Describe any opportunities to develop new or different skills that are available to nurses in your country's workforce.
- 17. What are the most common advanced or second degrees nurses seek?
 - a Probes:
 - What factors impact this choice?
 - How would you describe the characteristics of nurses who go on to seek advanced education?

Part VI: Private sector investments

- 18. What does investment look like in your country?
 - a. Probes:

- ❖ Who is investing in nursing education?
- ❖ What is the trajectory of private and public schools?

Tables

Table 1. ECSA countries and nursing stock

ECSA	Total	Nurses per 10,000	Nursing Health Labor Market Snapshot †
Countries	Nursing		
+	Stock		
Botswana			Minimum duration of training: 3 years
	12,179	54.03	Graduates per year: 342
			Anticipated nurse shortage by 2030: No
Eswatini			Minimum duration of training: 3 years
	4,706	41.415	Graduates per year: 289
			Anticipated nurse shortage by 2030: No
Kenya			Minimum duration of training: 4 years
	59,901	11.656	Graduates per year: 7120
_			Anticipated nurse shortage by 2030: 80,000 to 90,000
Lesotho			Minimum duration of training: 4 years
	6,866	32.567	Graduates per year: 304
			Anticipated nurse shortage by 2030: No
Malawi	U		Minimum duration of training: 4 years
	7,957	4.386	Graduates per year: 1886
			Anticipated nurse shortage by 2030: 40,000 to 50,000
Mauritius			Minimum duration of training: NR
	4,445*	35.152	Graduates per year: NR
_			Anticipated nurse shortage by 2030: No
Mozambique			Minimum duration of training: 2 years
	14,174	6.847	Graduates per year: 714
			Anticipated nurse shortage by 2030: 90,000 to 100,000
Namibia			Minimum duration of training: 4 years
	4,784	19.54	Graduates per year: 269
_			Anticipated nurse shortage by 2030: 2,000 to 3,000
Rwanda			Minimum duration of training: 3 years
	13,345	12.044	Graduates per year: 947
			Anticipated nurse shortage by 2030: 20,000 to 30,000
Seychelles			Minimum duration of training: 3 years
	684**	80.773	Graduates per year: 8
			Anticipated nurse shortage by 2030: No
South Africa	74,556*	13.078	Minimum duration of training: 4 years
	77,330	13.070	Graduates per year: 10192

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			Anticipated nurse shortage by 2030: 50,000 to 60,000
South Sudan			Minimum duration of training: 3 years
			Graduates per year: NR
			Anticipated nurse shortage by 2030: No
Tanzania			Minimum duration of training: NR
	31,940*	5.843	Graduates per year: NR
			Anticipated nurse shortage by 2030: 100,000 to 200,000
Uganda			Minimum duration of training: 3 years
	52,907	12.382	Graduates per year: 10,353
			Anticipated nurse shortage by 2030: 30,000 to 40,000
Zambia			Minimum duration of training: 3 years
	22,722	13.376	Graduates per year: 2558
			Anticipated nurse shortage by 2030: 30,000 to 40,000
Zimbabwe			Minimum duration of training: 3 years
	27,934	19.346	Graduates per year: 796
			Anticipated nurse shortage by 2030: 10,000 to 20,000
TOTAL			339,100

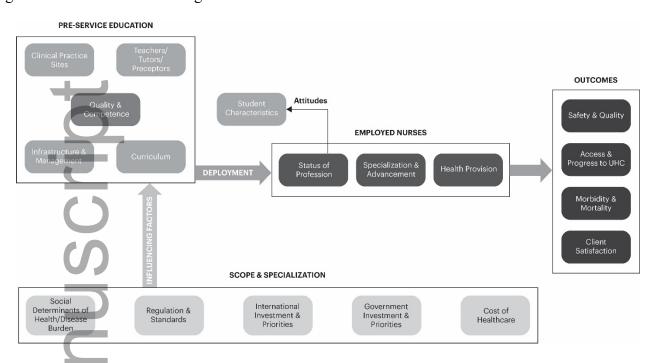
Data represent the number of total nursing stock as reported to the National Health Workforce Accounts platform as of 2018 unless otherwise indicated. No available data for South Sudan. *, 2017 data; **, 2016 data; ECSA, East, Central and Southern Africa.

†Data taken from SoWN Country Profiles (WHO, 2020). Shortage based on SDG 3 recommendations for nurse-to-population density. NR = not reported

Table 2. Focus group discussion participants

*Perspective	Number (percentage)				
Regulator	12 (22%)				
Government	8 (15%)				
Association	11 (20%)				
Educator	11 (21%)				
Clinician	7 (13%)				
Other	5 (9%)				
Total	54				

^{*}Participants' self-reported primary background or experience- could select more than one (54 total participants, reported perspectives from 38 participants)



*figure adapted from Johnson et al. 2013

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