GENDER-BASED FACTORS INFLUENCING THE RETENTION OF PRIMARY HEALTH CARE WORKERS IN NIGERIA: LESSONS FROM SUB-SAHARAN AFRICA

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Nigeria.

Word Count 13,043

56th Master of Public Health/International Course in Health Development

KIT (Royal Tropical Institute)

Vrije Universiteit Amsterdam (VU)

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A thesis submitted in partial fulfilment of the requirement for the degree of

Master of Science in Public Health

by

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Nigeria

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Where other people's work has been used (from either a printed source, internet, or any other source), this has been carefully acknowledged and referenced in accordance with departmental requirements.

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56th Master of Public Health/International Course in Health Development (MPH/ICHD)

16 September 2019 – 4 September 2020

KIT (Royal Tropical Institute)/Vrije Universiteit Amsterdam

Amsterdam, The Netherlands

September 2020

Organized by:

KIT (Royal Tropical Institute)

Amsterdam, The Netherlands

In co-operation with:

Vrije Universiteit Amsterdam (VU)

Amsterdam, The Netherlands

Acknowledgement

My sincere appreciation goes to my thesis supervisors who dedicated thier time to guide me in through this research. I also, appreciate all academic tutors at KIT for providing the necessary instruments and environment for the study.

Many thanks to my academic tutor for the encouragement, support, and guidance throughout this study.

I also appreciate my classmates in ICHD for the time spent together in sharing knowledge and friendship especially Solomon, Rejoice, Foyin and Mcking.

Lastly, my profound gratitude goes to my husband, son, siblings, and parents who provided unfailing love and support throughout the study.

Thank you all, as this accomplishment would not have been possible without the support.

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List of Abbreviations

CF	: Conceptual Framework
CHEW	: Community Health Workers
CTC	: Close To Community
FCT	: Federal Government
FHW	: Female Health Workers
FMOH	: Federal Ministry of Health
GBV	: Gross Domestic Product
GAC	: Gender Aware Category
GEH	: Gender Equity Hub
HEW	: Health Extension Workers
HIV	: Human Immune Deficiency
HR	: Human Resource in Health
HRM	: Human Resource Management
INGO	: International Non-Governmental Organization
LGA	: Local Government Area
LMIC	: Low and Middle-Income Countries
MSS	: Midwives Service Scheme
NANNM	: National Association of Nigerian Nurses and Midwives
NGO	: Non-Governmental Organization
NHRIS	: National Human Resource in Health Information System
NMCN	: Nursing and Midwifery Council of Nigeria
NMED	: National Malaria Elimination Programme
NPHCDA	: National Primary Health Care Development Agency
NTLCP	: National Tuberculosis and Leprosy Control Program
NYSC	: National Youth Service Corp
OECD	: Organization for Economic Cooperation and Development
PHC	: Primary Health Care
PPE	: Personal Protective Equipment
SDG	: Sustainable Development Goal
SSA	: Sub-Saharan Africa

SURE-P : Subsidy Re-investment and Empowerment Program

UHC : Universal Health Coverage

US : United States

WHO : World Health Organization

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Definition of Key Terms

The Gender Equity Continuum (1) provides a framework for understanding approaches to integrating gender.

Gender blind (GB): interventions that do not recognize how gender dynamics affect behavioural out- comes. This is identified as harmful. Gender aware interventions: programs/policies deliberately examine and address the anticipated gender- related outcomes during both design and implementation to achieve better behavioural and health out- comes. Within the gender aware category, the GEC identifies the following three levels:

Gender exploitative (GE): interventions reinforce or exploit harmful norms to achieve desired outcomes. This approach is also harmful and can undermine the objectives of the program in the long run.

Gender Accommodating (GA): interventions acknowledge, but work around, existing gender dynamics or roles. This approach may result in short-term benefits and may be an important first step in challenging rigid gender norms and inequalities; however, it may not reduce gender inequality for the long term or address gender systems that contribute to differences and inequalities.

Gender Transformative (GT): interventions seek to transform gender relations to promote equality and achieve program objectives. Attempts to promote gender equality by (i) fostering critical examination of inequalities and gender roles, norms and dynamics, (ii) recognizing and strengthening positive norms that support equality and an enabling environment, (iii) promoting the relative position of women, girls and marginalized groups, and transforming the underlying social structures, policies and broadly held social norms that perpetuate gender inequalities.

Abstract

Introduction: Nigeria is one of many sub-Saharan African countries experiencing a severe shortage of skilled health workers in their right number, mix and distribution. Attrition rates are highest at the primary care level despite the adequate production of nurses and midwives who constitute the bulk of the health workforce at the PHC level. This study seeks to explore the gender norms and experiences that could be influencing the retention of health workers at the PHC level.

Methodology: This is a review of evidence from existing literature from sub-Saharan African countries. The author conducted PubMed and Google Scholar searches using a combination of different search terms relating to gender and retention of health care workers in sub-Saharan Africa.

Results: Study findings show that Marriage and family responsibilities, sociocultural norms, safety and security, poor human resource management, poor remuneration, poor funding of PHCs, and limited opportunities for career advancement are the gender-based factors that influence the retention of health workers at the primary care level in sub-Saharan Africa.

Conclusion: The health system is not gender neutral. The patriarchal system of family headship in Nigeria influences the life course of a woman's education, potential, and professional advancement. Gender mainstreaming in Healthcare particularly for Human Resources for Health is not yet institutionalized in Nigeria, although the policies which should form the bedrock for its implementation already exist. These factors contribute to the retention of health workers in PHC centres in Nigeria.

Key Words: Gender, Health Workforce, Retention, Primary Health Care, Nigeria

248 words

Introduction

My experiences as a health Care Professional who has worked in both Public and Private sectors, and in rural and urban settings in a low-middle-income country piqued my interest in Health Systems and Human Resources for Health. I observed that being employed in the public sector and receiving a monthly salary does not automatically translate to high quality of care for patients and clients. Very often, people at the Primary level of care suffer most from absenteeism, unexpected transfers or leave, poor service delivery, etc. of health workers in their communities.

This indicates that there are underlying factors at play. I chose to focus on the gendered perspectives of health worker retention because women constitute the bulk of health workers at the Primary level of care in Nigeria. Although several studies have focused on the retention, motivation, and Job satisfaction challenges of health workers in Nigeria, I figured that it was also important to take a gender lens and look through the experiences of women and factors that mediate their poor retention in PHCs in Nigeria.

Since there is still little documentation about this focus in Nigeria, the aim of this study is to explore these gendered experiences from other sub-Saharan African countries of similar context, analyze their interventions to mitigate this problem and draw lessons from my findings for policy making in Nigeria, as part of my contribution towards the Gender equality target of the Sustainable Development Goals (SDGs).

CHAPTER 1

1.1 Background

Demography

Nigeria is a Western African Country sharing boundary with Niger, Benin, Cameroon, and Chad. It is Africa's most populoust country and the seventh most populous country globally. It has an estimated population of 198 million people and runs a Federal system of government with 36 States, 774 Local Government Areas (LGAs) and the Federal Capital Territory (FCT), Abuja. The LGAs are divided into 9,565 political wards where the Primary Health Centres (PHCs) are located(2). The country is divided into six geopolitical zones (North East, North West, North Central, South East, South West and South South) based on cultural and ethnic similarities(2).

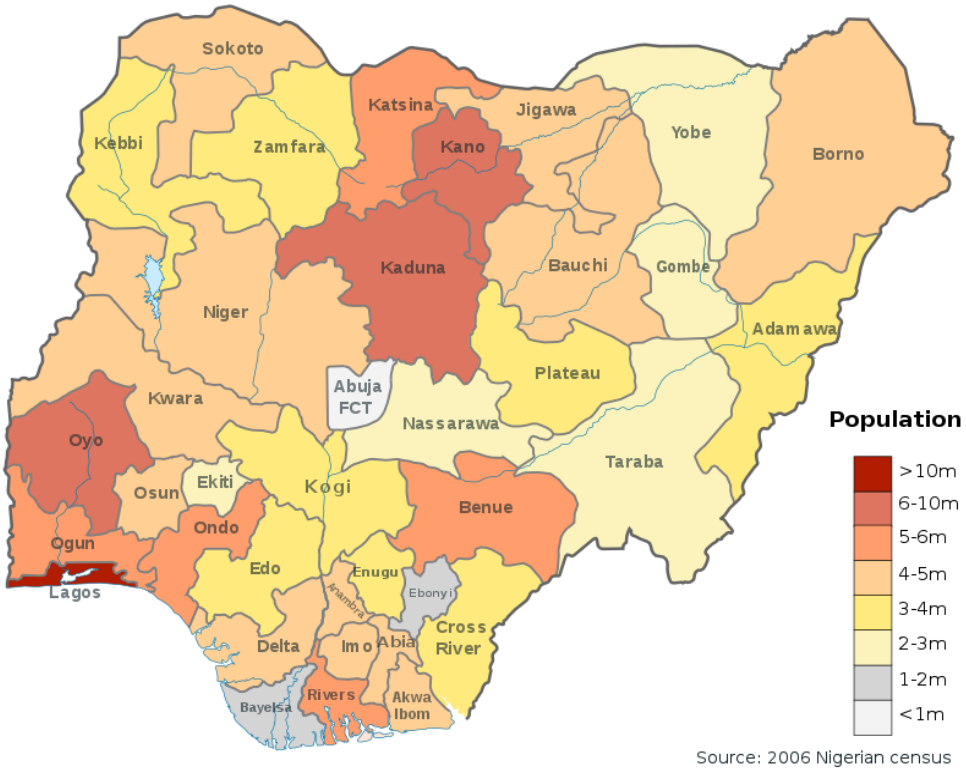


Figure 1: Map of Nigeria. Source: en.wikipedia.org

Economy

The predominant enterprise in Nigeria is subsistence agriculture, but government revenue (>75%) is obtained from oil. Gross Domestic Product (GDP) dropped from 6.2% in 2014 to 0.7% in 2017. The current inflation rate stands at 18.7%. The current decline in oil revenue has affected the country's public finances, including health expenditure. This has affected the finances of States and LGAs for health care which rely on the Federal Government (FG) Allocations(2). Terrorist attacks in the north has led to significant reversals in the health and development gains, in the North-Eastern region.

Cultural Diversity/Religion

The major ethnic groups are Yoruba (South-West), Igbo (South-East) and Hausa/Fulani(North) in addition to over 300 other ethnic groups and over 500 languages. English is the official language of the country and the North is mostly Muslim while the Southern are largely Christians(4).

Education

As of 2008, primary school enrolment rate was 88.8% while completion rate in 2012 was 87.7%. the literacy rate for young girls is 56.6% and 87% in urban areas. Literacy rats for women in the North-East and North-West are between 7.2%-55.7% compared to 90.1-96.4% in the Southern Zones. This points to a disparity between the two regions.(4)

Gender and Inequity

There are gender differences in the social indicators of the population. Nigeria ranks 152 out of 188 on the gender-related development index. Women of reproductive age constitute 22% of the population; there are 69.2% of educated male adults and 49.7% of educated female adults. The employment of women in the organized formal sector is low with only 36% of Nigerian women in the adult workforce. The higher levels of poverty and lower educational attainment and employment rates among women limits their ability to access health information and services(5). Marriage before the age of 15 is very common and Gender-Based Violence (GBV) remains a major public health concern and is still largely neglected area(2)

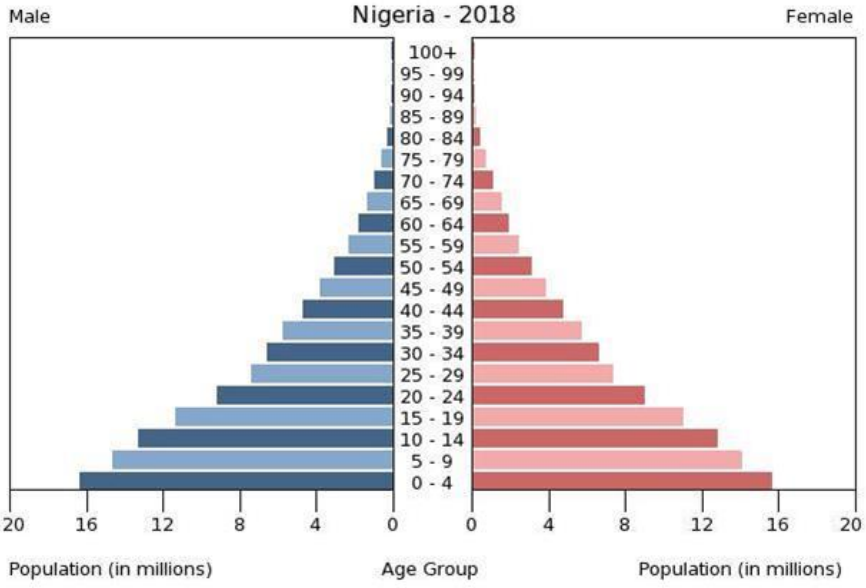


Figure 2: Nigeria Age Structure. Source: www.indexmundi.com

Health System

Nigeria operates a pluralistic system of health care consisting of public and private sectors, offering modern and traditional methods of health care. Public sector health care is managed at three levels: the LGAs are responsible for PHC services, State Governments oversee secondary care while the Federal Government provides tertiary care. The formal private sector consists of non-profit faith-based and non-governmental organizations; and private-for-profit providers. The private sector offers 60% of health care services through their facilities which make up 30% of the country's conventional facilities {See Table 1, Annex}(2). The informal private sector includes traditional healers, drug shops, complementary and alternative medicine practitioners, and patent and proprietary medicine vendors.

PHC forms the core of the national health system but it has remained weak and the health system is overstretched by rapid population growth and this threatens the achievement of the Universal Health Coverage (UHC) goals(2). In addition to providing Tertiary care, the Federal Ministry of Health (FMOH) leads the development, implementation, and supervision of specific health programs such as the National Malaria Elimination Programme (NMEP), National Tuberculosis and Leprosy Control Program (NTLCP), etc. The Federal and State Health Ministries of Health, Departments and Agencies manage the implementation of these programs at their own level(2). The health system is characterized by severe underfunding, inadequate number and skill of health workers, poor infrastructure, poor harmonization of the different stakeholders, unequal distribution of health resources, and limited financial protection for health expenditures(2). PHC in Nigeria is provided by the Local Government Authority (LGA) via health centres and health posts in urban and rural areas. Health services provided at PHCs include prevention and treatment of communicable diseases, immunization services, maternal and childcare services, Family planning services, public and environmental health education, and data collection on health and health-related events(6).

Health Financing

Poor funding and weak leadership are the main causes of the poor performance of the PHC system in Nigeria. Public health services are financed from government tax revenues. Government allocation to the health sector has not gone beyond 6% since year 2010. Budget releases have consistently been delayed and always fall short of actual budget allocations . Private Out-of-pocket spending as at 2017 is 77% which is almost twice the recommended limits of 40% by the World Health Organisation (WHO)(7). The National Health Insurance Coverage covers only 5% of the population(2).

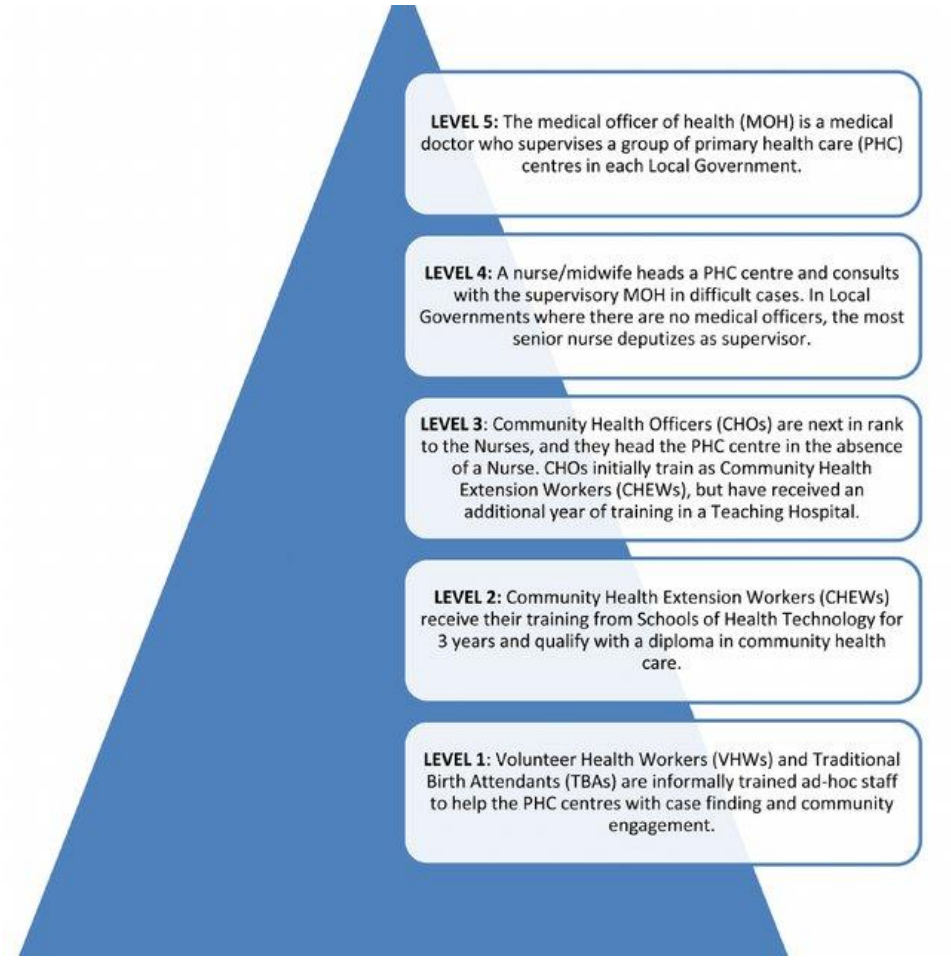


Figure 3: Organizational structure of the Nigeria Primary Health Care System. Source: Abdulmalik et al., 2013: Country Contextualization of the Mental Health Gap Action Programme Intervention Guide: A Case Study from Nigeria.

Human Resources for Health

Nigeria has one of the largest cohorts of Human Resources for Health (HRH) in Africa but still suffers significant shortages in some parts of the country {See Table 2, Annex}. The following cadre of health staff work primarily in PHCs namely, Doctors (at least 1), nurses, midwives, community health extension workers(CHEWs), Community health officers (CHOs), health technicians and untrained health volunteers(4). CHEWs undergo a diploma training in Community health care at Schools of Health Technology. CHOs are next to nurses in rank and they lead in the PHC in the absence of a nurse/midwife. They also train initially as CHEWS before proceeding for an extra year of training in a teaching hospital(1). CHOs and CHWs are paid by the LGA while Doctors, Nurses/Midwives are paid by the State Government {See Fig3} (1). Mal-distribution of the workforce has continued which is a disadvantage to rural areas, the northern parts of the country, and the health facilities at the lower levels(2). With an estimated global deficit of about 18 million health workers by the year 2030, particularly in low and lower-middle income countries, implications are that inadequate investment in the

health and social workforce diminishes the chances of achieving the Sustainable Development Goals (SDGs) (8). The national average of doctors is 38.9 per 100,000 population compared to the sub-Saharan African average is 15 per 100,000 population. The nurse/midwife population ratio stands at 148 per 100,000 population compared to the sub-Saharan African average of 72 per 100,000 population. Despite these high availability ratios, Nigeria still suffers from chronic shortage of health workers for its growing population needs, particularly in the northern areas of the country(10). A greater challenge is the maldistribution of existing health workers between the rural and urban areas across of the country(10). Nigeria requires about 150,000 doctors and 471,400 nurses by the year 2030. This indicates a gap of 33.45% and 29.25% calculated on the basis that all factors influencing the availability of HRH remain the same(2).

CHAPTER 2

2.1 PROBLEM STATEMENT

Nigeria currently faces the major challenge of a lack of capacity in providing and retaining a competent and adequate health workforce in the right skill mix to provide health care in the areas where services are needed the most(2). Nigeria is one of 57 countries in the world and 36 countries in Africa which lack sufficient health workers required to meet the health-related SDGs(9). Apart from community health workers who are trained specifically to work in PHC in communities, many health workers in Nigeria seek opportunities leave the PHC system to urban areas to work at the secondary or tertiary healthcare level(6). Poor and irregular payment of salaries at the local and state levels, poor conditions of service, discord among professional cadres and persistent strike actions are major reasons for the poor retention of health workers(2).

Patients seeking hospital care often bypass primary health care providers because such facilities are not well equipped. Primary care providers themselves often feel unsupported, demoralized, or suffer from burnout(10). Since PHC facilities are often the only kind of formal health care accessible to the surrounding communities, health worker shortage in these areas are associated with worse health outcomes(11),(12). Nigeria lacks organized and coherent data about the availability, spread and trends in HRH but a 2005 national survey revealed higher rates of health worker attrition from rural health facilities compared to those in urban settings. The attrition rate of doctors and nurses from rural areas was thrice and twice the rates from urban areas, respectively. At the PHC level, the attrition of doctors and nurses was much higher than at the secondary and the tertiary level. The resultant effect of this is that only 19% of Doctors and 31% of nurses worked at the PHC level of care(13). Evidence reveals that an increase in health workforce density by as much as 10% results in a decline in maternal mortality by about 5% in the country(14).

In a study of 104 countries, nearly 70% of the health workforce were females but with differences in gender distribution by occupation in all the regions. Most of the female workers were concentrated in nursing and midwifery while the males were physicians, dentists and pharmacists in many of the countries (15). A growing health workforce required to sustain health systems and achieve UHC targets may face financial challenges such as public health expenditure gaps and wage bill ceilings(16),(17),(18). Since women in the health workforce receive lower pay for the same work, they seem to do "more for less". This entrenches a perverse economic incentive to keep increasing the number of women in the health workforce as a way of keeping the overall health wage bill low. This strategy may not be recognized unless it is dissected using a gender lens(19). Female health workers from Ethiopia corroborated this fact in a study by Jackson and Colleagues. Female health workers reported that they suffered a disadvantage in the conditions of their pay and that men would have been paid higher (double) salaries for the same job because they are powerful(20).

Gender inequalities slow down health worker career progression, increase employment bottlenecks, attrition, and maldistribution in formal and informal work settings(21). In addition, absenteeism, reduced productivity, failing health and low health worker morale occur when gender discrimination thrives in the workforce behind "gender-blind" {see list of definitions} HRH policy makers, managers, and educators. This leads to having demotivated health workers at the frontline in both formal and informal health sectors(22). Gender biases hinder the realization of SDG 5 (achieve gender equality and empower all women and girls) SDG 8 (inclusive and sustainable economic growth, full and productive employment, and

decent work), among others. They equally cause systemic inefficiencies in health systems by undermining the productivity, distribution, motivation and retention of female workers, who constitute a majority of the health workforce(16).

In Nigeria, the three tiers of Government were to adopt the National Human Resources for Health Policy and Plan by the end of 2015. But a mid-term review of the National Strategic Health Development Plan of 2010-2015 revealed that only 15 states had adopted the National Human Resources for Health Policy representing 42% coverage. As of 2017, none of the 774 LGAs in the country have any specific policies or strategic plans for HRH resulting in a poor coordination of efforts to address important shortages, maldistribution of the available work force, poor governance and capacity for HRH, and reduced production and training capacity(23). HRH production asynchrony has led to an overproduction of CHEWs and an underproduction of midwives, and to mitigate this shortage of skilled workers in critical areas, the Federal Government introduced special schemes such as the Midwives Service Scheme (MSS) and Subsidy Re-investment and Empowerment Program (SURE-P) to improve the availability of nurses and midwives for the provision of maternal and child health services in underserved areas(2). Furthermore, the Nigerian Human Resources for Health Information System (NHRHIS) has been established with a health Workforce Registry to inform efficient HRH management and allow for up-to-date information about health workers. Huge gaps still exist in implementing the (NHRHIS) at all levels of care and the and the workforce registry was only established in the first quarter of 2020(2).

2.2 JUSTIFICATION

Morbidity and preventable mortality trends worsen in direct association with ease of access to health service(24). Improved retention of health workers improves the quality of care delivered because it increases competencies, strengthens team work, and health worker relationship with their host communities(25). Conversely, high attrition rates negatively affect health care increasing workload, hinders team work, and causes inefficiencies in work procedures(26).

There is a global scarcity of studies on gender and retention focusing on female health workers. Most of the available studies are concentrated in developed countries and focus mainly on physicians and nurses(27). Further research is needed to better understand the poorly covered subjects of recruitment and retention, mentorship, professional development, training etc. among female health workers. It is equally needed in the context of the Sub-Saharan African region (27). Sufficient data to underpin evidence-based decisions and policies to improve gender equity in the health workforce are lacking(23).

Some studies have been conducted on the motivation, retention and Job satisfaction of health workers in rural areas(28),(29),(30) and others on the challenges, and how to strengthen the primary health care system in Nigeria (25),(26),(12),(19),(27), but the gender perspective has not been studied to bring attention to the ways in which social and behavioural differences between men and women could be leading to inequities in the working conditions of the HRH in the health sector(28). This work aims to fill up this information gap and apply a gender lens to provide a critical analysis of the existing information focused on gender and PHC in Nigeria, drawing on information from other SSA countries.

2.3 STUDY OBJECTIVES

Overall Objective

To explore the gender-based factors influencing the retention of health workers in Sub-Saharan Africa and policies and practices to improve gender responsive strategies for retention to inform gender responsive policies for HRH at the PHC level in Nigeria.

Specific Objectives

1. To analyze the factors influencing the retention of health workers in Sub-Saharan African countries with similarities to the Nigerian context.
2. To identify gender responsive policies and practices/interventions to improve the retention of health workers at the PHC level in other Sub-Saharan African Countries.
3. To analyze the existing HRH policies at the PHC level in Nigeria and to what extent they are gender sensitive.
4. To disseminate research findings to policy makers at the administrative levels (FMOH, NPHCDA and the Federal Ministry of Labour and Employment) to inform gender responsive retention strategies for Nigeria.

CHAPTER 3

3.1 Methodology

This research is a literature review. This was an online literature search from February to July 2020 using google and google scholar search engines. Information was retrieved from databases such as the VU Library, PubMed using Mesh Terms, Human Resource for Health Online Journal, and the Global/Africa Health workforce observatory. Review of relevant literature about retention of female health workers at Primary care levels in Sub-Saharan Africa. This is because of the paucity of data in Nigeria. Research findings will be used to inform policies to address gender-based factors influencing health worker retention in Nigeria.

A conceptual framework was selected to guide the literature review. The review included studies and reports, working papers and policy briefs/guides about health workforce composition, distribution, attrition, and retention, and gender analyses of health workforce earnings, conducted in Sub-Saharan African countries irrespective of study type. Preference was given to literature related to gender discussions about female health workers in work and home settings. Peer-reviewed articles and grey literature such as Policy documents from the World Bank, UN Women, WHO, evaluation reports, working/position papers, and information from official government websites and country specific profiles were consulted. The list of references from selected articles were further checked to retrieve original research and other relevant articles.

Keywords and phrases used to search and retrieve literature include but not limited to "HRH and Gender", "female health workforce composition", "health systems and gender", "gender and the health workforce". These keywords were combined with the study areas mainly Nigeria, Africa, and Sub-Saharan Africa and Boolean operators were added to the keywords to control the search results (see Annex TABLE 1)

Data Quality and Analysis

Article abstracts were read to ensure that it met the inclusion criteria. The themes in the framework were organized under the corresponding objective. Information from literature corresponding to each theme and objective were organized. Similar or interconnected themes were grouped together under the corresponding objective and discussed. To ensure data quality, the methodology of each research was read both from the abstract and in-text to determine how the study was carried out and the methods were reproducible and followed research guidelines.

Conceptual Framework

The conceptual framework (CF) on gender and HRH designed by Steege et al. for the analysis of Gender relations and Work life of Community Healthcare providers (31) was selected for this research. The framework was designed to show how gender relationships and gender roles influence the experiences of Close to Community (CTC) healthcare providers at the individual, community, and health system levels. CTC providers are CHEWs and volunteer health workers but in Nigeria, CHEWs are trained by government for a period of 2-3 years and paid by the LGA to work specifically in PHCs as support staff to Nurses and Midwives (2). Because of the similarity in the context, work environment and job description, CTC providers as mentioned in the framework will include in this study, CHEWs, CHOs, Nurses and midwives who work in PHCs in the Nigerian context.

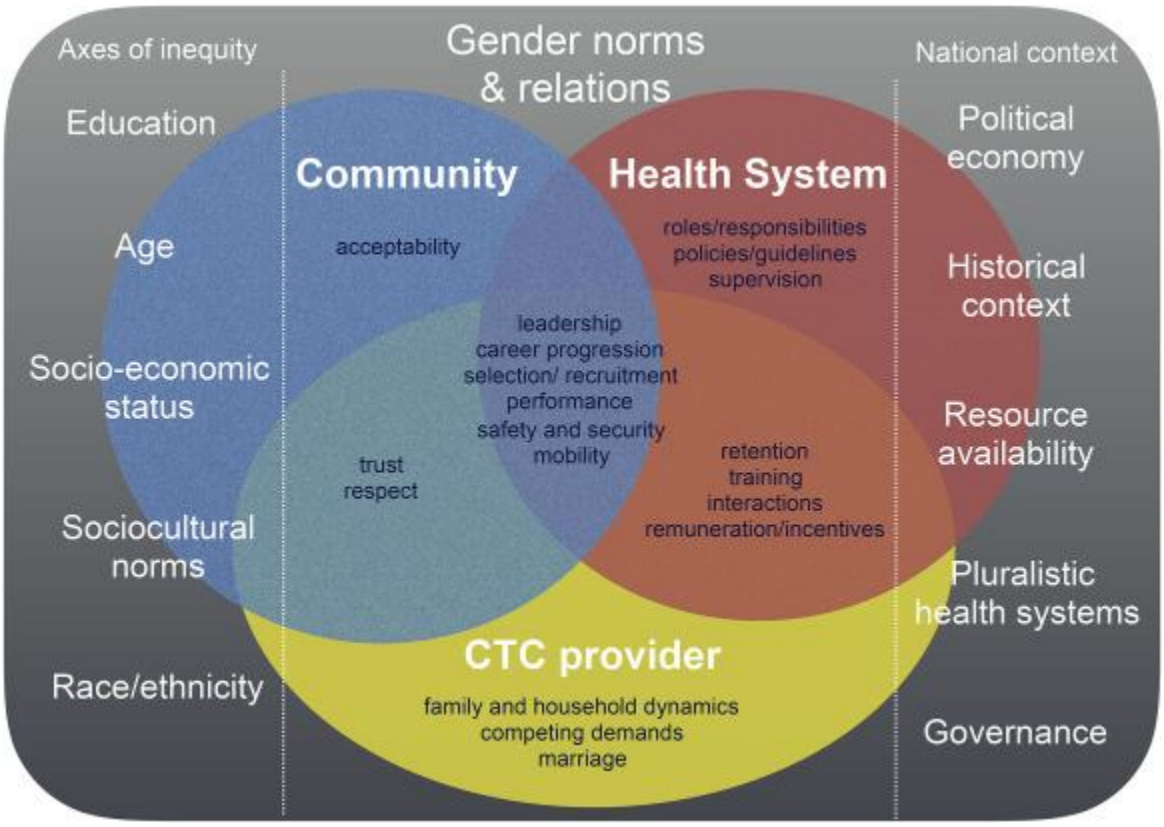
The framework was selected because it highlights many different factors mediating gendered experiences of healthcare providers at the community level. The framework was helpful in structuring the answers to the objectives of this study. The framework is divided into three (3) segments namely: Axes of Inequity, Gender norms and Relations, and National Context.

Gender norms & Relations: Under the community subsector, issues of trust, respect, and acceptability are described. This describes the perceptions and value that the host community places on the services PHC workers which affect the motivation of health providers. Under the Health System subsector, gendered influences on the roles/responsibilities of community health workers, Health System Policies/guidelines as well as supervisory support are included in the framework. Under the CTC provider subsector, the subjective experiences of the CTC provider with respect to family and household dynamics, competing demands for attention and time, and the demands of marriage are included. The interconnections between the individual CTC provider, community and health systems are also shown in the framework.

Axes of Inequity: This describes the areas where inequity is experienced by health workers outside the work environment which include Education, Age, Socio-economic status, Sociocultural norms, and Race/Ethnicity.

National Context**:** Under this segment, the Political economy of the country, the historical context of Community Care, the availability of resources to meet health worker demands, the existence of pluralistic health systems, and the Governance of the health system at the National level are analyzed here. The Political Economy under this context was not discussed because it overlaps with Governance in the health sector. Retention, performance, interactions, were not discussed. Training overlapped with Career Progression, and retention was the broad theme discussed throughout this study. Race and ethnicity were also not discussed as it was not one of the factors discovered from the literature. The work lives of the health workers/CTC providers refer to the gendered encounters of health workers with community members and experiences in their organizations while in the line of work and how this influences the continuation or discontinuation of their jobs. In addition, the framework shows other factors which are outside the health sector (e.g. Social norms and values) but also influence gendered experiences and retention.

Figure 4: Analytical Framework on Gender and Human Resources for Health by Steege et al.



Framework adopted from Steege et al., 2018: How do gender relations affect the working lives of close to community health service providers?

CHAPTER 4: RESULT

In this section, study findings from literature are presented under the different themes in the analytical framework. Factors influencing retention of health workers at the individual, community and health system level are discussed under objective 1. Cross-cutting factors across the three major areas (individual, community, and the health system) influencing retention are equally described under objective 1. In the following chapters, retention strategies and interventions adopted in various countries for their health workforce are discussed under objective 2. Finally, an analysis of the HRH policies of the Nigerian Government to retain health workers and sustain PHC are presented under objective 3. In addition to this, a gender lens is applied to these policies to analyze whether they are gender responsive.

Factors Influencing Retention In Sub-Saharan African Countries

Individual Health Worker Level**:** *Family and Household Dynamics/Competing Demands/Marriage*

Family and household dynamics influence the decision of women to work as PHC staff. The absence of family support is a major and common challenge to taking up this vocation (31). In Ethiopia, Kenya, and Malawi, the attrition of female health workers was attributed to marriage. This is because they were required to live in the communities where they worked, away from their husbands and family who lived in a different community (31). Although the strict restrictive policies preventing female health workers from relocating to other health facilities have been repealed in Ethiopia, the enforcement has been very poor and this has caused women to either live apart from their partners or leave their jobs (31). Steege et al. report that there were also expectations of female health workers to perform household tasks and look after children and other elderly members of the family in addition to their paid work (32).

In a study from Ethiopia, a staff turnover rate (rate of employee movement in and out of an organization) of 45.9% was recorded between 2009 and 2014 with Doctors (38.1%) being the highest and Nurses (13.4%) the least. This rate was higher in the tertiary institutions compared to the health centres, explained by the fact that the Doctors were drawn to seek higher paying jobs abroad and outside the public health sector (28). Although males were twice as likely to intend to leave the workforce, more nurses and midwives combined (65%) explicitly expressed their intention to leave their jobs within the next one year because of separation from family members, poor incentives and fringe benefits, uncomfortable working conditions, and lack of scholarship opportunities (28). This corroborates similar findings by Adegoke et al., who reported that 38% of midwives were planning to leave their jobs within two years (29). According to a Kenyan study, men were reported to control family planning and reproductive health issues. This sometimes had a negative consequence because women did not have the autonomy to decide when to have children which indirectly affected their career growth and development (30). Unless due consideration and suitable arrangements are made to accommodate maternity leave, flexible work schedules and child care responsibilities, some female health workers may find it challenging to return to work after child bearing (33). Societal pressures also contribute indirectly to the retention of staff as shown in a study from Uganda. Female healthcare workers revealed that they experienced a

lot of pressure in their society because they were unrealistically placed as belonging to a high social class. They were expected to be able to afford a lot of luxury for themselves and their family (34). This has pushed them to seek other jobs to supplement their income from their primary job making them less available at the health centres (34).

Community Level

Acceptability, Trust and Respect

Steege et al. report that community acceptance and utilization of health services is also influenced by the sex of the health worker due to existing gender norms and the type of services offered. Female health workers were more efficient in convincing pregnant women to utilize health services compared to men and in Malawi and Mozambique, male health workers found it difficult to visit women in their homes because of cultural barriers. This phenomenon was corroborated in other studies (31),(21),(35),(36). A study in Uganda reported that female health workers and health volunteers had more female clients confiding in them that they were secretly observing family planning without the knowledge of their husbands but this was not the same with the male health workers (31).

Male health workers were not readily accepted by female patients in Lesotho for the provision of health care services because of the fear of sexual exploitation and sexual abuse. The women expressed their inability to trust the male health workers (21). Conversely, men who proceeded to provide healthcare services were stigmatized by members of the community because care giving was strongly associated with a feminine identity in the society (21). In Tanzania, members of the community had the perception that the male and female community health workers conducting home visits had ulterior motives, especially for adultery. To mitigate this, health workers were encouraged to carry out their home visitations in male-female pairs (37). These experiences reveal some level of trust between community women and female health workers and trusting relationships have been shown to impact on the performance of health workers which also influences retention (38).

A Nigerian study revealed that the preference of community people in rural settings for health providers in the informal sector (such as herbal healers, traditional birth attendants, chemists and unpatented drug stores) contributed to a reduced demand for PHC services. This discourages PHC workers which leads to absenteeism and ultimately, a decision to leave (13). Yahya, reports that the hostility of host communities to non-indigenous health workers is another common cause of retention in that clime. This is because the local authorities in the community were not consulted before such deployments were carried out (39). For instance, the opposition of Islamic religious leaders to Polio Immunization in Northern Nigeria could be attributed to underlying suspicions of the intention of the program sponsors because they chose to focus on a specific health problem while disregarding other health problems in the community(39).

In South Africa, female health workers were perceived to be immoral because of their involvement with family planning and their interactions with males therefore, community members considered them 'prostitutes' instead of 'Doctors'(40). To assert themselves and command respect, nurses in Zimbabwe keep using weighing scales and prescribing many visits for antenatal care, beyond the required minimum because these activities create an impression of being important (41). Female health workers sometimes rely more on clinical symbols than their male colleagues to assert themselves when they sense that there are doubts about their professional competence and social standing due to gender biases (40).

Health System Level

Roles/Responsibilities

In Uganda, community health workers reported that though they had the same responsibilities as males and females, in practice, duties were assigned to them based on their gender. The females were more involved in childcare and stayed to handle problems within the locality, while the males assisted in transporting patients to referral facilities, visited more communities for mobilization and performed supervisory tasks. Males had the advantage of being able to use any form of transportation easily compared to the females. This gendered arrangement equally left men to participate in activities such as the cleaning of wells and latrine renovations (42). Newman et al. reported similar findings from their study in Rwanda. In an interview of health workers, about one-quarter of them confirmed that responsibilities delegated for male and female health workers occupying the same job and position were different in terms of the type or volume of work. This points to a horizontal gender segregation of duties easily noticed from the responses of some participants who commented that certain assignments seemed to be reserved for execution by men alone (43). Physical accessibility to locations also has gender implications for PHC and CHWs alike and can affect the successful execution of government interventions in communities. In Northern Nigeria for example, a local government authority in charge of PHC provided motorcycles to male CHWs to aid movement and accessibility (66). Female CHWs however, could not use those motorcycles because women are not allowed to expose their legs according to Islamic beliefs. This was resolved in an advocacy meeting with religious leaders who later agreed to allowing women use 'gender responsive' motorcycles which did not expose their legs (66).

Training and Supervision

Witter's study on the gendered health workforce revealed that attending in-service training was far more challenging for female health workers because it required more time away from the home front (44), though such trainings were regularly linked to promotional opportunities. This automatically reduced the number of female health workers eligible for promotions at each stage of the career ladder pointing vividly to gender disparities in the human resource retention process (45),(46). This explains the "glass ceiling" effect where there is a limited attainment to and scarcity of women in high level, highest-paying, decision-making positions despite their increased presence in such fields of endeavor (45),(47). This discrepancy is attributed to the difference in access of both genders to equal opportunities of mentoring, networking, role modelling, and career advancement within their workspace as well as the institutional culture which favors men and disfavors women (48). From Nigeria, there are reported inconsistencies in the training of primary care professionals in terms of regularity and who gets trained. Those who need training support often end up not being selected leading to staff motivation and attrition. Although Primary health care staff are encouraged to undergo personal trainings, very few opportunities for these trainings exist in actual reality(23).

In a study of six LMICs by Neeru Gupta, notable findings show that, nurses and midwives had few in-service training (49). Across the six countries, women were found to be more likely to receive transportation allowances or health insurance compared to their male co-workers but they have fewer opportunities to access further professional training (49). In a study from Malawi, continuing education and progressive career development do not adequately influence

the retention of health workers alone. Strong and functional Human Resource Management (HRM) practices contribute as well and result in improved health worker motivation and performance. Improved health worker motivation positively influences retention (29). These HRM practices include performance appraisals, the availability and use of job descriptions, adequate supportive supervision, and performance feedback (29).

Remuneration/Incentives

Salaries and income influence the motivation, performance, and enthusiasm of health workers including employee attraction and retention(17). Government salaries and allowances for Nigerian health workers except Doctors have become increasingly insufficient for comfortable living because of the challenge of inflation and the progressive devaluation of the Naira in the last 20 years. Opportunities for salary supplementation (via dual practice) are more commonly available in the urban than in the rural areas(24). Poor remuneration is a cause of high attrition rates among health workers which often has a negative impact on the cost-effectiveness and sustainability of government interventions targeted towards PHCs(31).

Gender Wage Gap

It is important to apply an intersectoral lens to understand remuneration in LMICs where women are frequently at the lower end of the gender-class-socioeconomic ladder (50). In the analysis of gender equity in 104 countries by Boniol et al., statistics from 21 countries reveal the average gender pay gap of 11% in the health workforce after adjusting for occupation type and the number of work hours (51). In a study by Shannon et al. on the wage conditions of healthcare professions, there was a substantial gender wage gap across the general and health workforce in all country groups. On average, women were paid 24 to 35% less than men in the general workforce, and 26 to 36% less than men in the health workforce. The gender wage gap was pronounced in all country and occupation groups, although the largest gender wage gaps were seen in allied and support occupations in lower-middle-income countries (52). Ensuring that staff receive adequate pay for their work is key to retention (53),(54).

Wages in the public sector consist of salaries and various allowances with the basic salary constituting a small part of the overall pay. In a 2005 survey in Ghana, the basic salary was 26% of a doctor's monthly income in comparison with 43% of that of mid-level health workers such as medical assistants (26),(55). Allowances are meant to strike some balance in the salary scale across the health workforce, but this is not often the case. In Ghana, a doctor's basic salary was three times higher than that of a community nurse while his entire income was four times higher when allowances were added (56). The situation is similar in Zambia where the addition of allowances made doctor's salaries four times higher than those of nurses or midwives (57). The wide disparities in pay between doctors and other skilled health staff such as clinical officers, medical assistants, and senior nursing officers highlight the significance of income in HR planning and in getting the right mix of health workers (17).

Regularity of Pay

There were different kinds of allowances (housing, on-call duty, recruitment, retention, uniform, overtime, and night-duty) as part of health worker salaries in Zimbabwe (57). This structure incurs heavy administrative costs and could result to many inconsistencies, feelings of unfairness, and distrust in the system (17). The regularity of payment is also exemplified

in a Zambian study which revealed that 15% of health staff always received incomplete pay, 80% had been payed after their due date, 10% have had to pay a fee to 'accelerate' the payment of their salaries (57). In Ghana, there were also reports of irregular pay of allowances for overtime from 40% of participants in a study (56). Constant experiences of delayed payments discourage the dedication of employees in the public health system (17). In Uganda, many nurses, midwives and other health workers engage in dual practice to augment their salary because of a lack of salary increment (34). Some owned private clinics or worked elsewhere, while others engaged in one form of retailing business or another. This affected the availability and retention of staff at their primary places of work (34).

Incremental Pay

In Burkina Faso, salary increase was not highlighted by health workers as one of the important incentives for retention in PHCs because all civil servants are on the same salary scale. In addition, the ministry of health could not single-handedly increase salaries without the involvement of all other government parastatals(58). In Burkina Faso, salaries did not increase with the duration of service(17). Conversely in Ghana, doctor's salaries increased by a factor of 1.7 and by 3.7 for midwives over a career period(56). The prospects of a progressive salary increase is expected to improve staff retention in the public service but this assumption has not been substantiated in SSA due to the lack of empirical data(17).

Public-Private Sector Pay Disparities

The disparities between salaries in the public and private sectors, particularly international Non-Governmental Organizations (iNGOs) contribute to the attrition of health workers from the public sector. In Ethiopia, people working with donor agencies earn more than those in government employment. For instance, a car driver in a US bilateral agency in Addis Ababa earned more than a University Professor in the medical school, and a Public health specialist in government would earn over three times his pay in an iNGO (59). Doctors, midwives, and laboratory technicians each received more than twice the salaries of their counterparts in public employment. NGOs were reported to pay 20%-45% more than government. In addition, some doctors in the private sector received up to 52% of a year's earnings as incentives (60). This affected retention in the health sector because most of the health workers are employed from the public sector, thereby reducing the public health workforce. In addition, health workers themselves sought for opportunities to move into the private sector, resulting in an internal brain drain within the health system(60). This leaves the health system with less skilled and poorly motivated workers who could also be tempted to leave, and the challenge of finding new qualified hands to replace those who have left(17).

Interconnecting/Cross-cutting Factors

This section analyzes different gender factors in the framework which are at play at all three levels of the healthcare provider, the community or society and the health system.

Mobility

This segment presents findings about Occupational Mobility among Health workers within (internal) and outside (international) the health system of countries and the underlying factors (Push and Pull).

The increasing demand for health workers in high-income countries plays a role in retention and health workforce mobility patterns (16). From the current Organisation for Economic Co-operation and Development (OECD) data, high wage differences between the health workforce of high and low income countries contributes significantly to the growing trend of international migration of health personnel (61). Factors responsible for the migration of health workers have been categorized into 'Push' and 'Pull' factors. 'Pull" factors attract an individual to a new environment while 'Push" factors act to make an individual leave a location (62).

'Pull' factors include better employment opportunities, higher earnings, and improved living conditions. 'Push" factors include poor salaries, job loss, poor living conditions, etc. (62). 'Pull' factors influence international health workforce migration while internal migration is a combination of both factors. Factors such as the level of political stability within a country, conflict and terrorism, public service work conditions, and employment situation mediate health worker attrition or retention at the national level (62). General living conditions influence retention while labour laws, human resource management, poor leadership, career advancement opportunities, existing infrastructure and equipment, and supportive supervision influence mobility at the local level (62).

In Nigeria, Awofeso reported that though Northern States such as Jigawa and Taraba, are severely lacking in indigenous health workers, and social infrastructure, their governments do not provide pensionable appointments to non-indigenous staff. This has made relocation to PHCs unattractive to non-indigenous health staff (24). Bocoum et al. highlighted the regionalized recruitment policy for Nurses, Midwives, and Auxiliary midwives established to correct the uneven distribution of HRH in Burkina Faso(58). Health workers were required to work/stay in a region for an indefinite period unless they were senior officers who could apply for a change of region. From the study, most nurses and midwives desired the cancellation of the regionalization policy because of family responsibilities (58). In a 2015 study, PHC workers emphasized that the supportive actions of host communities overcame the push factors such as irregular salaries, poor facility that they experienced (13). The supportive actions of the host community such as providing accommodation and keeping company encouraged them to stay. Another stick factor for retention may be the limited options for employment elsewhere for the community health workers who are specifically trained to work at the PHC level (19).

Leadership and Career Progression

In this segment, findings on the gendered dimensions influencing leadership and career advancement in the health workforce are presented.

In various health professions, women are under-represented in leadership positions and are concentrated in the lower pay positions (44). According to Langer et al., women currently face a struggle to function in their full capacity largely because of the lack of gender responsive policies which empower women to incorporate their social, biological and professional roles(63). Professional hierarchies influence leadership appointments in Kenya and Nigeria. Senior physicians who are usually male, are often promoted to leadership positions with little attention to their experience in management training to the disadvantage of qualified female health workers (64),(24). This has compromised effective health leadership and deprived the health system of qualified clinicians (84). When offered leadership positions women looked for family approval (64). Married women lost years of service already

accrued in the public sector, forfeiting opportunities for trainings and promotions after changing or leaving their jobs. This negatively impacted their career growth with many women returning to the public health sector in lower positions (51). These show gender inequity with regards to career development and the attainment of decision-making positions (45).

According to Evers and Sieverding, studies show that even highly qualified females in other occupational fields are promoted less often and experience longer career progression times compared to their male colleagues within the same field(65). From the 2011 study of Newman et al., some women reported that their performance evaluations and promotion opportunities had been influenced by their pregnant state. While others confirm that they had missed job opportunities that they were qualified for because of the likelihood of being pregnant in the near future, others reported that they had been demoted after a pregnancy without a just cause(43). Newman's findings reveal the existence of vertical and horizontal segregation in the Rwandan Health workforce. Few women (16%) believed that women were not qualified to occupy leadership positions(43). Dhatt et al., report in their research in Kenya, women were recognized for childbearing and upbringing by male health managers. These roles were seen as a disadvantage to their career advancement as well as their ability to take up leadership positions in healthcare(64). A senior female manager equally shared this sentiment when she confirmed that after much training and investment, newly appointed female health managers tend to get pregnant a short while after their appointments. They proceed on maternity leave and become inconsistent and less committed to their work(65).

Selection/Recruitment

There are equally gendered factors that could influence the recruitment of PHC workers. In Mozambique, the requirement that male community health workers must attend a residential training for four months makes it difficult for married women who also desire the job because of gendered household duties. Single mothers playing the 'provider' role also faced similar challenges of having to be away from family. Furthermore, the low literacy levels of women put them at a disadvantage for the job compared to their male counterparts(95). In some LMICs, the criteria used in selecting female PHC workers include mobility, the ability to communicate in the local language, mobility, leadership abilities, availability, family obligations, indigenous citizenship status. These types of considerations in selecting PHC workers deliberately make men preferable for selection(59). Steege et al. in their study of post-conflict Mozambique, report that literacy requirements disqualified CHWs who could not complete their education because of the war, but males in similar circumstances were allowed to work(66). Witter et al. equally observed that in Zimbabwe, men were more likely to be posted to the rural areas which was perceived as beneficial for promotion and access to training opportunities(44). Restrictive and unfriendly recruitment policies in the Northern States of Nigeria despite a having higher disease burden and severe shortage of skilled personnel, have hindered the recruitment of skilled workers from other parts of the country(2).

Safety and Security

In this segment, I analyze the dangers that health workers are exposed to in the course of work as well as the gendered factors behind insecurity in their work.

Insecurity impacts the performance of health workers. From Steege et al., it was challenging for CHWs to deliver health services at night, and during the day in urban and rural Kenya. For example, CHWs were threatened by the husbands of clients who needed HIV testing in Kenyan communities and rape incidences of CHWs were reported. Study participants suggested the use of security personnel to protect CHWs and ensure their safety (31). From Ethiopia, Jackson et al., report that some Health Extension Workers (HEWs), expressed concerns about their personal safety and some particularly mentioned the risks of sexual assault. One HEW was reported to have been abducted and raped with no action taken by management to remedy the situation(20).

Razee et al., report that in Papua New Guinea, young men who abused drugs were cited commonly as threats to safety by study participants. Many female health workers gave instances of feeling threatened by clients, community members, other health staff and strangers. Some of them include being alone on night duty, being young and single, arriving newly to the community and living alone without family(67). In another instance, male prowlers broke into the rooms of single ladies, while the female health manager was threatened by the husband of a staff she disciplined. FHWs shared strategies they employ to ensure safety such as living with a family member, not walking alone, not opening the health centre when there's no electricity, working with a male colleague etc.(67). Female health workers considered changing job location because of their personal safety and one reported pressure from her husband to change work location for safety reasons. These issues were reported to cause a lack of motivation to work which is also a determinant of retention (67). Similar concerns came from PHC workers in Southern Nigeria(68) where female health workers could not attend to expectant mothers at night as they were afraid to walk alone. Insecurity can be pronounced in conflict situations for both professional PHC staff and CHWs. Nurses regularly left their health posts during conflict for more secure places while leaving patients in the care of CHWs. CHWs in DR Congo are largely older women who were at high risk of rape in conflict situations (69), (31). Reports of violence and sexual harassment also exist in the health system.

In Rwanda, only 4% of male health workers reported quitting their jobs because of verbal abuse. On the other hand, 10% of female health workers reported quitting their jobs due to bullying and 7% due to sexual harassment (43). In most cases, subjects only disclosed the incident to close friends and family but for sexual harassment, about 40% of cases were not reported to anyone. Furthermore, only 30% of health workers reported any action taken by their supervisors to help the victims. These experiences of sexual violation and violence are likely to contribute to the attrition of health workers (43).

Education

Gender inequality and educational disadvantage experienced by boys and girls hinder opportunities for the production, retention, and advancement of health workers into leadership positions. In 2011, Newman's study of Kenya's health education system, revealed that women enrolled more in programs such as nursing, nutrition, and Community Health Worker (CHW) while more men enrolled in medicine and clinical officer trainings(70). School administrators justified this gender segregation and stereotyping submitting that nursing was perceived as a woman's job and it was not dignifying for men to take it up. An analysis of faculty staff in 20 nursing schools revealed surprisingly that there were more male (285) than female(173) lecturers(70). Uzochukwu reported from his study on Nigeria that the lack of effective incentives from government to encourage the pursuit of professional healthcare training has also contributed significantly to the shortage of PHC workers. Though evidence

exists that health care trainees from rural areas will likely work in PHCs and rural facilities, this option has not been fully explored. Furthermore, limited employment opportunities and persistent health worker strikes send a discouraging message to prospective health workers(71).

Age

Ebuehi and Campbell report from their study findings in Nigeria that the age of health workers influenced their decision to stay in PHC facilities in rural areas. Younger health workers with previous work experience who were satisfied with their present work were willing to remain in PHCs (72). This may be explained by the fact that younger health workers were less likely to be married with fewer family responsibilities and therefore were more mobile and willing to stay in PHCs (72). This finding is similar to a study from Ghana by Bonenberger who reported that most of the health workers were young people under 30 years of age indicating that middle-aged and older health workers had moved to the urban areas(73). In contrast, a study from Ethiopia showed that a high percentage of Nurses and midwives who were young and had worked for less than 5 years were planning to leave the workforce(28). This is also like the findings from Mozambique where both young male and female community health workers were less likely to stay in their jobs and more inclined to go outside their communities into the cities to look for other job opportunities(66).

Sociocultural Norms and Socio-economic Status

Many PHC workers have a low socio-economic status and educational level and are mostly women. They are at the bottom of the health system hierarchy and are subject to the power play which shape the health sector and the societies they exist in (74). Study findings from Tweheyo et al., revealed that married female health workers in Uganda were often absent from work because they had to fulfil culturally established norms. The illness of a child or family member meant they had to stay off work because culturally, women are responsible for caring for the family. This norm holds so strongly that workers did not require an initial request of leave from facility managers to be absent(34). Furthermore, it was also mandatory for women to be present at the burials and wedding ceremonies involving immediate and extended family members and health workers followed suit to protect their 'image' before the family(34). According to Ostlin et al., existing sociocultural norms define women and girls as less capable in certain regions yet seen as repositories of family/community pride. Most of these norms make women subordinate to men and gives men control over their income and resources such as money, land, and other assets, including decision-making power. This ultimately results in economic inequality and a low socioeconomic status where women have less property but still have higher burdens of work to do in the economy of unpaid care, reproduction, and ensuring survival(75).

National Context

Governance and Resource Availability and Pluralistic Health Systems

Nigeria operates a pluralistic health care system with both public and private sectors, and orthodox and traditional forms of care being provided (2). The public sector activities in Nigeria is funded through national allocations shared among the three tiers of government. About 50% of the funds go to the Federal Level, one-quarter to the 36 states of the Federation and the last quarter to the 774 Local Government areas (LGAs) in the country (76). The

Federal government presides over tertiary care, State governments manage secondary level of healthcare while the LGAs are responsible for the Primary level (PHC). In line with the 1999 constitution, local government funds are channeled through the State government account and this has given States constitutional control over the level of funding that gets to the LGAs (77). This method of resource transfer/allocation was initially established in the old 1979 constitution and later abolished in the 1989 constitution to strengthen LGAs and increase their autonomy. It was again reversed in the 1999 constitution for fear of the misappropriation of funds and corruption at the LGA level with a direct transfer of funds (78). Devolving authority to the LGAs without corresponding financial autonomy to fund the PHCs creates a foundation for non-uniform health outcomes in the communities. This also created a pluralistic health system where the PHC is under the control of both the state and local governments (79),(80). According to Khemani and Stuti, one of the major and recurrent drawback of the Nigerian health sector is poor and inefficient leadership (81). Nigeria's health indicators still compare poorly with those of other African countries such as Tanzania, Uganda and Eritrea despite having a much larger health workforce than many of them (81). Khemani reports that Uganda ranks and regularly publishes the national district health performance figures as part of efforts to improve transparency about health worker performance in the health sector (81). Influenced by this finding, Awofeso, advocated for the establishment of benchmarks to monitor and compare the performance of health workers in the public sector in Nigeria (24). In Uganda, low prioritization of and insufficient financial allocations to decentralized health care is responsible for a high rate of absenteeism among public health workers at the PHC level (34).

Resource availability in terms of staff strength and functional equipment is another factor observed by Bradley & McAuliffe (82). Staff shortages and the use of obsolete, non-functional, or insufficient equipment is demotivating for health workers which also affects retention(82). These shortages lead to extended working hours and heavier workload for which there is no extra pay. This also has a negative impact on patient outcomes and can lead to prolonged stay (82). In addition, stress levels are increased as "off duty" times are reduced. Lack of Personal Protective Equipment (PPE) unduly exposes health workers to the dangers and possibility of contracting infections (such as HIV) (82).

Gender-sensitive policies and practices/interventions to Improve Health Worker Retention in PHCs

This section covers gender responsive interventions/practices to address health worker retention in PHCs. Many LMICs have adopted several incentives such as compulsory service; employed alone or in combination with other options to attract or compel health workers to stay in PHC facilities (62),(66).

Compulsory service and Financial Incentives

Lehmann and colleagues quoting Reid observed that the Ministry of Health in South Africa initiated compulsory service and financial incentives to tackle imbalances in the distribution of health workers, and the allowances for rural workers and those with scarce skills. The financial incentives seemed to produce positive benefits by making health workers stay in

primary care facilities for a longer term, but the staffing of many rural hospitals is still a challenge, with hospitals in the remote rural areas without doctors (62). In the study carried out by Steege et al. up to 40% of participants supported establishing a 5-year service contract especially with young graduates to encourage working in health facilities at the primary level particularly in rural areas. In addition, deploying new staff to such facilities will improve coverage and service provision(95).

Rural Allowances

In 2005, Zambia initiated some measures to attract and retain doctors in rural hospitals. This included a rural allowance which is 30% of their salary, in addition to accommodation renovation, a contribution to children's school fees, vehicle and or housing loans, and support toward further education (83). These interventions seemed to have a strong influence in attracting doctors. Though the intervention was expensive, it was far cheaper than employing foreign doctors for the same positions (83). In a 2019 follow-up study of the effectiveness of these interventions by Prust et al., the education and employment incentives, and facility-based improvements influenced health workers to take up rural jobs (84).

Non-Financial Incentives

Performance Appraisals, Staff Recognition, Gender Studies

In a study from Ethiopia, staff retention activities by the management of health institutions included yearly performance appraisals for health workers and feedbacks following the appraisal (28). Other strategies include involving staff in organizational goal setting, providing financial and non-financial incentives, and taking disciplinary measures and staff counseling. These interventions were all rated as being averagely effective except for the financial incentives which were rated as poor (28).

A non-financial incentive was initiated in South Africa to tackle gender issues in the health workforce. A Women's Health Project was instituted to educate and empower health workers to recognize and deal with gender biases in their personal, organizational, and professional lives. This was done using participatory methods in reflective and action-oriented training. Two major courses were developed under this project - Health Workers for Change and Gender and Health Systems to address gender relations, issues about race, class and other areas of discrimination that reflect life's complexities (85). Health workers were made to go through a process of clarification of their values and a self-reflection about how society influences their work and organization. They were asked to empathize with others to understand the roles of other actors within the health system (11).

Infrastructure, Improved Human Resource Management

In a 2015 study on the Job satisfaction and retention of Midwives in Rural Nigeria by Adegoke et al., the three most important retention strategies identified by study participants were the availability of training opportunities, availability of equipment and supplies and the availability of drugs at PHC facilities (29). Uzondu et al. in their study report that in Northern Nigeria, female health workers were posted in pairs to PHCs to prevent loneliness and isolation. In addition to that, "gender responsive" motorcycles which did not expose the legs of female HWs were provided in conformity with the cultural and religious ethics of that environment to aid their transportation across difficult terrains (35). Attractive financial incentives and the

provision of comfortable accommodations and potable water close to the health facility are all strategies that contributed to the retention of the female health workers within the communities (35). Awofeso (24) reiterated WHO's stand on health leadership and management focusing on improving the management training cadre and linking recruitment and retention to performance. This will be a shift from the current system of health management and leadership which operates largely by default, rather than by design in Nigeria (24).

Creating opportunities for continuing professional development, effective and responsive human resource management practices, in addition to increased and regular salary and allowances (housing, education, transportation) corroborated by literature (86),(73),(87),(88), are the interventions that have been applied / implemented by several SSA countries to improve health worker retention at PHC levels. Many of these interventions have been implemented either singly or in a "bundle". Following a 2015 study in Mozambique, the Government of Mozambique focused on the provision of housing benefits (basic government housing and housing loans), professional development trainings, and a sufficient supply of drugs and equipment at facilities (88). These incentives were implemented for non-physician health workers whose interests had initially been under-represented when the study showed that they were the most highly preferred incentives influencing job uptake in PHCs (88).

Leadership and Career Progression

To establish a gender responsive and institutionalized leadership style, Dhatt et al. recommended creating an enabling environment for women's leadership by establishing an active recognition system for exceptional leadership by women, and an active recruitment of women leaders at all levels of the health system (64). Langer et al., reports that organizing flexible work schedules, leadership development programs focused on women, mentoring programs, and professional women's networks improves retention, increases the promotion of gifted women, and also improves organizational performance(63).

HRH and Gender policies in Nigeria

Policies/Guidelines

This segment Provides a summary of the Gender, PHC, and Human Resource for Health Policy documents of Nigeria. The aim is to understand the focus of the government in these key areas and the gender sensitivity therein. 2 documents are reviewed here namely: The Draft National HRH Strategic Plan, and the National Gender Policy (Implementation) Plan.

The Draft National Human Resource for Health Strategic Plan for Nigeria was developed in 2007 in response to issues raised in the World health report of 2006 concerning the global human resource crisis which was worsening in developing countries (89). The overall aim is "to ensure that adequate numbers of skilled and well-motivated health workforce are available and equally distributed to provide quality health services". In the document, the current challenges of the HRH of the country were acknowledged. These include shortages, mal-distribution, under-utilization, brain-drain, lack of HRH management information system, and

systemic deficiencies in HRH management,etc. The plan set forth actions to be taken in a number of areas including but not limited to: aligning the supply of the health workforce to the priorities of the health sector, applying best practices for HRH management and development will promote the equitable distribution and retention of HRH in the right mix, and institutionalizing performance incentives and management systems that recognize hard work and service in deprived and underserved areas(89).

For the recruitment and retention of health staff at all levels of care in the country, the strategy of the Federal Government was to liaise with the National Youth Service Corps (NYSC) to deploy health professionals to areas of severe need, and redistribute public health workers between 'underserved' and 'surplus' States. Efforts towards health worker retention was to improve remuneration, conditions of service and implement incentive retention schemes(89).

The National Gender Policy (Implementation) Plan

The National gender policy plan for Nigeria was developed in 2006 to address issues relating to women empowerment to ensure equal rights for men and women(90). The policy was to address the systemic inequalities between men and women without ignoring the fundamental differences between them. The intention was to have the gender policies incorporated into all national goals and objectives considering how gender inequality issues interfere with the achievement of such goals at the local, national, and international levels. the goal of the National gender policy was to provide guide for the country to move from gender blindness to gender transformation(91). Four critical areas of gender gap have been addressed by the policy:

Economic Participation- women are worst hit by economic transition processes because they lack access to resources. This focused on strengthening gender responsive trade regimes in the commerce and export ministries for women to be involved in enterprise and small and medium scale businesses. In addition, it mentioned the rights of women to receive adequate remuneration for their services. This was expected to increase household income, reduce poverty, and contribute to the economic development of the nation.

Economic (Employment Opportunities)- Women remain severely underrepresented in the workforce although constituting 49% of the population. Unemployment rates among women have remained high (more than 60%) and strategies must be developed to increase the employment index for women.

Educational Attainment and Capacity Building-this is focused on increasing the enrollment rate girls from the current 42.6%. This is in addition to the protection of child rights to ensure that the girl child studies up to Secondary school level and be at least 18 years before being given up in marriage.

Political Empowerment-this addresses the patriarchal system of decision making to allow for the equitable representation of women at the home front and in Governance.

Health and Wellbeing- this focuses on the social determinants of health of women often mediated by many factors. It also addresses the issues of harmful cultural practices, maternal mortality, socioeconomic status , teenage pregnancy(91).

Although HRH strategies have been outlined in these policy documents, only 15 states in the country have adopted the policy(33). A health sector reform program was implemented between 2004 to 2007 to reorganize the sector for improved service delivery which would

result in better health outcomes. The program was implemented using a top-down approach which hampered its true realization and the roles and contributions of the Local Government to the revitalization of PHC were not clearly defined (23). Furthermore, the political will and commitment to sustain the implementation of these policies have not been clearly seen from the governing Authorities (23),(92). Though there were mentions of gender mainstreaming, gender studies, and gender in health management (for pre-service training of health workers), in the National strategic HRH plan, there were no clearly outlined actions that would be taken to ensure its implementation and to achieve gender equity in the health workforce (89).

CHAPTER 5: DISCUSSION AND RECOMMENDATION

5.1 Discussion

This section analyzes the findings from literature based on the objectives of the study. The most prominent findings and the interrelationship between them are discussed.

5.1.2 Factors Influencing Health Worker Retention in PHCs

Family and Household Dynamics

Marriage and family life have a strong influence on the life course of a woman's career. Female health workers face the challenge of striking a balance between maintaining a career and fulfilling household responsibilities. The lack of autonomy of women to decide when to have children or not also interferes with their work life and their motivation to remain in paid employment. This reflects a desire to comply with the socially constructed gender norm of being the caregiver in the home and wife to their partner without losing out on the opportunity for self-realization through productive work. These competing demands could explain reasons for lateness or absence at work because of family demands, relocating or resigning jobs to be with their husbands – a pointer to the overriding influence of gender at play. Health worker absenteeism has negative implications for the health outcomes of patients meant to be served, especially in emergencies. In contrast, unmarried female health workers are more available with less family expectations to meet. These scenarios should be considered in the deployment of health staff to PHCs. Workplace place policies that support women in balancing disproportionately heavy domestic roles with paid employment such as maternity and sick leave can be beneficial in encouraging retention(31).

At the community level, receiving recognition for work from the host community contributes to the retention of health workers. Acceptability from community members increases the motivation of health workers and gives the satisfaction of being involved in a valuable course which is one of the determinants of retention. This can serve as a stick factor especially when performance appraisals, and supervisory support are lacking. On the other hand, communities with strong cultural views supporting women subordination may not provide such motivation for health staff which could be demoralizing. This is because women involvement in health care and interaction with men are interpreted as a transgression of the socio-cultural gender norm and a challenge of the status quo.

Remuneration and Incentives

At the Health system level, salaries and incentives play a very significant role in the retention of health workers at the PHC level. Inadequate, irregular, and incomplete pay are demotivating factors which have a negative effect on health worker retention. The impact of pay parity is worse on the female than on the male health worker. Inequalities in pay have a dual impact of economic gender discrimination and disincentivizing the entrance of new and young professionals into the primary level of care. The vicious circle exists because majority of the female health workers are in the low-paying position, they receive less pay in comparison with their male counterparts at the same level(15), and with their colleagues at the higher levels of care. There is equally no financial compensation for providing care at the family level. This reduces their purchasing power and ultimately keeps them at that lower end

of the gender-class-socioeconomic ladder. Secondly, young health professionals will be unwilling to work at the primary care level where the salary is not commensurate with the required effort. This explains why many female health workers engage in other businesses to augment their salaries from government. In Nigeria, insufficient salaries and the pay gap between doctors and other health workers are the major reasons for the recurrent strike actions in the health sector. These strike actions have resulted in the death of many patients who could not access care. Gross underfunding caused by the flawed system of PHC financing, inefficient allocation and use of resources, weak leadership, and corruption at the PHC level contribute significantly to the inability of LGAs to pay attractive and regular salaries to PHC staff(20). The adoption of specific financial and non-financial incentives such as providing car and housing allowances like Zambia, and establishment of a singular salary scale for all public servants as seen in Burkina Faso can be instrumental in closing this gender pay gap in Nigeria.

Leadership and Career Advancement

Women under-representation in leadership reveal gender inequities across institutional, national, and internal organizations. Although health systems depend significantly on women as health care providers, they are rarely given the opportunity to lead within the same systems (64). When given the chance at leadership, women have been proven to be differently motivated and focus their interventions on areas that are more responsive to the needs of both genders including children(64). Promoting male doctors to positions of leadership by default stereotypes and discriminates against the female gender as incapable of leadership. The self-discriminatory and self-limiting thoughts and attitude of women who believe that pregnancy and childcare roles disqualify women from being able to take leadership roles is a pointer to the lack of mentorship and successful female role models in leadership. Encouraging and allowing women to occupy positions of leadership empowers them to influence policy development, challenge harmful gender norms and practices thereby becoming agents of change, and to realize their potential in building responsive and inclusive health systems(31). Providing mentoring opportunities for women in this regard is a beneficial step that can be taken to increase female health worker participation in leadership. The scarce or non-involvement of women in leadership positions and decision-making processes was equally a recurring theme throughout the course of this research. This also applies to the study findings on effective and responsive human resource management in the health system.

Safety and Security

Everyone, has the right to feel safe and protected by their employer(31). The various accounts of GBV reported in this study indicate that more attention is needed in this area. The personal effort of health workers to ensure their safety while providing healthcare indicates a lapse on the part of government for health worker welfare. Uncertainty about personal safety at work is a major deterrent to health worker retention. Safety policies and emergency evacuation plans are necessary to ensure the safety of health workers especially those in distant locations and, gender responsive policies within the health workforce to curb all forms violence against women. In addition, the human resource management arm of the PHC system should enforce disciplinary actions against erring persons and get justice for abuse survivors It is unacceptable when the health system as an institution becomes a source of harm to the people it should protect. Providing security in form of police posts close to the health centres is a good alternative as is practiced by Kenyan Health workers.

Mobility

The internal and international mobility of health staff contributes to staff attrition and retention. More male doctors migrate internationally than other cadres of health staff. This is because men who are regarded according to gender norms as providers take proactive steps to look for better paying jobs to continue to fulfil their role. Restrictive recruitment policies at the local and state government levels equally pose a major challenge in Nigeria. States in the Northern parts of the country with higher disease burden are often unwilling to employ health workers from states with 'surplus' supply like Lagos, Enugu, and Anambra States. This is a breach of the HRH policy which allows the redistribution of health staff between 'underserved' and 'surplus' states. Furthermore, religious intolerance in these northern parts of the country is a major deterrent for health workers from the Southern and Eastern parts who are predominantly Christians. This is significant for Christian women for whom total covering of all parts of the body (as part of dressing) is not a religious requirement which can expose them to attacks on the grounds of religious non-compliance. Health worker shortages and the consequent health outcomes will continue in these parts of the country until this problem can be resolved. On the reverse side, older women who leave their jobs or move to different locations are often more experienced (5 years and above). This has implications for the health outcomes of the community when only younger, and less experienced (2-5 years) health workers are left to provide services to the community.

Education, Socio-cultural norms, and Socio-economic Status

Women have lower education attainment rates and therefore lower employment rates. This reduces the number of women eligible for entry into the health professions. Furthermore, the patriarchal system of family headship and decision-making puts women at a disadvantage(2). Many family heads chose to educate the males instead of females because of the sociocultural beliefs that females are expected to get married early and begin reproduction. It also means that women cannot seek educational pursuits without the approval of their husbands or fathers. Early marriage also deprives the girl child of the opportunity for education, self-realization, and self-development. Poverty and lack of assets prevent women from being able to access education by themselves at the primary and secondary level which are prerequisite requirements for entrance into the health care profession. Women are largely dependent on the men who are culturally classified as the 'providers' of the household and are often not expected to be in possession of lots of money, lands and houses or other form of wealth. The above exemplifies the situation of women especially in the northern parts of Nigeria. The interplay of these three factors influence the availability of women for employment into the health workforce in the long-term and retention in the immediate term.

5.1.3 HRH and Gender Policies

The Nigerian government has already developed policies to support gender mainstreaming in the health workforce. There are still gaps about how these policies will be adapted to the different levels of health care in the country and to different socio-cultural and religious contexts. The second national strategic plan was commissioned in 2018 but the current area of focus based on the document is the rehabilitation and construction of PHC centres in all the political wards of the country to strengthen Universal Health Coverage (UHC)..

Relevance of Framework

The framework on gender by Steege et al., was useful in exploring a wide range of gender-based factors influencing the retention of health workers. The framework is versatile and can be adapted to both High income, low, and low-middle-income country contexts. Some factors were, however, not very clear or needed in the framework and were also not explained or used by the developers of the framework themselves. For example, the factor 'interactions' did not clearly reflect who is interacting with who. Although it was placed between the health system and the health care provider, it is already expected that the health provider will interact with the health system. The entire framework was developed to explore retention factors under the different segments. There would have been no need for an extra addition of 'retention' in the framework. These could have been left out of the framework to make it easier to use.

5.1.4 Study Limitations

It was challenging finding relevant literature from Nigeria about gender in the health workforce. Therefore, the author had to find information from other SSA countries. This study was carried out by one person in a very limited time frame. Though study search was delimited to 10 years and different key words and search terms were combined, there is still the possibility that some relevant articles may have been left out. Secondly, the analyses and review of each article may not have been as thorough as it could have been if more than one person were reviewing it.

5.2 Conclusion

Subtle pointers to the existence of gender biases exist within the health system of Nigeria and other Sub – Saharan African countries. Focusing on actionable factors that can increase the retention of health workers in PHCs while addressing the gendered dimensions is important to be able to get the best out of and already overstretched and depleted workforce. The patriarchal system of family headship in Nigeria influences the life course of a woman's education, potential, and professional advancement. Women in general and female health workers particularly, will be able to achieve more when they have the support of their husbands and family members. Gender equality in the health workforce in actual practice allows men and women to choose their different vocations, develop the necessary competence for their job, to be well paid and equally allowed to thrive and grow in that chosen Profession. Gender mainstreaming in Healthcare particularly for Human Resources for Health is not yet institutionalized in Nigeria, although the policies which should form the bedrock for its implementation already exist. Practices and interventions from other countries seem to be efforts taken in isolated responses to the gender challenges that occurred per time. Gender-sensitive policies and interventions to reduce inequality in the health workforce and strengthen the retention of health workers in PHCs must be institutionalized. The political willpower to support and facilitate the institutionalization of gender responsive policies for the health workforce is still lacking; this shows that there is a need and a window of opportunity for women to become more involved in the leadership and decision-making processes in Nigeria.

5.3 RECOMMENDATIONS

1. **National Level:** The FMOH, the Federal Ministry of Women Affairs and the Ministry of Labour and Employment should begin to actively implement and institutionalize the National Gender Policy and HRH retention Policy for Health workers in all PHCs in Nigeria.
2. The Federal Ministry of Health should provide sex-disaggregated data of health worker distribution in Nigeria for gender mainstreaming.
3. **State Level:** HR policy and management practices which enforce disciplinary actions against all forms of violence and assault should be enacted and implemented in the health workforce.
4. Short course sessions on gender in the workplace covering core topics such as gender awareness, gender mainstreaming, and gender in health management should be carried out for all staff as part of pre-service training and for management level staff as part of compulsory requirements for promotion.
5. Would-be health managers and supervisors should be asked to present practical steps about how they would ensure gender responsive and gender transformative environment under their watch after their training.
6. Leadership trainings and mentorship programs for male and female health workers should be instituted. This is to provide positive models of leadership to encourage women to aspire to positions of leadership. Women constitute a larger percentage of the health workforce and should be represented in leadership for gender-balance and gender-equitable decision making.
7. **The PHC level of care:** State governments should take over the management of PHCs through the state ministries of health since the funds go through them.
8. The leadership in the national and state ministries of health should liaise with the executive and legislative arms of government to increase the fiscal space to allow for increased budgetary allocations to healthcare and the wages of health workers.
9. **Local Government Level:** Local Government Authorities should provide specific incentives such as housing, and transportation allowances or car loans for PHC workers to encourage their retention in PHC facilities. Lessons can be drawn from the interventions of Zimbabwe and Ethiopia in this regard.
10. **Health Worker Level:** Men should also take up caregiving roles in the household to enable their partners pursue and advance in their chosen careers. Further research needs to be carried out to determine ways in which men have been involved in the caregiving role in support of their partners.

REFERENCES

1. Group IGW. Understanding and Applying the Gender Equality Continuum Purpose. 2016.
2. Federal Ministry of Health-Nigeria. Second National Strategic Health Development Plan 2018-2022: Ensuring healthy lives and promoting the wellbeing of the Nigerian populace at all ages. 2018.
3. National Bureau of statistics-Ministry of Budget and National Planning. Nigeria-Multiple Indicator Cluster Survey (MICS5) 2016-17 [Internet]. 2018. Available from: https://nigerianstat.gov.ng/nada/index.php/catalog/57/download/549
4. WHO Regional Office for Africa. WHO Country Cooperation Strategy 2014-2019 Nigeria. 2014.
5. Human Development Report 2016. Human Development for Everyone [Internet]. United Nations Development Programme. 2016. 286 p. Available from: http://hdr.undp.org/sites/default/files/2016_human_development_report.pdf
6. Abdulraheem IS, Olapipo AR, Amodu MO. Primary health care services in Nigeria: Critical issues and strategies for enhancing the use by the rural communities. J Public Heal Epidemiol [Internet]. 2012 [cited 2020 Mar 5];4(1):5–13. Available from: http://www.academicjournals.org/JPHE
7. World Health Organization. NHA indicators_2017_SelectedCountries. 2017. p. 1.
8. World Health Organization. Global strategy on human resources for health: Workforce 2030. 2016.
9. World Health Organization. Delivered by women, led by men: A gender and equity analysis of the global health and social workforce (Human Resources for Health Observer Series No. 24). 2019.
10. Sambo GL, Lusamba-Dikassa P, Diarra-Nama A, Phiri M, Nyoni J, Awases M, et al. Crisis in Human Resources for Health in the African Region. African Health Monitor. 2007;7(1):15–21.
11. Abimbola S, Okoli U, Olubajo O, Abdullahi MJ, Pate MA. The midwives service scheme in Nigeria. PLoS Med. 2012;9(5):3–7.
12. Nigeria. NIGERIA DEMOGRAPHIC AND HEALTH SURVEY 2013 National Population Commission Federal Republic of Nigeria Abuja. 2013.
13. Abimbola S, Olanipekun T, Igbokwe U, Negin J, Jan S, Martiniuk A, et al. How decentralisation influences the retention of primary health care workers in rural Nigeria. Glob Health Action. 2015;8(1):12.
14. Vinten G. Book Review: Human resources for health: overcoming the crisis. Vol. 125, Journal of the Royal Society for the Promotion of Health. 2005. 287–288 p.
15. Magar V, Gerecke M, Dhillon J, Campbell J. Women's Contribution to Sustainable Development Through Work in Health: Using a Gender Lens to Advance a Transformative 2030 Agenda. 2016.
16. Buchan J, Dhillon IS, Campbell J. Health Employment and Economic growth: An evidence Base. World Health Organization. 2017. 27–50 p.
17. McCoy D, Bennett S, Witter S, Pond B, Baker B, Gow J, et al. Salaries and incomes of

health workers in sub-Saharan Africa. Lancet. 2008;371(9613):675–81.

18. Goldsbrough D. Does The IMF Constrain Health Spending in Poor Countries ? Evidence and an Agenda for Action Report of the Working Group on IMF Programs and Health Spending. Center for Global Development. 2007.

19. Elson D. Gender equality and economic growth in the world bank world development report 2006. Fem Econ [Internet]. 2009 Jul [cited 2020 Jun 28];15(3):35–59. Available from: http://www.tandfonline.com/doi/abs/10.1080/13545700902964303

20. Jackson R, Kilsby D, Hailemariam A. Gender exploitative and gender transformative aspects of employing Health Extension Workers under Ethiopia's Health Extension Program. Trop Med Int Heal. 2019;24(3):304–19.

21. Newman CJ, Fogarty L, Makoae LN, Reavely E. Occupational segregation, gender essentialism and male primacy as major barriers to equity in HIV/AIDS caregiving: Findings from Lesotho. Int J Equity Health. 2011;10:1–13.

22. Roome E, Raven J, Martineau T. Human resource management in post-conflict health systems: review of research and knowledge gaps. Confl Health [Internet]. 2014 [cited 2020 Jun 26];8(18). Available from: http://www.conflictandhealth.com/content/8/1/18

23. Uzochukwu BS., Agongo EE, Agana-Nsiire P, Enyimayew N, Adibo M, Mensah E. Primary Health Care Systems (Primasys) [Internet]. World Health Organization. 2017. Available from: http://www.who.int/alliance-hpsr

24. Awofeso N. Improving health workforce recruitment and retention in rural and remote regions of Nigeria. Rural Remote Health. 2010;10(1):1319.

25. Buykx P, Humphreys J, Wakerman J, Pashen D. Systematic review of effective retention incentives for health workers in rural and remote areas: Towards evidence-based policy. Aust J Rural Health. 2010;18(3):102–9.

26. World Health Organization. Working together for Health: The World health Report 2006. Policy Briefs. 2006.

27. El Arnaout N, Chehab RF, Rafii B, Alameddine M. Gender equity in planning, development and management of human resources for health: a scoping review. Hum Resour Health [Internet]. 2019 [cited 2020 Jun 25];17(52):9. Available from: https://doi.org/10.1186/s12960-019-0391-3

28. Gesesew HA, Tebeje B, Alemseged F, Beyene W. Health Workforce Acquisition, Retention and Turnover in Southwest Ethiopian Health Institutions. Ethiop J Health Sci. 2016;26(4):331–40.

29. Adegoke AA, Atiyaye FB, Abubakar AS, Auta A, Aboda A. Job satisfaction and retention of midwives in rural Nigeria. Midwifery [Internet]. 2015 Oct 1 [cited 2020 Mar 5];31(10):946–56. Available from: https://linkinghub.elsevier.com/retrieve/pii/S0266613815001928

30. Ojakaa D, Olango S, Jarvis J. Factors affecting motivation and retention of primary health care workers in three disparate regions in Kenya. Hum Resour Health [Internet]. 2014 [cited 2020 Jul 2];13(33):13. Available from: http://www.human-resources-health.com/content/12/1/33

31. Steege R, Taegtmeyer M, McCollum R, Hawkins K, Ormel H, Kok M, et al. How do gender relations affect the working lives of close to community health service

providers? Soc Sci Med [Internet]. 2018;209(April):1–13. Available from: https://doi.org/10.1016/j.socscimed.2018.05.002

32. Saprii L, Richards E, Kokho P, Theobald S. Community health workers in rural India: Analysing the opportunities and challenges Accredited Social Health Activists (ASHAs) face in realising their multiple roles. Hum Resour Health. 2015;13(1):1–13.

33. Szabo S, Nove A, Matthews Z, Bajracharya A, Dhillon I, Singh DR, et al. Health workforce demography: a framework to improve understanding of the health workforce and support achievement of the Sustainable Development Goals. Hum Resour Health [Internet]. 2020 [cited 2020 Jun 28];18(7):10. Available from: https://doi.org/10.1186/s12960-020-0445-6

34. Tweheyo R, Daker-White G, Reed C, Davies L, Kiwanuka S, Campbell S. Nobody is after you; it is your initiative to start wor: A qualitative study of health workforce absenteeism in rural Uganda. BMJ Glob Heal. 2017;2(4):1–11.

35. Uzondu CA, Doctor H V., Findley SE, Afenyadu GY, Ager A. Female health workers at the doorstep: A pilot of community-based maternal, newborn, and child health service delivery in Northern Nigeria. Glob Heal Sci Pract. 2015;3(1):97–108.

36. Olang'o CO, Nyamongo IK, Aagaard-Hansen J. Staff attrition among community health workers in home-based care programmes for people living with HIV and AIDS in western Kenya. Health Policy (New York). 2010;97(2–3):232–7.

37. Feldhaus I, Silverman M, Lefevre AE, Mpembeni R, Mosha I, Chitama D, et al. Equally able, but unequally accepted: Gender differentials and experiences of community health volunteers promoting maternal, newborn, and child health in Morogoro Region, Tanzania. Int J Equity Health [Internet]. 2015;14(1):1–11. Available from: http://dx.doi.org/10.1186/s12939-015-0201-z

38. Kok MC, Ormel H, Broerse JEW, Kane S, Namakhoma I, Otiso L, et al. Optimising the benefits of community health workers' unique position between communities and the health sector: A comparative analysis of factors shaping relationships in four countries. Glob Public Health. 2017;12(11):1404–32.

39. Yahya M. Polio vaccines - "no thank you!" barriers to polio eradication in Northern Nigeria. Afr Aff (Lond). 2007;106(423):185–204.

40. George A. Nurses, community health workers, and home carers: Gendered human resources compensating for skewed health systems. Glob Public Health. 2008;3(SUPPL. 1):75–89.

41. Mathole T, Lindmark G, Ahlberg BM. Dilemmas and paradoxes in providing and changing antenatal care: A study of nurses and midwives in rural Zimbabwe. Health Policy Plan. 2005;20(6):385–93.

42. Morgan R, Ayiasi RM, Barman D, Buzuzi S, Ssemugabo C, Ezumah N, et al. Gendered health systems: evidence from low-and middle-income countries. Heal Res Policy Syst [Internet]. 2018 [cited 2020 Jun 27];16(58):12. Available from: https://doi.org/10.1186/s12961-018-0338-5

43. Newman CJ, de Vries DH, Kanakuze A, Ngendahimana G. Workplace violence and gender discrimination in Rwanda's health workforce: Increasing safety and gender equality. Hum Resour Health [Internet]. 2011 [cited 2020 Jun 28];9(19):13. Available from: http://www.human-resources-health.com/content/9/1/19

44. Witter S, Namakula J, Wurie H, Chirwa Y, So S, Vong S, et al. The gendered health workforce: mixed methods analysis from four fragile and post-conflict contexts. Health Policy Plan. 2017;32:52–62.

45. Bismark M, Morris J, Thomas L, Loh E, Phelps G, Dickinson H. Reasons and remedies for under-representation of women in medical leadership roles: a qualitative study from Australia. BMJ Open [Internet]. 2015 [cited 2020 Jun 28];5:9. Available from: http://bmjopen.bmj.com/

46. Kaneto C, Toyokawa S, Inoue K, Kobayashi Y. Gender difference in physician workforce participation in Japan. Health Policy (New York). 2009;89(1):115–23.

47. Arrizabalaga P, Abellana R, Viñas O, Merino A, Ascaso C. Women doctors and their careers in a large university hospital in Spain at the beginning of the 21st century. Hum Resour Health [Internet]. 2015;13(1):1–8. Available from: ???

48. Longo P, Straehley CJ. Whack! I've hit the glass ceiling! Women's efforts to gain status in surgery. Gend Med. 2008;5(1):88–100.

49. Gupta N, Alfano M. Access to non-pecuniary benefits: does gender matter? Evidence from six low-and middle-income countries. Hum Resour Health [Internet]. 2011 [cited 2020 Jun 25];9(25):7. Available from: http://www.human-resources-health.com/content/9/1/25

50. Mumtaz Z, Salway S, Waseem M, Umer N. Gender-based barriers to primary health care provision in Pakistan: The experience of female providers. Health Policy Plan. 2003;18(3):261–9.

51. Boniol M, Mcisaac M, Xu L, Wuliji T, Diallo K, Campbell J. Gender equity in the health workforce: Analysis of 104 countries [Internet]. 2019 [cited 2020 Jun 25]. Available from: http://apps.who.int/bookorders.

52. Shannon G, Minckas N, Tan D, Haghparast-Bidgoli H, Batura N, Mannell J. Feminisation of the health workforce and wage conditions of health professions: an exploratory analysis. Hum Resour Heal [Internet]. 2019 [cited 2020 Jun 25];17(72):16. Available from: https://doi.org/10.1186/s12960-019-0406-0

53. Willis-Shattuck M, Bidwell P, Thomas S, Wyness L, Blaauw D, Ditlopo P. Motivation and retention of health workers in developing countries: A systematic review. BMC Health Serv Res. 2008;8:1–8.

54. Chankova S, Muchiri S, Kombe G. Health workforce attrition in the public sector in Kenya: a look at the reasons. Hum Resour Health. 2009;7(1):1–8.

55. World Bank. Adjustment in Africa: reforms, results, and the road ahead. Adjustment in Africa: reforms, results, and the road ahead. 1994.

56. Witter S, Kusi A, Aikins M. Working practices and incomes of health workers: Evidence from an evaluation of a delivery fee exemption scheme in Ghana. Hum Resour Health. 2007;5:1–10.

57. Chansa C, Matsebula T, Piatti M, Mudenda D, Chama-Chiliba CM, Chitah B, et al. Zambia Health Sector Public Expenditure Tracking and Quantitative Service Delivery Survey. Zambia Heal Sect Public Expend Track Quant Serv Deliv Surv. 2019;(April).

58. Bocoum YF, Kone E, Kouanda S, Yameogo EWM, Bado RA. Which incentive package will retain regionalized health personnel in Burkina Faso: A discrete choice experiment. Hum Resour Health. 2014;12(1):1–9.

59. Davey G, Fekade D, Parry E. Must aid hinder attempts to reach the Millennium Development Goals? Lancet. 2006;367(9511):629–31.

60. Huddart J, Rebecca F, Lyons J. The Zambia HIV / AIDS Workforce Study : Preparing for Scale-up [Internet]. Prevention. 2004. 1–80 p. Available from: http://www.qaproject.org/pubs/PDFs/ORMZambiaWorkforcel.pdf

61. World Health Organization. HEALTH WORKFORCE REQUIREMENTS FOR UNIVERSAL HEALTH COVERAGE AND THE SUSTAINABLE DEVELOPMENT GOALS Background paper No. 1 to the Global Strategy on Human Resources for Health [Internet]. 2016 [cited 2020 Jun 24]. Available from: http://www.who.int/about/licensing/

62. Lehmann U, Dieleman M, Martineau T. Staffing remote rural areas in middle-and low-income countries: A literature review of attraction and retention. BMC Health Serv Res [Internet]. 2008 [cited 2020 Jul 6];8(19):10. Available from: http://www.biomedcentral.com/1472-6963/8/19

63. Langer A, Meleis A, Knaul FM, Atun R, Aran M, Arreola-Ornelas H, et al. Women and Health: The key for sustainable development. Vol. 386, The Lancet. Lancet Publishing Group; 2015. p. 1165–210.

64. Dhatt R, Theobald S, Buzuzi S, Ros B, Vong S, Muraya K, et al. The role of women's leadership and gender equity in leadership and health system strengthening. Glob Heal Epidemiol Genomics. 2017;2(8):9.

65. Evers A, Sieverding M. Why do Highly Qualified Women (Still) Earn Less? Gender Differences in Long-Term Predictors of Career Success. Psychol Women Q. 2014;38(1):93–106.

66. Steege R, Taegtmeyer M, Ndima S, Give C, Sidat M, Ferrão C, et al. Redressing the gender imbalance: a qualitative analysis of recruitment and retention in Mozambique's community health workforce. Hum Resour Health [Internet]. 2020 [cited 2020 Jul 2];18(37):20. Available from: https://doi.org/10.1186/s12960-020-00476-w

67. Razee H, Whittaker M, Jayasuriya R, Yap L, Brentnall L. Listening to the rural health workers in Papua New Guinea - The social factors that influence their motivation to work. Soc Sci Med [Internet]. 2012;75(5):828–35. Available from: http://dx.doi.org/10.1016/j.socscimed.2012.04.013

68. Kadiri-Eneh N, Uzochukwu B, Tobin-West C, Azuike E. An assessment of job satisfaction among primary health care workers in Rivers State, Nigeria. Niger J Med. 2018;27(3):282.

69. Raven J, Akweongo P, Baba A, Baine SO, Sall MG, Buzuzi S, et al. Using a human resource management approach to support community health workers: Experiences from five African countries. Hum Resour Health [Internet]. 2015;13(1):1–13. Available from: http://dx.doi.org/10.1186/s12960-015-0034-2

70. Newman C, Kimeu A, Shamblin L, Penders C, McQuide PA, Bwonya J. Making non-discrimination and equal opportunity a reality in Kenya's health provider education system: results of a gender analysis. World Health Popul. 2011;13(2):23–33.

71. Wilson NW, Couper ID, De Vries E, Reid S, Fish T, Marais BJ. A critical review of interventions to redress the inequitable distribution of healthcare professionals to rural and remote areas. Rural Remote Health. 2009;9(2):1060.

72. Ebuehi OM, Campbell PC. Attraction and retention of qualified health workers to rural areas in Nigeria: A case study of four LGAs in Ogun State, Nigeria. Rural Remote Health. 2011;11(1):1–11.

73. Bonenberger M, Aikins M, Akweongo P, Wyss K. The effects of health worker motivation and job satisfaction on turnover intention in Ghana: A cross-sectional study. Hum Resour Health. 2014;12(1):1–12.

74. Larson E, George A, Morgan R, Poteat T. 10 Best resources on... intersectionality with an emphasis on low- and middle-income countries. Health Policy Plan. 2016;31(8):964–9.

75. Sen G, Östlin P. Gender inequity in health: Why it exists and how we can change it. Glob Public Health. 2008;3(SUPPL. 1):1–12.

76. Lukpata VI, Ph D. Revenue Allocation Formulae in Nigeria : A Continuous Search. Intern J Public Adm Manag Res [Internet]. 2013;2(1):32–8. Available from: http://www.rcmss.com

77. Okafor J. Local Government Financial Autonomy in Nigeria: The State Joint Local Government Account. Commonw J Local Gov. 2010;(6):127–31.

78. Egbe EJ. Native Authorities and Local Government Reforms in Nigeria Since 1914. IOSR J Humanit Soc Sci. 2014;19(3):113–27.

79. Babalola S, Fatusi A. Determinants of use of maternal health services in Nigeria - Looking beyond individual and household factors. BMC Pregnancy Childbirth. 2009;9:43.

80. Ononokpono DN goz., Odimegwu CO bb. Determinants of Maternal Health Care Utilization in Nigeria: a multilevel approach. Pan Afr Med J. 2014;17(May):2.

81. Khemani S. Local government accountability for health service delivery in Nigeria. J Afr Econ. 2006;15(2):285–312.

82. Bradley S, McAuliffe E. Mid-level providers in emergency obstetric and newborn health care: Factors affecting their performance and retention within the Malawian health system. Hum Resour Health. 2009;7:1–8.

83. Koot J, Martineau T. Mid Term Review: Zambian Health Workers Retention Scheme (ZHWRS) 2003–2004. Zambian Heal Work Retent Scheme [Internet]. 2005;(March):2003–4. Available from: http://www.hrhresourcecenter.org/hosted_docs/Zambian_Health_Workers_Retention_Scheme.pdf

84. Prust ML, Kamanga A, Ngosa L, McKay C, Muzongwe CM, Mukubani MT, et al. Assessment of interventions to attract and retain health workers in rural Zambia: A discrete choice experiment. Hum Resour Health. 2019;17(1):1–12.

85. George A. Human resources for health: a gender analysis. Background paper prepared for the Women and Gender Equity Knowledge Network and the Health Systems Knowledge Network of the WHO Commission on Social Determinants of Health. 2007.

86. McAuliffe E, Galligan M, Revill P, Kamwendo F, Sidat M, Masanja H, et al. Factors influencing job preferences of health workers providing obstetric care: Results from discrete choice experiments in Malawi, Mozambique and Tanzania. Global Health [Internet]. 2016;12(1):1–19. Available from: http://dx.doi.org/10.1186/s12992-016-

0222-4

87. Blaauw D, Erasmus E, Pagaiya N, Tangcharoensathein V, Mullei K, Mudhune S, et al. Policy Interventions that Attract Nurses to Rural Areas: A multicountry discrete choice experiment. Bull World Health Organ. 2010;88(5):350–6.

88. Honda A, Vio F. Incentives for non-physician health professionals to work in the rural and remote areas of Mozambique-a discrete choice experiment for eliciting job preferences. Hum Resour Health. 2015;13(1):12.

89. World Health Organization. Federal Republic of Nigeria Draft National Human Resources for Health Strategic Plan: 2008 to 2012 [Internet]. 2007. Available from: www.who.int/workforcealliance/countries/Nigeria_HRHStrategicPlan_2008_2012.pdf [cited 2013 May 9]

90. Nigeria FR of. NATIONAL GENDER POLICY (IMPLEMENTATION PLAN) FEDERAL REPUBLIC OF NIGERIA. 2013.

91. Kura SM. An analysis of Gender inequality and National Gender Policy in Nigeria. Int J Sci Eng Res Vol 4, Issue 1, January-2013 1. 2013;4(1):1–23.

92. Akanke Abosede O, Sholeye OF. Strengthening the Foundation for Sustainable Primary Health Care Services in Nigeria. J Prim Health Care. 2014;4(3):9.

ANNEXES

Table 1: Search strategy	**Objective 1**	**Objective 2**	**Objective 3**
Database/Source	Key words used		
WHO reports, World Bank reports, Policy/technical briefs, Dissertations, PubMed, Science Direct, CINAHL, Google Scholar, etc.	HRH and gender in Africa", "health workforce and gender in Africa", "Gender issues in the health workforce of LMICS", "gender and health workforce in developing Countries	"Retention of female health workers in Sub-Saharan Africa", "retention of the health work force in Sub-Saharan Africa" "Retention of health workers in low- and middle-income countries" "Staff retention in low- and middle-income countries"	Gender-based labour policies in Nigeria", "Gender-based policies in the Nigerian health system", "maternity and sick leave for female health workers in Nigeria"
Inclusion Criteria		**Exclusion Criteria**	
Literature on the retention of Health workers in low- and middle-income countries		Literature on other aspects of gender not focused on the health workforce. Commentaries, narratives, and opinion publications. Studies concerning high income countries	
All literature published between 2005 to 2020		Literature published before 2005	
All literatures published in the English Language		Literature not published in the English Language	
Original research, Systematic reviews, literature reviews, quantitative, qualitative, and mixed methods research.			
Working papers, policy briefs, and reports on gender in the health workforce by multilateral organizations such as the			

Table 2: Distribution of Health Facilities in Nigeria as of 2015.

Type of Health facility	Public	Private	Total
Primary Health Centres	21, 808	8,290	30,098
Secondary Health Facilities	969	3,023	3,992
Tertiary Health Facilities	76	10	86
Total	**22, 853**	**11,323**	**34, 176**

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Table 3: The availability of all cadres of health workers as of 2012

Health Professional Category	Total Number Registered	Number per 100,000 population	Ratio
Doctors	65,759	38.9	1:2,572
Dentists	3,129	1.9	1:54,056
Optometrists	2,676	1.6	1:63,207
Dispensing Optician	168	0.10	1:1,006,793
Nurses and Midwives	249,566	148	1:677
Dental Nurses	266	0.15	1:635,868
Radiographers	1,286	0.76	1:131,525
Pharmacists	16,979	10	1:9,961
Physiotherapists	2,818	1.7	1:60,022
Community Health Officers	5,986	3.5	1:28,256
Senior CHEWs	42,938	25.3	1:3,939
Junior CHEWs	28,458	16.8	1:5,914
Medical Lab Scientists	19,225	11.3	1:8,798
Medical Lab Assistants	11,067	6.5	1:15,283
Medical Lab Technicians	8,202	4.8	1:20,622
Environmental Health Officers	6,542	3.9	1:25,854
Health Records Officers	2,926	1.73	1:57,806
Dental Technologists	730	0.43	1:227,646

Dental Therapists	3,253	1.9	
Dental Technicians	1,885	1.1	1:89,730
Dental Surgery Assistants	886	0.5	1:190,904
Chattered Chemists	2,533	1.5	1:66,775
Public Analysts	717	0.4	1:235,901
Pharmacy Technicians	1,849	-	-
Health Technicians	8,739	5.15	1:19,354
Occupational Therapists	34	-	-
Occupational Therapist Assistants	104	-	-
Speech Therapists	28	0.01	1:17,000,000
Audiologists	25	-	-
Physio-Technician	65	-	-
Prosthetists and Orthotists	8	-	-

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