

**OPTIMISING PERFORMANCE OF MATERNAL AND
NEONATAL HEALTHCARE WORKERS AT THE
PRIMARY CARE LEVEL IN GHANA**

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OPTIMISING PERFORMANCE OF MATERNAL AND NEONATAL CARE WORKERS AT THE PRIMARY CARE LEVEL IN GHANA


A thesis submitted in partial fulfilment of the requirement for the degree of Master of Science in Public Health

By:

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GLOSSARY

Coaching: one-on-one activity where a coach attempts to induce change in the trainees to boost performance'

Health system: all activities whose primary purpose is to promote, restore or maintain health (1)

Human resource management system: integrated use of data, policy and practice to plan for necessary staff, recruit, hire, deploy, develop and support health workers(2).

Mentoring: a sustained, collaborative relationship in which a highly experienced health care provider guides improvement in the quality of care delivered by other providers and the health care systems in which they work(3)

Performance: a combination of staff being available (retained and present) and staff being competent, productive and responsive(1)

Performance based financing: is the transfer of money or material goods from a funder or other supporter to a recipient, conditional on the recipient taking a measurable action or achieving a predetermined performance target(4)

Performance management system: a process by which managers and employees work together to plan, monitor and review an employee's work objectives and overall contribution to the organization. More than just an annual performance review, performance management is the continuous process of setting objectives, assessing progress and providing on-going coaching and feedback to ensure that employees are meeting their objectives and career goals(5).

Primary care: Basic or general health care focused on the point at which a patient ideally first seeks assistance from the medical care system. It is the basis for referrals to secondary and tertiary level care.

Recognition System: A systematic approach or strategy to acknowledge, reward, and motivate the performance of health workers to provide quality health services through appropriate financial and non-financial incentives

Supportive supervision: a process that promotes quality at all levels of the health system by strengthening relationships within the system, focusing on the identification and resolution of problems, and helping to optimize the allocation of resources, promoting high standards, teamwork, and better two-way communication

Well performing workforce: A well-performing workforce is one that works in ways that are responsive, fair and efficient to achieve the best health outcomes possible, given available resources and circumstances(6).

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To my family who took care of my daughter back in Ghana so I complete this course, Gideon Agyeman Duah for the support and encouragement you gave me and to my classmates of the 53rd ICHD/ MSc PH batch, I say many thanks for all your support and love. I cannot be grateful enough.

DEDICATION

To my late father Daniel Agyei-Mensah, who left me too early in life to watch over me in the heavens; You should have lived long enough to watch me climb these heights!

To my mother, Georgina Adjei-Mensah and my daughter, Moriah Akosua Gyamea Agyeman Duah; you inspire me to keep climbing.

LIST OF ABBREVIATIONS

ADHA	Additional Duty Hour Allowance
AIDS	Acquired Immuno-Deficiency Syndrome
ALS	Action Learning Sets
App	Application
AR	Ashanti Region
CHAG	Christian Health Association of Ghana
CHEW's	Community Health Extension Workers
CHO	Community Health Officer
CHW	Community Health Worker
CHPS	Community Health Planning and Services
CR	Central Region
DHS	Demographic and Health Survey
DHMT	District Health Management Team
EmONC	Emergency Obstetric and Neonatal Care
EPI	Expanded Program on Immunization
FDA	Food and Drugs Authority
GAR	Greater Accra Region
GDP	Gross Domestic Product
HCW	Health care worker
GHS	Ghana Health Service
GHWA	Global Health Workforce Alliance
HCW	Healthcare Worker
HIST	Health In-Service Training
HIV	Human Immunodeficiency Virus
HLM	Health Labour Market
HMIS	Health Information Management System
HR	Human Resource
HRH	Human Resources for Health
IHI	Institute for Healthcare Improvement

IMCI..... Integrated Management of Childhood Illnesses

IMR..... Infant Mortality Rate

IWG..... Innovation Working Group

LMIC's..... Lower and Middle Income Countries

MAF..... Millennium Accelerated Framework

MDG's..... Millennium Development Goals

MMR..... Maternal Mortality Rate

MoH..... Ministry of Health

MOTECH..... Mobile Technology for Community Health

NCD's..... Non-Communicable Diseases

NGO..... Non-Governmental Organisation

NHIS..... National Health Insurance Scheme

NMR..... Neonatal Mortality Rate

NR..... Northern Region

PA..... Performance Appraisal

PAS..... Performance Appraisal System

PBF..... Performance-Based Financing

PM..... Performance Management

QUALMAT..... Quality of Maternal and Prenatal care

SBA's..... Skilled Birth Attendants

SDG's..... Sustainable Development Goals

SRMNCH..... Sexual, Reproductive, Maternal, Neonatal and Child Health

STEM..... Support Train and Empower managers

SWAp..... Sector Wide Approach

THE..... Total Health Expenditure

TWG..... Technical Working Group

USMR..... Under 5 Mortality Rate

UER..... Upper East Eegion

UNAIDS..... United Nations Program on HIV/AIDS

UWR..... Upper West Region

VU..... Vrije Universiteit

WHO.....World Health Organisation

WIFA.....Women in Fertility Age

ABSTRACT

INTRODUCTION: Ghana is among the 57 countries shown by the World Health Organisation to be experiencing health workforce crisis. The population is growing at a faster rate against limited number of health workers. Performance of the few workforce providing Maternal and Neonatal care services at the primary care level have not been optimised.

OBJECTIVES: The objective of the study was to explore effective interventions that improve performance of maternal and neonatal health workers at the primary level in Ghana and propose recommendations to improve performance to relevant stakeholders.

METHODOLOGY: A review of published literature on health worker performance in Lower and Middle Income Countries and Ghana was conducted. The Technical Working Group of the Global Health Workforce Alliance framework was adapted and used to aid analysis of findings.

FINDINGS: Factors influencing performance included poor governance of the health system, political and socio-cultural factors and poor human resources for health (HRH) management. Poor performance management systems included lack of supportive supervision and performance appraisal systems, limited in-service training and absence of recognition systems. Most interventions I found in literature concentrated on health facility level. That is mainly on management systems which looked at performance management, recognition systems and quality improvement. However, they were poorly documented and often had flawed implementation. Culture, gender and age seem important determinants to influence performance. Nonetheless, I did not discover any interventions to address these factors.

CONCLUSION: At the primary level, facility managers play a crucial role in improving health worker performance. Their capacity need to be equipped and better resources must be allocated to them as well as increasing their decision space to better improve health worker performance.

RECOMMENDATION: Performance is influenced by various determinants at various levels therefore multifaceted actions at the different levels are important.

This study was conducted by Hannah Adjei-Mensah.

KEYWORDS: Performance, Performance management, Primary care, Midwives

WORD COUNT: 13195

INTRODUCTION AND ORGANISATION OF THE THESIS

The health workforce crisis is still alarming especially in the 57 developing countries recorded by the World Health Organisation (WHO) of which Ghana is one. There still exist the challenge of shortage, maldistribution, poor skill mix and migration of the few workforce outside the country for greener pastures. On top of these is the government's inability to employ all the qualified graduates from the various health training institutions into the health system due to budget constraints.

As a Senior Nursing officer in Ghana's biggest and premier teaching hospital, I have witnessed pregnant women go through complicated labour and postnatal periods mainly due to poor management at the primary level and late referral for prompt specialist care. At the tertiary level, staffs are overwhelmed with the number of patients under their care sometimes compromising the quality of services delivered.

The focus of this thesis is at optimising performance of Maternal and Neonatal care workers at the primary level to ensure good quality services and improved health outcomes for pregnant women and their new-borns. Though the human resources for health crisis exist at all levels of care i.e. primary, secondary and tertiary, I focus my work at the primary level because it is at this level that patients first meet healthcare workers, ironically, it is this level that suffers most in terms of shortage of staff, maldistribution and poor skill mix of health professionals. Less attention is also given to this level in terms of financial, equipment and technical resources by government. It is therefore imperative to understand factors that influence their work performance to be able to design effective interventions to tackle them.

I believe that if we could optimise the performance of the few workers present at this level in wait of bridging the huge shortage and maldistributions gaps, the country can achieve much in proving quality health services to improve health outcomes of women and children. The needless mortalities will be prevented in achieving the Sustainable Development Goals 3.1- By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births and 3.2- By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births.

The thesis is organized in five chapters:

1. Chapter one provides background information about Ghana with regards to the country's state of health, its health system and workforce and maternal and neonatal care overview
2. Chapter two presents a description of the problem, significance, objectives, methodology and conceptual framework used for this study
3. Chapter three analyses the findings with regards to theories and concepts of performance, determinants of health worker performance at the macro, micro and individual health worker levels
4. Chapter four presents findings on interventions that have been implemented in Ghana and other countries in Sub Saharan Africa to improve performance of maternal and neonatal health care workers as well as gaps in the current interventions
5. Chapter five discusses the findings, presents a conclusion and provides recommendations for optimising performance of maternal and neonatal health care workers in the primary care level

CHAPTER ONE BACKGROUND INFORMATION ABOUT GHANA

This chapter gives general background information about Ghana, the health system, an overview of the health workforce and maternal and neonatal health services in the country.

1.1 GEOGRAPHY



Figure 1-Map of Ghana Source: Ezilon Maps 2015(7)

Ghana, formally known as the Gold Coast is situated in west Africa. It is boarded by Burkina Faso to the north, Cote D'voire to the west and Togo to the east. The Atlantic Ocean lies to the south of the country (Figure 1) (8).

1.2 DEMOGRAPHY

Ghana's population was estimated at 24.7 million by the national Demographic and Health Survey (DHS) in 2014, in 2016, it was projected at 28.3 million at an estimated 2.5% annual growth rate(8)(9). Females constitutes 50.9% of the population whiles 38% of the general population are below fifteen years of age. The urban population constitutes 51% and total fertility rate is 4.2.(8).

1.3 POLITICAL AND ADMINISTRATIVE STRUCTURE

Ghana became a republic in the British commonwealth in 1960 after gaining independence in 1957. The country practises a multi-party democracy with three administrative arms; the executive, judiciary and the legislature with its administrative and political headquarters in Accra(8). The country is decentralised into 10 administrative regions with 216 districts to ensure equitable resource allocation and efficient, effective administration at the local level.

1.4 SOCIO-ECONOMIC STATUS

Ghana is a lower middle income country with a Gross Domestic Product (GDP) of \$1369.7 (10). By 2014, the service sector was the fastest growing sector of the economy, contributing 52% of the gross domestic product (GDP), followed by the industry sector at 27%, and the

agriculture sector, at 22%. Poverty levels reduced from 51.7% in 1992 to 24.2% of the population by 2013(11)

1.5 GENERAL HEALTH PROFILE

In 2013, the health sector developed the 5-year medium term development plan for 2014-2017 to improve the health status of Ghanaians and reduce risk of ill health and preventable death in contributing to the nation’s wealth(12). The country advanced efforts in collaboration with various international agencies and development partners in reaching these goals with significant improvements. As at 2015, the life expectancy of Ghanaians was 64 years for women and 61 years among men(8)(13). The Maternal Mortality ratio (MMR) was estimated at 380/100,000 live births in 2014 whereas Under 5 Mortality Rate (U5MR) also decreased to 60/1000 live births in 2014(14). Neonatal mortality rate 28/1000 live births accounted for 48% of U5MR in 2015(15) as shown in figure 2(15)(13). The period prevalence of HIV/AIDS in 2014 was 5.5% out of this, 2% were pregnant women(16).

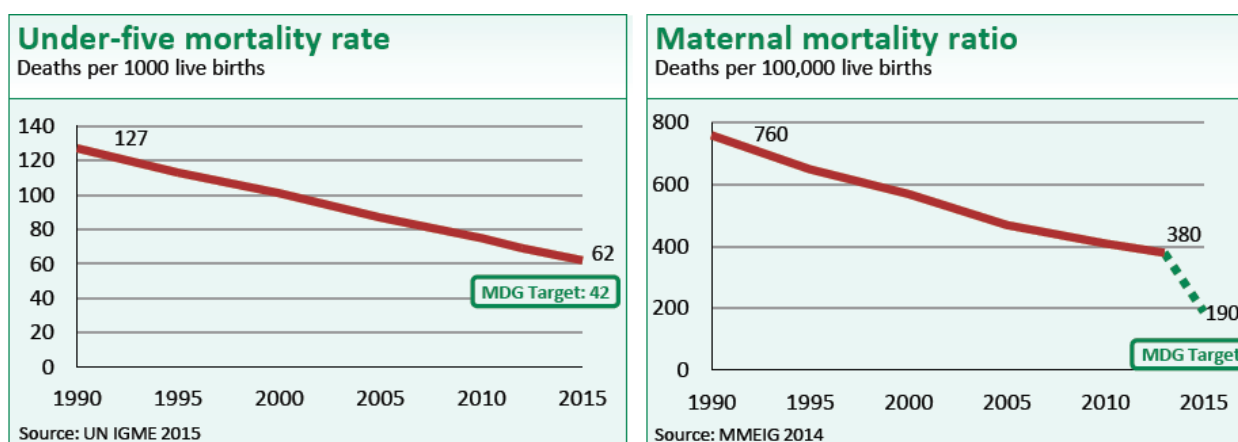


Figure 2: Maternal and under five mortality ratio in Ghana

Source: Countdown to 2015. Maternal, newborn and child survival(15)

The country suffers a double burden of communicable and non-communicable diseases due to the epidemiological transition with increasing levels of non-communicable diseases. In 2012 NCD accounted for 42% of total deaths in the country(17). The top 10 causes of death in 2012 (latest available) are presented with table 1.

Condition	Number of Deaths (*1000)	Percentage (%)
Lower respiratory infections	22.4	10.7
Stroke	18.3	8.7
Malaria	17.4	8.3
Ischemic Heart Disease	12.1	5.8
HIV/ AIDS	10.3	4.9
Pre-term birth complications	7.9	3.7
Diarrheal Diseases	7.6	3.6
Birth asphyxia and birth trauma	7.3	3.5
Meningitis	6.3	3
Protein-Energy Malnutrition	6.2	2.9

Table 1: Top 10 causes of deaths in Ghana, 2012. Source: Ghana-WHO Statistical Profile(17)

1.6 OVERVIEW OF THE HEALTH SYSTEM IN GHANA

The Ghana Ministry of Health (MoH) is the backbone of the health system in Ghana providing general government policy direction, resource mobilisation, monitoring and evaluation and administrative supervision to the Ghana Health service (GHS)(18). Initially, the MoH had the sole role of providing health services in the country until 1996 when the health sector adopted the Sector Wide Approach (SWAp) in its reforms with the government, partners, civil societies and the private sector all playing a part. The GHS was then established to implement policies and programs in the public sector and offer delivery of health service(18)(19)(20). Service delivery, based on the principles of primary healthcare, is organized at three levels: primary, secondary and tertiary level. Food, medicines and medical products are regulated by the Food and Drugs Authority (FDA)(21).

In 2003, the National Health Insurance Scheme (NHIS) was introduced to improve financial accessibility to healthcare in the country(22). It recorded a national coverage of 40% of the total population in 2016(23). The scheme is mainly tax-based and covers almost 90% of services provided at the primary level. Free maternal care was added in the range of services in 2008(20)(24). Other major sources of funding include government budget allocation to the health sector, donor funds and direct out of pocket payment by users(25)(12). The Total Health Expenditure (THE) as a percentage of GDP in 2014 was 3.6% less than the minimum requirement of 5% of public health expenditure and government allocation for health is 11% which is less than the agreed Abuja declaration of 15%(13)(26). An overview of the health workforce and maternal and neonatal health is presented in the annex 1 and 2 as well as the relationship between the MoH and the various sectors and organisations in Ghana in annex 5.

1.6.1 PRIMARY CARE LEVEL IN GHANA

The Ghanaian health system is decentralised with administrative organisation of the GHS at three levels; national, regional and district levels. The district level constitutes the primary

care level at community, sub-district and district levels. The Community-based Health Planning and Services (CHPS) is the very first point of contact with healthcare providers where basic health care needs are provided(27)(28). Often, the community and sub-district levels are managed by a medical assistant or a nurse who is under the supervision of the level directly above him. This is presented in annex 6.

CHAPTER TWO

This chapter first describes the problem of the health workforce in the country, specifically regarding maternal and neonatal healthcare providers at the primary level. The main and specific objectives of this thesis follow. Thereafter, the methodology used to achieve the objectives is presented including a description of the conceptual framework used.

2.1 PROBLEM STATEMENT

The State of the World Midwifery Report 2014 projected the population of Ghana which was 25.4 million to be increased by 39% by 2030 bringing it to 35.1 million. With an estimated 83.8 million antenatal visits, 16 million births and 64.1 million post-partum and postnatal visits between 2012 and 2030(31). This implies that the country needs to scale up its' health staff to be able to provide optimal Maternal, Neonatal and Child Health (MNCH) care to the growing population. The current number of health professional providing these services must double if this is to be achieved(31).

Unfortunately, the current rate at which health professionals are trained, employed and retained in the health sector is inefficient and far below reaching the estimated number by 2020(12)(16)(31)(32). The public sector is unable to absorb all the nurses and midwives who graduate each year. Almost 2000 newly graduated nurses and midwives are awaiting postings by the Ministry of Health due to lack of budget(33). There is also the challenge of inequitable distribution of human resources for health (HRH) which is most pronounced for higher-level cadres (particularly doctors and professional nurses and midwives). There is high concentration in the urban areas compared to rural and remote areas where more than 65% of the total population lives. In the rural settings, the quality of health services provided are compromised(25)(32). Unfortunately, it is these settings that health problems are pronounced. For instance, Fertility rates are higher in the rural settings between 4.7 and 5.1 as compared to the urban regions of 3.9(8). SBA rate is 90.1% in urban areas and only 60.2% in the rural areas whereas institutional delivery rate is also 90.2% in urban areas compared to 59% in rural areas(34).

At the primary level, there has been observed inefficiencies seen in rising levels of absenteeism resulting mainly from dual practice, substandard performance mainly seen in disrespectful attitudes and mistreatment of patients, non-adherence to protocols and guidelines and inefficient use of resources(32). The situation is more problematic at the primary level because resources are more constraint with very vulnerable population(16). It is therefore crucial that we understand factors that influence substandard performance and device mechanisms to curb them to optimise performance of the few nurses and midwives at this level. This is paramount if health services can be improved in reaching the Sustainable Development Goals (SBD's), particularly goal 3.1 and 3.2 of reducing the needless deaths of mothers and children(35).

2.2 JUSTIFICATION

Though government has embarked on many interventions to improve the health of the people of Ghana and maximise output of health care professionals, it has not been optimal. Evidence shows that if pregnant women were attended to by skilled birth professionals most of the maternal and child deaths would have been prevented but the SBA rates are still low(31)(36)(5). The main issues have been too few workers, poor quality of service and inadequate financial and other resources(38)(39). In the words of Dr Mahmoud Fathalla,

former President of the International Federation of Obstetricians and Gynaecologists; "...women are not dying because of diseases we cannot treat. They are dying because societies have yet to make the decision that their lives are worth saving"(37). This truth is seen in Ghana where women are less empowered economically, socially and culturally, and mostly the decision to promptly seek care but also access to quality care are affected by factors beyond them leading to unnecessary delays, disrespect and mistreatment and poor healthcare.

The healthcare workforce (HCW) are the core in achieving universal health coverage, but shortage, maldistribution and substandard performance hinder this vision(40). It is therefore crucial that HRH managers give attention to optimizing performance of HCW's in providing MNCH services at the primary care level in Ghana. This research seeks to investigate the various strategies that can be adopted to optimise performance of HCW's to provide quality lifesaving care to their patients. Given the significant evidence gaps in relation to wider policy approaches and strategies to develop, maintain and optimize the performance of the health workforce, the research is focused on contributing to addressing the performance shortfalls observed in Ghana drawing on experiences from other countries in Sub Saharan Africa.

2.3 RESEARCH QUESTION:

What interventions effectively improve performance of midwives and nurses providing (MNCH) services at the primary care level in Ghana?

2.4 OBJECTIVES FOR THE STUDY

This study seeks to explore effective interventions that improve performance of MNCH workers at the primary care level to make relevant and evidence informed recommendations to key stakeholders.

2.5 SPECIFIC OBJECTIVES:

- To analyse determinants of MNCH worker performance
- To examine current interventions in Ghana to improve performance of health workers and identify existing gaps.
- to identify and critically analyse some interventions that aim at improving MNCH worker performance in other sub-Saharan African countries
- To identify evidence informed responses for optimising performance of MNCH workers and make recommendations to relevant stakeholders including the MoH and its agencies.

2.6 METHODOLOGY

A review of literature on performance of health workers in various developing countries mainly in Sub Saharan Africa was conducted to address the objectives of this study. The primary search was conducted in December 2016 in Pub-Med, Science Direct, Google Scholar and VU e-library to obtain published articles on performance of health worker. The following keys words; performance, healthcare, nurses, midwives, skilled birth attendants, and Ghana were used to conduct an initial broad search in different combinations. A further search was conducted using keywords related to each specific objective in different combinations with Boolean operators "and"/ "or" to generate more results. *Table 2* below presents the search words.

Article titles and abstracts obtained were reviewed for relevance to identify articles which reported findings on healthcare and worker performance. The availability of the full text article and fulfilment of the inclusion criteria then determined article addition (or not). Reference lists of journal articles retrieved were searched manually to identify potential related articles following the initial search. Specific websites of ministries, international and national organisations such as World Health Organisation (WHO), UN, World Bank, Ghana Health Service, and the Ghana Ministry of Health were searched for international perspectives, policy statement, recommendations and updates, local guidelines and protocols on HRH performance. Published and unpublished articles in English from 2005 to date were considered for the study.

Table 2: search table

Source	Search words used per objective			
	Objective 1	Objective 2	Objective 3	Objective 4
PubMed VU e-library Google Scholar	"health worker", "determinants of performance", "factors influencing performance", "Supervision", "concepts of performance", "primary care", "nurse", "midwives", "skilled birth attendants", "human resources for health",	"performance", "performance management", "supervision", "training", "guidelines", "task shifting", "quality improvement", "strategies", "mentoring", "Ghana", "maternal health", "neonatal health", "nurses", "midwives", "health workers",	"performance", "performance management", "supervision", "training", "guidelines", "task shifting", "quality improvement", "strategies", "mentoring", "Ghana", "Africa", "sub Saharan Africa",	"performance interventions", "performance management", "supervision", "training", "guidelines", "task shifting", "quality improvement", "strategies", "mentoring", "performance-based financing", "performance appraisal"
Websites of: MOH GHS UNAIDS WHO		"performance guidelines", "strategic HRH plan", "Human resources for health policy", "Ghana",	"performance guidelines", "strategic HRH plan", "Human resources for health policy", "Africa", "sub Saharan Africa"	"performance guidelines", "strategic HRH plan", "Human resources for health policy",

2.6.1 INCLUSION AND EXCLUSION CRITERIA

The criteria for inclusion were:

1. Studies of any design that reported findings on performance of healthcare workers (Nurses and Midwives)
2. The full text article was available
3. The article was written in the English language and from 2005.

2.6.2 LIMITATIONS OF THE STUDY

The study may have excluded potential relevant articles written in different languages aside English and written before the date considered for the study. As this work is a review of literature, it is also subjected to publication bias.

2.6.3 CONCEPTUAL FRAMEWORK

Various studies have used different frameworks in understanding factors that influence performance of health workers. Such studies are presented in annex 4. The Technical Working Group (TWG) for the Global Health Workforce Alliance (GHWA)(44) uses a framework adapted from Dieleman et al(42). The framework scrutinises the fundamental determinants of health worker performance and how the different dynamics play in the health care setting in each context. It considers the various dimensions of worker performance by incorporating the socio-economic, labour market and the political factors. This framework was chosen for the study due to its comprehensiveness and the different levels at which it analyses health worker performance. This research adapts and utilizes this framework for analysing literature using the specific objectives as a guide. The World Health Organization (WHO) definition of performance “a combination of staff being available (retained and present) and staff being competent, productive and responsive” is used in this study(42).

2.6.4 THEORETICAL BACKGROUND OF THE FRAMEWORK

The framework uses 6 domains to describe the performance process which are, context, inputs, **process, outputs, outcomes, effects and impacts as presented in figure 7.**

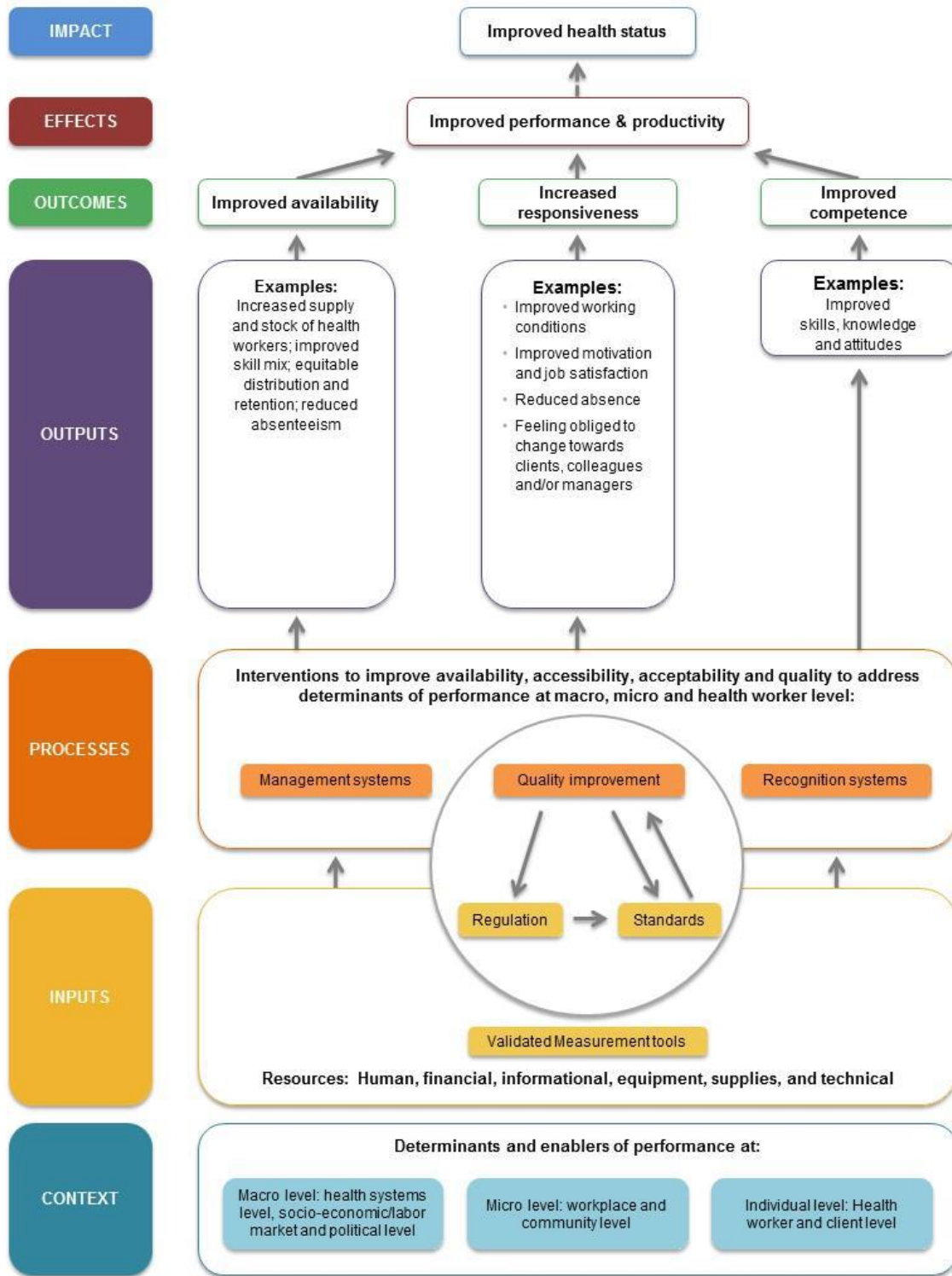
1. **Context:** according to the framework, factors that determines performance are rooted in three main levels, macro, micro and individual health worker and client levels.
 - Macro level: this level comprises of the political, labour market, socio-economic factors and the overall health system. It involves allocation of resources, the regulatory framework, planning and deployment of health workers, accountability mechanism and communication and decision-making processes which are affected by policy makers and stakeholders in health care at the national level. These include the ministry of finance, ministry of health, civil societies and professional bodies, etc.
 - Micro level: this involves the facility level and considers issues as availability of working equipment, drugs, supplies and stationary. At this level, factors like teamwork and human resources management activities play a role. Players at this level are the local managers, colleagues at work, the community and other local partners.
 - Individual level: this includes the health worker’s educational level and experience, living conditions and sex. At this level, there is the need for specific

strategies developed by managers and policy makers to target the specific aspects.

- 2. Inputs and processes:** include interventions to improve availability, accessibility, acceptability and quality to improve performance. They comprise of management systems, recognition systems and quality improvement. Regulations and standards influence quality improvement. Inputs include, human, financial, information, equipment, supplies and technical resources.
- 3. Output:** these are the expected results in terms of improved working conditions, improve motivation and job satisfaction, equitable distribution and retention of health workers, reduced absenteeism, improved skills, knowledge and attitudes of health workers.
- 4. Outcomes:** the outcome of the interventions in terms of measurable improvement in availability, responsiveness and competence (these indicators are explained in annex
- 5. Effects:** these outcomes lead to improved performance of health workers.
- 6. Impact:** the overall results that is achieved with the intervention; improved health outcome

ADAPTED FRAMEWORK FOR THE STUDY

This study utilizes the first three levels of the framework; context, inputs and processes to address the objectives spelt out for the study looking at determinants and documented interventions that improve performance. The framework is adapted to allow community and client factors to be looked at under socio-economic factors. Cultural factors are also included to better understand the contextual factors that influence health worker performance. The framework is presented schematically in figure 3.



Adapted from Dieleman et al. 2009 Informed by Campbell J et al. A Universal Truth: No Health

Figure 3: conceptual framework of TWG used for the study(44).

CHAPTER THREE- REVIEW OF LITERATURE

This chapter looks at various determinants of MNCH workers performance from the global, Sub-Saharan Africa and Ghana perspectives analysing the determinants at the health labour market, political, health system and socio-economic level (including community and client factors), facility and the individual worker levels.

3.0 DETERMINANTS OF PERFORMANCE OF MNCH WORKERS

Performance, as it is related to behaviours of healthcare workers (HCW's), is complicated and affected by many factors(42). Hartts et al confirmed earlier theories that a large percentage of performance problems (65%-74%) can be attributed to the issues that are under the control, authority and responsibility of policy makers and management. Earlier performance theorists attributed a rather higher percentage of between 81% and 90% (45)(46).

3.1 LABOUR MARKET

The health labour market (HLM) include the production, recruitment and distribution of HCW's leading to having the right HCW's with the right skills at the right place and time, doing the right things(47). The HLM may be influenced by governance of the health system and other political influences thereby affecting how workers are produced, recruited and deployed. Regulations governing the extent the private sector is allowed in the production and recruitment of health workers may also be influenced by governance. Vujicic and Zurnn therefore emphasizes the necessity in understanding the role HLM plays on the HRH and the factors involved to be able to advance good policies in tackling the HRH problem in developing countries. They argue that the need-based approach may not be the best way to solve the problems of HRH shortages, maldistribution and poor workforce performance(48).

Andalon and Fields in the World Bank's 'Labour Market for Health Workers in Africa' described production, underutilization, distribution, and financing as the challenges leading to underperformance of the health workforce(47). Underutilization of health workers refers to the number of trained health workers as against the number employed. Factors resulting in the difference could be due to migration, leaving the health sector to other sectors of the economy due to better conditions of service. Studies from Zimbabwe, Ghana, Malawi and Rwanda indicate that about 34%- 60% of health professionals trained migrate to Europe, United Kingdom and the United states due to better conditions of service creating significant vacancies in these countries. The problem this situation poses is the increased levels of work that is left for the few remaining workers to accomplish as the demand for service does not change hence leading to increased workload which impacts negatively on performance(47).

Government's inability to pay salaries and restrictions on the government's wage bill can lead to low salary levels which demotivate health workers and may reflect in poor performance and high public/private attrition rates(32)(3). In most instances, rural communities may lack the resources to attract and retain health workers leading shortages and poor skill mix. When there is lack of professional workers, staff with limited competences take on tasks for which they are not trained(32). Evidence shows that in Ghana and other parts of sub Saharan Africa (Nigeria, Rwanda, Ethiopia, Zambia and Tanzania), imbalances in the rural/urban distribution is partly due the opportunities in the cites to be hired and paid better salaries by the private-for-profit sector, opportunities for dual practice, or opportunities for career advancement and availability of working tools and conducive working environment which enhances performance

of work, reduces stress and burnouts and offer opportunity to learn new skills to advance care (32).

3.2 POLITICAL INFLUENCE

Political influences may include factors such as unstable political climate leading to conflict, crime and unrest which breaks the health system. This impede service provision including MNCH as shown in Soucat et al and WHO and UNICEF report on trends of maternal mortality 2015(3)(49). The continual changing environment in a fragile state poses challenges to the organization of health care, health needs and demand for service. HCW's may not be able to quickly adjust thereby leading to high caseloads, substandard care and poor health outcomes(3). Ager et al report that during the insurgency of Boko Haram in Nigeria, provision of health services was impeded as some HCW's were killed or abducted leading to closure of facilities. Restrictions on movement and curfews led to poor access and utilization of health services by mothers and their children. Immunization and antenatal schedules were missed and the few remaining workers were overworked due to drop in nurses/midwives' number from 107 to 27 in the study area. The quality of service provided was therefore compromised due to the few numbers of workers and performance levels dropped(50).

Poor resource allocation and non-prioritization of the health sector with less investment into the workforce have been documented as resulting from lack of political commitment, corruption, lack of accountability and transparency(51). This causes the unattractive nature of the health sector in many African countries such as Zambia, Tanzania, Mali and Malawi(3). This situation has resulted in malpractices and inefficiencies in health service delivery including absenteeism, dual practice, illegal changes and using public facilities for private practice resulting in poor health system responsiveness with substandard practices(52). In a review in LMIC's, poor prioritization of midwifery services and poor salaries were among factors that demotivated midwives hindering their performance(53)

Abdul-Gafaru describes Ghana's health system as highly politicized that technical dimensions of policy planning and implementation is undermined. Appointments of directorship to major health departments are under the influence of political leaders who appoint based on affiliation to party leading to poor technical efficiency in most sectors of the health system(54). In a study that assessed the effect of politics and health service delivery, it was noted that allocation of government resources did not focus on addressing the needs of deprived communities leading to huge disparities and inequalities in resource allocation(54). In some situations, large numbers of health facilities have been set up without the needed number and skills to manage them. These facilities are left for lower skilled staff who are not able to provide quality care without supervision leading to substandard work performance.

Other factors I have observed include the bureaucracies that exist between various ministries or sectors (e.g. ministries of Finance, Labour and Manpower, Women and Children's Affairs etc.). This results in delayed decision making, late implementation of certain key programs and payment of salaries and other incentives. Such delays may lead to poor motivation and substandard performance of HCW's and the health sector in improving the health of the population. Significant leakages in finances in Ghana due to corruption and poor allocation of resources to programs have also been reported as resulting in poor performance of the health sector with consequent effects on the workforce. In rural and remote areas, provision of services to women and children may be impeded by lack of necessary logistics, drugs and tools to work thereby compromising on work performance(54)(55).

3.3 HEALTH SYSTEMS FACTORS

The health system as defined by the World Health Organization (WHO)(1), include “all activities whose primary purpose is to promote, restore or maintain health”. Good policies, funding and organization of the health system may result in a system that is responsive, efficient and ensures equity(56). Various studies have analyzed the impact of health system related factors on the performance of health workers looking at it from the perspective of the of the other five building blocks (service delivery, health information systems, essential medicines and technology and governance) (3) . Factors such as poor human resources policy and plans, inadequate resource allocation to the health sector and poor collaboration between different sectors in a country have been identified as leading to high levels of poor functioning health system. This results in maldistribution and staff shortages, poor allocation of financial and other resources resulting in poorly motivated health personnels who are nonperforming (42)(57).

Hongoro and Normand(58), acknowledges the complexity of human resources problems in developing countries which span from policies on recruitment, training, deployment, retention and performance of health workers influenced by both political and labour market factors as well the economic state of a country. In most instances, there is poor coordination between health planning and planning for training and education which lead to skill gaps and underperformance. Among the challenges are the lack of quality data and poor funding of human resources departments in health ministries which limit their ability to plan adequately in solving the HRH challenge.

A recent review in Africa ascertained that factors such as quantity and quality of human resources, poor Health Management Information system (HMIS), infrastructure and lack of supplies across all sectors of the health system usually results in poor performance of HCW’s especially those providing MNCH services. Information gaps may lead to poor decision making by policy makers including health ministers who are then not able to design and implement relevant policies to improve performance of the workforce. In Benin and Senegal, poor HMIS led to barriers in implementing audits in maternal mortality for HCW’s to identify where the service was lacking(59). Poor healthcare financing increase attrition, dual practice, and illegal charges of service which compromises quality of care. In a study to identify factors affecting performance on nurses in Namibia, poor salaries and non-existence of other forms of motivation (fringe benefits) were among the reasons given as demotivating and leading to poor performance (61). There is anecdotal evidence in Ghana that nurses and midwives employed by the MoH and the GHS start receiving their salaries from 3 months up to about 17 months after employment. Such delays in payment of salaries lead to high levels of strikes and unrest, absenteeism and vacation of post, poor motivation and dual practice and thus compromising on performance of newly employed staff in the public sector. (Undocumented)

Another factor is governance of the health systems which involves decision making by governments, policy makers and other relevant stakeholders in the health sector. Planning of health needs, regulation of health stakeholders and establishing accountability in the health sector as well regulation of private practice is greatly influence by government decisions which also affect policy directions(3). Decisions, policies and plans as well as the organisation of the health system may impact on performance of health workers in different ways. Un-clear policies and plans result in poor collaboration between the health sector, other sectors and relevant stakeholders including health training institutions and private providers, or the extent to which the private sector can operate within the health system. Production and distribution of health workers as well as other HRH activities may thus not be linked to local needs(62).

The extent to which health system is centralised or decentralised also has an influence. In a centralised health system, planning, human and financial resources etc. are managed at the higher level (ministry of health in most cases) and allocated to specific programs while in a decentralised health system, managers at the local levels are given greater decision space to plan and implement activities based on their local needs. Managers at decentralised local levels are able to implement HRH management systems to improve performance. These two types of governance affect human resource management and performance of HCW's differently(3). In a study in Nigeria, it was noted that decentralization at the primary level lead to delayed and irregular salaries due the bureaucracies involved. In Nigeria, the federal government is responsible for tertiary care while the states manage secondary care. Primary care is left to the local government which is described as the weakest. Working in rural communities is therefore unattractive and HCW's mostly do not stay at post or are inefficient in their work(63). Conversely, studies in Ghana to assess the implementation of MNCH services in northern Ghana, and management of logistics in the health sector drew attention to the difficulties in following the procurement Act (Act 663. 2003) which is centralised and does not allow for emergency purchases of maternal health supplies with very weak supply chain as leading to inadequate logistics at the facility level which hinders performance of MNCH workers(48)(64).

Appiah-Denkyira et(32) and Kwamie et al al(65) in their studies in Ghana ascertained that at the Ministry of Health level, performance management functions are not decentralized and poorly carried. This demotivates staff especially those at the primary level whose promotions and salary increment are mostly delayed for long periods and might have to travel long distances to the city to follow up. Another issue identified was the policy which grant automatic promotion based on years of service with no regards for poor performance or rewards for good performance. This does not challenge health workers to scale up responses in service delivery(32).

The above factors point to the fact that various health systems factors influence substandard performance of HRH whose activities are affected by the performance of the other blocks within the health system.

3.4 SOCIO-ECONOMIC AND CULTURAL FACTORS, (COMMUNITY AND CLIENT)

Socio-economic and cultural barriers serve as challenges to the provision of MNCH services thereby compromising the performance of health workers especially in sexual and reproductive health services for adolescents and unmarried women(66). In countries experiencing major economic crises, there may be less job opportunities or government might only be willing to pay less for the provision of health services or few workers may be employed to do more. In such a situation, workers are overworked and salaries may not match outputs which may also not be able cover living expenses. The resultant effect may be dual practice to earn more or charging clients illegal fees and other forms of corruption on the part of the health worker(53). This leads to inefficiencies in the health system and clients who may not be able or willing to pay such charges may thus receive poor services.

Contextual factors such as religion and culture, language, geographical area, as well ethnicity have been documented as influencing health worker performance in diverse ways and leading to poor utilization of health services (1) (53). In a recent review in sub-Saharan Africa and Southeast Asia, HCW's were found generally to have negative attitudes towards the provision of service which was influenced mostly by the cultural beliefs, stigma and victimization from colleagues who saw those providing abortion services as 'killers'. This led to poor treatment,

ignoring patient who needed the service or treating them with disrespect. In South Africa for instance, health workers gave moral, religious and ethical reasons for refusing to provide abortion care or giving poor quality services to women especially young girls needing abortion care(66). In Kenya providers were conservative in providing contraceptive services to young girls and boys. In some cases, like in Mozambique Midwives were hesitant in providing evidenced based care like skin to skin care because of their cultural and religious beliefs(53). Significant findings included the low social status of midwives resulting from gender inequality in most developing countries which leads to less autonomy to take innovative decisions in providing MNCH services(53). Studies in Malawi, also indicated that the role of the woman in society; caring for children and husband coupled with domestic work negatively affected job performance(67). In a review in LMIC's, nurses point out gender inequality as leading to discrimination and insecurity which affected output. Nurses feared being raped when called for night duties, this affected provision of 24-hour services leading to substandard work performance(53). Economic factors included low salaries, lack of support for housing with less professional recognition (because midwives were women) leading to poor motivation and poor job satisfaction. In Brazil, a study indicated gender can drive the responsiveness of healthcare in some aspects as it was observed that female clinicians spent extra time in treating children under five years as compared to male clinicians(68).

Anecdotal evidence shows that some religious groups in Ghana including Catholics and Muslims may be hesitant to provide abortion and contraceptive services hence clients needing these services may not receive optimal care from service providers or may be referred to other facilities. Other factors such as communication and language barriers and poor knowledge of cultural norms and values of the local people may sometimes lead to poor and substandard care.

Though I did not identify studies that looked at patient factors in relation to health worker performance, patient's socio-demographic factors such as age, gender, risk factors, severity of illness and the ability and willingness of patient to patronise services can influence performance(69). Again, patient's perception of the health worker and service, and their educational levels all contribute to what services they receive and how the service is organised to suit them hence influencing performance of providers(69). A study conducted in Iran to assess factors that influence health care quality noted that patient attributes contributed to performance of service providers. Health care providers for instance reported that educational levels, demands and attitudes of patients influenced their job performance. One of the respondents remarked;

"If people know about their rights [in hospitals], they would expect more from their care-givers and consequently the quality [of medical services] increases" "I might unconsciously explain more to an educated patient. I assume that s/he would understand better" "If I see that a patient acknowledges my efforts, I will do my best. Otherwise, I just do my job. The patient's behaviour unintentionally affects my work"(69 p.3)

Sennun et al in a study in Thailand note the importance of involving local communities in supervision process especially in rural setting. Better results are achieved as the community help to identify problems and formulate interventions to meet the community needs(70).

This suggest that patients' attributes, attitude and cooperation with services provided may impact on performance of health workers. Severity of the care needed may leave inexperienced workers stressed, frustrated and non-performing. Other factors may include

community interest, support and acceptance of services provided by health workers which eventually influences job performance(69).

3.5 WORKPLACE/ FACILITY LEVEL

Good HRH management serves as a motivating tool for workers, bringing their individual aspirations and goals in line with that of the organisation. Dieleman et al(42) point out that performance management is poorly carried out in resource-poor environment. Lehmann et al(71) report factors such as poor working conditions, including organizational arrangements, management support, high-risk work environments and non-availability of equipment as resulting from poor performance management leading to poor performance of HCW's. Rashad et al 2014 also describe barriers such as unclear roles and expectations, poor processes of work, inappropriate skills mix within the work setting, competency gaps, lack of feedback and unsuitable incentives as factor that may hinder performance even in situations where there are enough workers(44).

Studies in LMIC's indicate that most HRH managers have poor training in supportive managerial skills, lack autonomy in decision making, are inadequately motivated with unclear lines of accountability. They little understand what really motivate health workers to perform(41). Interventions and strategies usually centre around use of monetary incentives and training which, evidence shows do not improve motivation to perform in the long term(57)(60).

Ramina et al(72) in a study in Kenya established that a positive relationship exist between leadership styles and employer performance. Management direction and opportunity allowed staff to take initiatives in accomplishing task to a large extent determines the level of organizational achievement. Therefore, managers who are not able to apply the needed leadership skill to suit current situation may achieve nothing with their staff(68). For instance, choosing autocratic leadership style may lead to fears and feelings of job insecurity, poor communication and lack of constructive feedback(72). This may further result in poor innovation and poor organizational citizenship thus leading to behaviours that hinder good performance and leaves tasks poorly accomplished(73)(74). Teamwork and shared group responsibility also influence performance of workers most especially in rural and remote areas where resources are constraints with limited number of HCW's(42).

A review in LMIC's showed that most publicly owed primary care facilities had weak infrastructure with poor staffing and limited capacity of emergency care. Inadequate equipment and poor referral systems led to poor performance and lack of evidence-based practice. However, facilities that were privately owned had strong staff with needed equipment and other inputs performed better as compared to publicly owned facilities(75). In a study in Malawi, one midwife remarked;

"...in maternity there is only one nurse working during the night, and that nurse is covering postnatal ward, nursery, labour ward, ante-natal ward, plus theatre when there is a caesarean section...so that is not safe for the patients, because there can be emergencies in all wards at once." (76)

Indicating the high workloads which could probably due to poor management arrangements.

Another study in two resource-poor hospitals in Tanzania established that poor management in one of the facilities led to shortages in supplies, poor salaries and high workloads leading

to frustrations, constraints and poor work output. In the other facility availability of supplies, training and incentives with doctors support during emergencies enhanced performance of midwives(77).

Poor supervision and performance appraisals, lack of recognition systems were among factors that were found to demotivate workers leading to substandard performance(60). Awases et al identified lack of recognition of well performing employees, absence of a formal performance appraisal system and poor working conditions in Namibia as demotivating and leading to poor performance (61). In Mali, factors that demotivated workers were due to poor management functions as most workers were not given job descriptions, or job descriptions were not specific enough for workers themselves to identify the job requirement or their training needs. Performance appraisal, promotion and continuous education were mainly administrative rituals and not used to enhance performance(60). In Armenia health workers lacked in-service training and those that were lucky to have did not get trainings that matched their needs. Poor feedback and recognition systems demotivated MNCH providers leading to poor performance(78).

Asabir et al(32) indicated that poor workforce performance in Ghana at the facility level were usually due to poor performance management and appraisals and lack of supportive supervision. This resulted from two main things, first performance management and appraisal are centralised at the national level and so local managers are not able to instil serious sanctions to non-performing workers as well as absence of rewards for staff who perform up to standard. Secondly most managers at the facilities level, especially at the primary care level usually had no formal training in human resources management and were thrust into management positions due to seniority (usually depending on academic qualification or years of service). They may thus lack the knowledge, skills and authority to improve local working conditions to improve performance(32). Planning of In-service training for instance is usually done at the central level and staff selected by the district offices to attend. In most instances, staff in the communities were not aware of the criteria used for selection since need assessment was properly carried out or not done. Training was not linked to local need(48). Assessing the effect of supervision on productivity in Northern Ghana, Frimpong et al established that supervision was not frequently carried out and only few workers (15%) felt supervisors were supportive in their work which improved their productivity. However, it cannot be established by this paper that improved productivity led to optimal performance(79). In a study by Sacks et al in Ghana, community health nurses reported lack of opportunity for career advancement, not being fairly compensated, lack of logistics and disrespect from supervisors as factors that demotivated and affected their job performance(80).

3.6 INDIVIDUAL HEALTH WORKER FACTORS

Individual factors affecting health worker performance include personal attributes such as age, gender, marital status, cultural and religious norms and values, ethnicity as well as individual lifestyle(71). A number of these factors have been described under socio-cultural factors. Other factors noted to influence performance of individual MNCH HCW's mostly at the primary include the years of work experience of providers and their perception of the workload. An experienced midwife can quickly notice pregnancy related complications and refer for prompt advance care than an inexperienced newly graduated midwife (personal observation). Again, stress and burnouts usually result from personal psychological perception of workload and how one can cope with such in providing quality MNCH services. Though

there could be influences on marital status and performance of MNCH nurses and midwives at the primary level documented evidence could not be assessed. In a study that looked at community health workers' (CHW) performance in Kenya, it was found that married CHW's performed better as compared to unmarried workers probably due to the support they received from other members in the household(81). However studies in Zimbabwe found no significant association between marital status and CHW performance (82)

Factors such physical and medical conditions, as well family and marital issues of workers can also have influence on their work performance. For instance, a HCW who has HIV/AIDS might need medical and emotional support at work(42). Women are mostly affected with family issues and child care and lack of specific workplace interventions including safety and security may impact negatively on their work performance. A nursing mother might need reasonably ample time to care for the needs of her baby before she can fully concentrate on her task. Dieleman et al also considers the individual's life cycle and career stage and what motivate them to perform(42). A young graduate from college might work harder and better because of his/her want to gain experience but also to apply what has recently been learnt in school. Appiah-Denkyira et al however draws attention to the fact that in Ghana, pre-service training may not be aligned with what is actually expected on the job performance(32) which may limit one's ability and competency to perform. Studies were not identified in Ghana that analyzed individual factors and how they influence HCW performance.

Aberese-Ako indicate that intrinsic motivation, the internal and naturally satisfying reward that people (MNCH providers) have may impact on performance of health services. In this case, health care providers may take initiatives to reach their clients and provide optimal care possible in spite of poor salaries and other demotivating managerial arrangements(83). Various studies that look at motivation of HCW's also discusses intrinsic motivation.

CHAPTER FOUR

This chapter first presents an overview of interventions used in Ghana to improve performance of maternal and neonatal health workforce. In the process, gaps are explored. The second section presents a review of evidence-informed interventions from some countries in Africa.

4.0 INTERVENTIONS TO ADDRESS PERFORMANCE OF HEALTH WORKERS

To achieve results, multifaceted interventions that tackle different determinants rather than single interventions are encouraged as single interventions do not improve performance in the long run(42)(57). The global strategy on human resources for health: Workforce 2030, indicates that much could be achieved in health worker performance and productivity if management systems within the health system were improved and resources used more efficiently and effectively. Policy makers and managers within the health system must ensure harmony between the production, recruitment, deployment and performance of HRH. In this way, policies and plans as well as national HRH strategies are able to comprehensively tackle the needed actions to be implemented(57). Many of the suggestions seen in literature to improve performance are part of the routine tasks of managers and often not described as specific interventions unless externally funded program was implemented and thus little details was found.

The framework used for the study looks at management systems, recognition and quality improvement systems as entry points used for interventions in improving performance. For interventions to work, they need to be well designed and adapted to the needs of the workforce but there is also the enabling environment. An enabling environment includes among others good governance, appropriate policies, capacities and resources available. Regulations and standards must be well in place for quality improvement. Local managers require capacity, decentralised HRM with a bigger decision space to enable them initiate and implement recognition systems and to function effectively at the primary level. The enabling part is crucial but vast to cover all in this study. The interventions that I describe here are critical areas at facility level that have been noted in literature. They focus on actual implementation of performance management (PM) and recognition systems together with quality improvement strategies. These interventions rest on the enabling environment to be successful. At the primary level, as often health care providers provide integrated care including MNCH, interventions that target general health workers and not just MNCH are discussed.

4.1 INTERVENTIONS IDENTIFIED IN GHANA TO IMPROVE HRH PERFORMANCE

4.1.0 MANAGEMENT SYSTEMS

HRH management system is defined as 'integrated use of data, policy and practice to plan for necessary staff, recruit, hire, deploy, develop and support health workers'(2). Performance management is an aspect of HRH management systems which may include activities as performance appraisals, supervision (supportive supervision, mentoring, coaching, follow-up), in-service training, efficient use of health workers including skill mix and recognition systems(42). Ensuring availability of work tools and other resources as well occupational safety and job security also improves performance and productivity(42). Under management system I discuss performance appraisal, supervision and training. For recognition systems, I include monetary incentives because that was the only example I got. Under quality improvement, I look at the plan-do-check-act and use of job aids.

HRH management system may be centralised or decentralised depending on the organisation of the health system in a particular context. At the macro level, health sector reforms, privatisation, improving accountability and transparency with better health sector financing and good remuneration for HRH will eventually create an enabling environment to improve motivation, job satisfaction and performance(42).

The GHS developed the Leadership Development Program (LDP), which trains and build capacity of local health managers in leadership and management in 2008(85). The program aimed to improve HRH management system by implementing an intervention to improve capacities of decentralized managers. In 2010, 276 health officers benefited from the program. The program used teamwork, defining root cause, action planning, monitoring and evaluation and repeating the cycle to address the limited responsiveness and poor leadership to improve MNCH(86). This was carried out in Ashanti, Volta, Greater Accra and Western Regions(85). This program could not be sustained. An evaluation done by Kwamie et al in 2014 found that the program was a good initiative which gave short-term outcomes with its approach. It helped local managers to prioritize and build initiatives as well as building teamwork. Due to poor planning, verticalized programing and centralized decision-making of the health system the program failed(86). Time constraints due to the routine work of managers and change in leadership and the limited decision space of local managers also accounted for the failure.

4.1.1 PERFORMANCE APPRAISAL AND FEEDBACK

Performance appraisal (PA) has emerged in HRH management as a tool to monitor and evaluate and review staffs' performance against their job requirement. It serve to motivate and identify training needs, identify other needs of HCW's for support and as a standard for promotion and to improve performance(87). Several aspects can be assessed including motivation, ability and knowledge, working conditions, expectations and training needs and measures for improvement and future growth. Flexible, constructive and timely feedback from a credible source improves performance and decreases stress between managers and staff(88). Hence managers must be credible enough to perform PA.

Various health facilities including the tertiary hospitals in Ghana use performance appraisal, though not enough evidence was found in literature to show its effect on improving performance of health workers and how it is carried out in Ghana. This suggest that at the primary level, the use of performance appraisal might even be minimal. In Ghana, though performance appraisal is used in HRH management, most staff see it as a ritual and only used for promotions. Staff performance appraisals are not frequently carried out by managers(32). The Ghana Health Service in 2003 developed its own performance appraisal system (PAS) to focus PAS more on performance improvement and less on promotion, until then it used the Civil Service appraisal form. While the civil service forms required PA to be done yearly, the GHS PA required that it is done quarterly. The differences are presented in annex 7 and 8. Pilot projects were carried out in four regions in 2005 but an assessment by the UNAIDS revealed many challenges which hindered its use. Three of the regions did not have PA on their annual action plan. One region that had it on its plan only budgeted for photocopies and training of district managers. District action plans did not include PA related programs. Data was poorly kept and only 5 districts in one region implemented PA though the region had trained several districts. At the national level, there was poor planning and supervision with inadequate training of managers and poor budget support. The assessment indicated that the

project was not ready for a national scale up(89). The 2014 GHS annual report only indicated that managers were assessed on their objectives for the year and PA was carried on other staff but nothing was mentioned as to how this was done or how it influenced staff performance(16).

4.1.2 SUPERVISION

Supervision has been proven to improve performance, provide professional development, improve health worker job satisfaction and increase motivation of workers(42). Traditionally, supervision was viewed by managers with HR task in LMIC's as command and control or fault finding with little emphasis on improvement (93). This has changed as supportive supervision is more used to improve performance by 'direct, personal contact on a regular basis to guide, support, and assist designated staff to become more competent in their work with focus on broader performance improvement'(90). A review in LMIC's reported only few studies on mentoring and clinical mentoring which mainly looked at clinical skills moulding and educational strategies(91).

Frimpong et al established in Ghana that supervision though carried out, only few workers find it to be supportive. In the study, only 15% of the respondents felt their supervisors were supportive(79). Escribano-ferrer et al points out in their study that supervision is a planned intervention which is expensive with little effect on improving HCW performance in Ghana. Again, the study indicated that in most cases, there are no feedbacks or problem solving and no involvement of the community in the supervision(92). Supervision therefore is routine task which is also not often done. The Ghana national newborn strategy and action plan promotes the use of supportive supervision and mentoring to improve performance of MNCH providers(36). The Ghana HRH policy 2006-2011, acknowledges the weak institutional capacities which does not promote effective supervision and monitoring across all levels in the service delivery(93).

4.1.3 TRAINING

Good HRH management systems can align staff training to the specifics of the job. On-the-job training, clinical meetings and in-service training are training mechanism used whiles in employment to improve skills, and knowledge(42). These have been documented as cost-effective ways of improving knowledge and skills of employees as compared to off-site training which is usually expensive, create staff shortages and implementation of new skills may be difficult due to unsupportive environment. Performance in the long run may also not improve substantially with this kind of training(42). Rowe et al encourages multifaceted interventions like training plus supervision to improve performance than concentrating on training alone(57)

The health education unit of the Ghana Health Service (GHS) plans various in-service trainings (IST) for HCW's across the country which is one of its mandates(16). HCW's are required to have at least one IST linked to their profession and field of practice which is required for renewal of professional license each year. The Nursing and Midwifery Council (NMC) with GHS organize IST for nurses and midwives as well as health care assistants in the country. The NMC also offer training to HCW's to instill good professional conduct and discipline as well as regulating their practice(7). Some Pharmaceutical companies and other private health stakeholders also do organize training for health workers(25). The private sector is required

to adapt the GHS in-service policy however there is poor regulation of the private sector(32). IST is independent of pre-service training and based on an assessment of training needs. This is however not optimally carried out(25).

According to the GHS report, the use of in-service training by local managers was limited although no data was given. The GHS related this to gaps in information flow which has made the training information system outdated(25). Among the challenges faced in implementing staff in-service training in Ghana include weak management and institutional structures, poor coordination of training activities between and within levels and inequity in access for different cadres. Also poor standardization of training in the GHS, and poor funding of planned training programs (25). The Ghana HRH strategic plan 2007-2011, (the most recent) (93) indicates as one of the strategies to improve performance that, in-service training must be implemented by all agencies. To expand and facilitate IST to cover public health, clinical and management, and build capacity for IST coordinators and trainers but it does not indicate how it will be achieved nor how funding will be carried out(93). Various tertiary institutions have also instituted distance learning programs for nurses, midwives and other health cadres for continuous career advancement to improve competency and performance in the health sector. (personal observation)

4.1.4 TASK SHIFTING

WHO recommends the training and use of mid-level cadres and task shifting which is adequately planned and supported, proper skill mix and use of lower level cadres for basic services and delegating more complex task to medical clinicians and midwives. This is to ensure efficient use of HCW's. The WHO world health report 2006 indicates the inefficiencies that result from poor skill mix where minor duties could be delegated at a cheaper cost with same quality (1). Various forms of task shifting has been adopted mostly in developing countries to improve the lives of mothers and their children and WHO provides an extensive list of various MNCH services that can be shifted to mid-level cadres and the conditions under which these can be done(94).

Ghana MoH introduced the use of lower-level cadres into the health system in the 90's in the Northern region in reaching the World Health Organization goal of "health for all by year 2000" (93). Community health nurses were trained in basic health service delivery skills. They provide services such as immunization, family planning, birth attendance, antenatal/postnatal care, basic treatment and health education including community outreach and home visits to pregnant and lactating women(95). These tasks were delegated from midwives and general nurses. The program has been adopted into the national HRH policy and there has been a national scale up(93). There is the need for empirical studies to be conducted on how the used of these cadre have improved performance of health workers in the primary level in Ghana. In a recent study by Okyere et al in Northern Ghana, they ascertained that though task shifting helps to improve the competency of mid-level cadres, they often perform tasks which are far beyond their job description due to shortage of health workers. They emphasise the danger in this and the need for continuous training, coaching and supervision to guide their work performance(94). One of the health assistants in describing her work remarked;

"As a health aide worker, prescribing medicine for the sick is not part of my work here. But sometimes I do that. My main task is to assist in the OPD, assist the midwife in delivery, assists in the weighing of babies and other postnatal activities. The reason why I perform

other duties is because I have worked in this health facility for a long time and I have experience in consultation. So, when the in-charge is very busy or is not around, I do consultations because we have only one senior nurse here who is trained to be consulting” (91 pg 9).

4.1.5 RECOGNITION SYSTEMS

Emerging evidence shows that other forms of incentives such as continuing education, supportive career structures, and non-monetary recognition of good performance motivate HCW's to perform and that the use of monetary incentives can undermine or reduce motivation of HCW's who are intrinsically motivated(96). Recognition and esteem from peers, managers and community, appreciation of good performance and conducive workplace norms with opportunities for continuous professional advancement have been documented as key to promoting health worker performance(44)

Between 1998 to 2005, the Additional Duties Hours Allowance (ADHA) was initiated by the MoH in Ghana to reward health staff for extra duties worked. Though the initial program targeted doctors, it was later extended to cover all staff. This resulted in high cost to the MoH. ADHA and salaries accounted for about 97% of Total Health Expenditure leading to its cancellation with new salary structure. Through this program, health workers increased output as more time was spent in the health facility and reduced absenteeism however the impact on actual work performance was not assessed(27). Data was not found as to how much absenteeism levels decreased.

There are systems for continuous career improvement but the selection process is not always transparent(16). Community health nurses (CHN's) after serving in rural areas for three years are eligible for higher education to become public health nurses or midwives. The NMC has recently upgraded some health assistant training facilities in the country into midwifery schools. they give top-up training to upgrade community health nurses to midwives since 2011(97). Some districts may have instituted some systems to reward good performance but these are under researched and evidence could not be traced as to how performance of MNCH have been influenced by such systems in Ghana. Though the MoH stated in the 2006-2011 HRH policy to 'ensure fairness in promotion for all categories of health staff, it does not explicitly relate promotion to performance of staff(93).

4.1.6 PERFORMANCE-BASED INCENTIVES

Performance-based incentives which involves the use of monetary and non-monetary incentives have been used in various countries around the globe to influence health worker performance(98). It is a motivating tool in HRH to improve HCW performance as it shifts focus from inputs to output in achieving high quality essential health services. Use of supply side PBF may target individual workers or a facility in totality. Though at the global level evidence on the effectiveness of PBF has been mixed, evidence from parts of Africa such as Rwanda and Zambia have shown how PBF has improved worker performance, increased health care coverage and health outcomes(99).

The MoH proposed PBF in the 2007-2011 strategic plan but it has not been implemented(93). Though there are ongoing pilot projects in parts of the country including the Northern, Volta, Upper East and Upper West regions of the country by the World Bank and the European Union-funded QUALMAT (Quality Maternal Health) projects. The project was pre-piloted in 2015

which was hindered by poor capacity of human and other equipment at the CHP zones to delivery essential MNCH services to meet targets. Training of staff was initiated in February 2017 for the pilot project. The project is effective from 2015 to 2020 and impact evaluation will be in 2018 hence effect on health worker performance is not yet known(100).

4.1.7 QUALITY IMPROVEMENT

The quality improvement process is use by managers to identify and solve problems and continuously improve by assessing measures put in place and adjusting to suit current situation(57). It is a series of steps that aim at helping HCW's and managers to identify and solve problems of suboptimal performance. It shows where specific interventions fit into the larger process of managing HCW's. The process follows the plan-do-check-act (PDCA) cycle with focus on teamwork, clients and systems, process and measurement(44)(57). It includes the use of teamwork and improved staff relations, coaching and feedback as well as the use of guidelines to inform performance(84). Coaching has been defined as a 'one-on-one activity where a coach attempts to induce change in trainees to boost performance'(86 pg 13). Quality improvement also include the use of job aids such as mobile health.

QUALITY IMPROVEMENT WITH PROJECT FIVE ALIVE IN GHANA

From 2008 to 2015, the national Catholic Health Service with the Institute for healthcare improvement (IHI) initiated the 'project five alive' at the primary level in Ghana to reduce mortalities and morbidities in under 5 children. After successful pilots in the northern region, there was a national scale up. The main approach was to train and equip HCWs in using the PDCA cycle to improve coverage quality and patient-centred health care. This was done by training, peer-to-peer learning network of hospitals with supportive coaching and mentoring. Nurses and midwives were trained in data analysis and decision-making based on information. Supervision was carried by the local health managers and IHI. This led to reduced delays in service provision and consistent and reliable use of approved protocols in managing childhood diseases. In the Brong Ahafo, Western and Greater Accra regions, U5MR reduced by 24.4%, 41.0%, and 41.6% respectively(16). By November 2014, the project reported 31% reduction in U5MR, 37% in IMR and 35% reduction in under-5 malaria case fatality rates in 134 facilities(101). Health facilities continue to develop, test, adapt and implement locally acceptable ways to address root causes of MNCH mortalities and morbidities. This improved the capacity of HCW's to provide quality child health care in the country as reported by the Ghana Health Service(16)(101). The improvement in service output also indicate that performance of MNCH workers also improved.

4.1.9 USE OF TECHNOLOGY FOR QUALITY IMPROVEMENT

The Mobile Technology for Community Health (MOTTECH) project is a partnership project between the Ghana Health Service, Grameen Foundation and Columbia University's Mailman School of Public Health. Funding was by a grant from the Bill & Melinda Gates Foundation. The pilot MOTTECH project was launched in July 2010 in the Upper East Region with the aim of increasing the quantity and quality of prenatal and neonatal care in rural Ghana with the use mobile phones. The mobile software comprises of two applications (App); mobile midwife and nurses' application. The nurses' App allow community health workers to record and track care provided and centralizes recording of health data, reports on monthly activities are automated as well as schedule for treatment. Reminders for follow-ups are sent via SMS alerts in the client's local language. It also allows data on service delivery and outcomes to be reported to the district office via the mobile phone. The mobile midwife App provides voice and text messages weekly to pregnant women about their pregnancy and antenatal care and

health promotion alerts. The SMS messages to the HCW's made their work easier and was a motivation to follow up care(102)(103). Strategy is being developed for a national scale up(104).

Various studies have shown the potential of the use of modern information technology has in improving health worker performance and optimising health outcomes for pregnant women and their children(91)(105)(106). Noordam et al report studies carried in Ghana, Uganda, Mali, Malawi and Sierra Leone where quality improvement using phones and radio to carry out information to pregnant women in remote communities have been successful. Giving Motorola to traditional birth attendants enabled easy communication with HCW'S and quick referrals and transportation of emergencies with significant reduction in maternal deaths(105).

4.1.10 OCCUPATIONAL HEALTH AND SAFETY

To ensure health and safety of HCW's, the GHS and the MoH has put in place strategies to promote safe working environment. Provision and use of protective working equipment including gloves, mask and aprons is ensured in all facilities. Staff are also encouraged to register for the NHIS. Local managers provide guidelines on management of injuries and infections at the workplace. Provision of secured staff accommodation remains a problem in most rural and remote areas(93). The GHS report in 2014 acknowledges that occupational health activities have not been standardised in the primary facilities. No indication was given as to the way forward.

4.2 INTERVENTIONS FROM OTHER AFRICAN COUNTRIES

Few interventions that have shown to work in some countries in Africa are discussed in this section. These examples were chosen because they used multifaced interventions to improve HCW performance.

4.2.1 SUPPORTIVE SUPERVISION IN TANZANIA

The support, train and empower managers (STEM) project was implemented in three regions in Tanzania by Ifakara Health Institute in collaboration with Centre for Global Health, Trinity College Dublin, Ireland to increase capacity of managers to support and train their staff. The intervention was composed of three elements(107):

- Workshops for the reproductive and child health personnels in the District Health Management Team (DHMT) and obstetric care facility managers on HRM particularly, increasing planning, monitoring and controlling HRM activities.
- Intensive training in supervision and support for managers
- Action Learning Sets (ALS)- this was made of groups of about 6-8 of local managers who met regularly to exchange ideas and support each other. It was led by an external facilitator, for staff engaged in supervision and mentoring of EMOC health workers

During the project, all facilities in two districts received the first two elements and two other districts received all elements. Controlled districts did not receive any element. The three regions selected for the study had previously collected data on levels of job satisfaction with supervision which served as a baseline measurement for grouping worker satisfaction into high, medium and low levels.

A post intervention assessment conducted revealed that supportive supervision guidelines were present in about 80% of the intervention facilities, use of personnel files, dissemination of job descriptions increased from 6.7% to 53.3% in intervention facilities and absentee registers had been implemented. Community health management teams were impressed as there was systematic record-keeping which made it easy to trace records. Absentee levels were reduced due to the introduction of the absentee register and job descriptions helped in clarifying each employee's roles(108). Managers acquired knowledge and skills to improve their performance. Supervision was seen more as a joint activity to work and solve challenges that arose together with employees. Communication between supervisors was improved with a supportive work environment. A summary of the results is presented in the figure below:

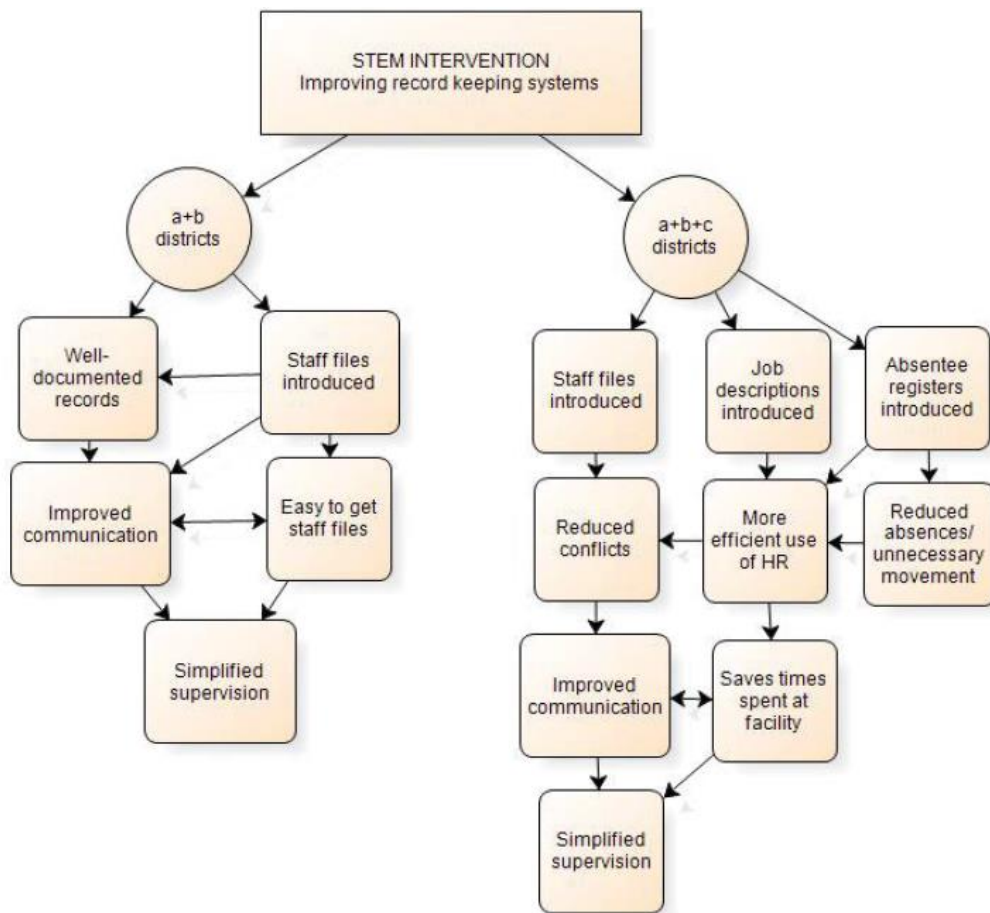


Figure 4: impact of supportive supervision on HRM in Tanzania

4.2.2 PERFORMANCE-BASED FINANCING IN RWANDA

Rwanda has been described as one of the successful countries in using PBF. After the 1994 genocide, the country was torn apart with most systems destroyed. The health system faced challenges of HRH shortages, maldistribution and inadequately trained workers especially in the rural areas(109).

Pilot projects of PBF in marked programs such as MNCH by external donors was initiated to motivate HCW's to improve their performance and health outcomes. Policy makers made strict assessment with monitoring and impact evaluation which informed a national scale up and adaptation of PBF as a national policy in 2005. Health facilities become more accountable and responsive offering weekend consultation, extended working hours and offered baby cloths to mothers who delivered in their facilities(110). Lessons were learnt from pilot projects which included upgrade of infrastructure with needed inputs, easy physical accessibility of facilities, well-functioning public-private partnership and good up-to-date HMIS(111). The implementation of the national PBF policy was done together with national health sector reforms including institution of the facility-based child health policy and community-based insurance schemes to reduce obstacles in accessing health care especially MNCH services(109). Reforms in HRH management led to 62% increase in HCW's and remuneration increased by 60% to 100%(110).

The success of the initiative was made possible by government commitment in increasing funding to the health sector as well good accountability and transparency of use of donor funds in the country. This allowed for enough financial support for administration, supervision and training services. Clarification of the various roles of all parties involved was done and indicators for performance were set and linked to supportive supervision systems. Again, systems and conditions for payments as well as expected outputs were clearly indicated(111)(112).

In the Rwandan experience, though monetary incentives served as motivation for health workers to perform, that only couldn't have been sufficient enough to achieve results. Strengthening of other parts of the health system contributed substantially to the success (112). Other countries that have succeeded in using PBF to improve performance of health workers include Tanzania, Burundi and Democratic Republic of Congo(113)(114).

4.2.3 TASK SHIFTING AND USE OF MID-LEVEL CADRES

In 2003, the Nigeria DHS indicated skilled birth attendants (SBA's) rates of 12.3% in the North-West zone. Most primary care facilities lacked doctors, nurses and midwives and were managed by community health extension workers (CHEW's) who lacked delivery skills. The federal government together with Save the Children, Jhpiego, (non-governmental organisation) in 2006 started to train and support CHEW's as SBA's. In-service training was offered to already practising CHEW's by nurses and midwives and supervision and other performance improvement systems were established. CHEW'S were trained to offer BEmONC services in 23 primary health centres. This led to an increase in utilisation of MNCH services and increase in their job performance(115). The change in utilisation was possible because of government's commitment and support to make the new training of these cadres acceptable in the health system. Procurement of needed supplies and delivery kits as well as infrastructural development in the facilities were facilitated by government. The program continues to receive policy and regulatory support from government to better specify the new task of these cadre to ensure sustainability. The figure below shows the positive effect that shifting basic obstetric care to CHEW's with the necessary training, support and supervision had on primary care facilities in Nigeria(115).

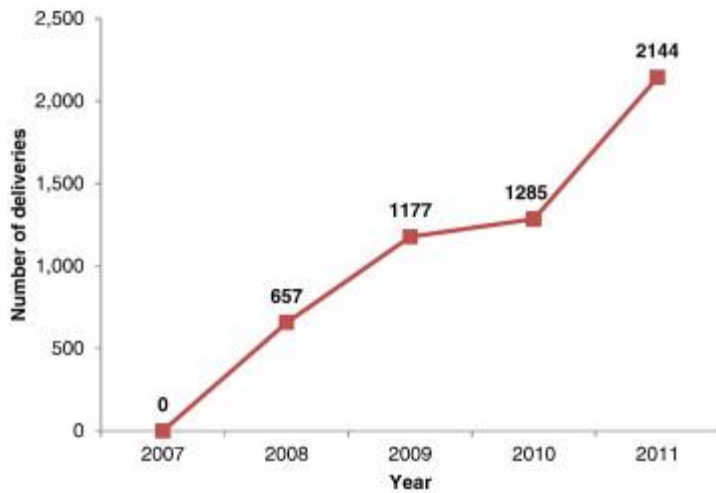


Figure 5: number of deliveries conducted by community health extension workers

Nonetheless, there were challenges in the performance of the new skills due to inadequate supply of logistics and drugs and the frequent transfer of CHEW's to different units where they could not practice their new skills. The 2013 DHS reported SBA rate of 12.3% in the North-West zone (116). This could be due to population changes and increased number of pregnancies.

CHAPTER FIVE

This chapter presents a discussion, conclusion and recommendations to improve performance of MNCH workers in Ghana. Recommendations are based on gaps identified and evidence from other African countries in improving health workforce performance.

5.1 DISCUSSION

FACTORS INFLUENCING PERFORMANCE AND INTERVENTIONS TO IMPROVE PERFORMANCE

As the literature review was mainly focused on LMIC's and sub-Saharan Africa where countries often have very similar situations, I believe that other factors that influence performance identified in other countries can also be seen in Ghana. Findings from this study have thrown light on determinants of HCW performance. To be able to design effective interventions to optimise performance, local managers must first understand the underlying causes of substandard performance(57). It has been noted that interventions to improve performance do not stand out at the local level as these activities are part of the normal duties of local managers. And so, evidence is limited as to what is being done to improve performance especially at the primary level. I see that regulations and standards are there but either they are not well communicated or not well followed up by local managers. Also, interventions on accountability and recognition systems are limited and local managers might not know about them or are not able to take decisions to implement such interventions. This may be due to the limited decision space local managers have and so, creating an enabling environment with clear policies, accountability and transparency, decentralisation and enough decision space is very crucial (42)(57). At the macro level, health sector reforms with better financing and good remuneration for HRH will eventually create an enabling environment to improve motivation, job satisfaction and performance(42).

Evidence from this review has shown that most local managers in Ghana lack formal training in HRH management thereby resulting in poor HRH management. Performance management is not decentralised in Ghana and local managers lack the decision space to implement most of the performance management functions(32)(65). I see few interventions in Ghana to improve management capacity for better HRH management but these interventions are not sustained in the long term. This has been blamed on the verticalized and centralised programming which does not consider the local settings(86). Other factors identified in Ghana to influence HCW's performance include over politicisation of the health sector and the bureaucracies that exist within the health sector and between other sectors. These lead to delayed salaries and late implementation of key activities in HRH management and provision of MNCH services especially at the primary level.

Though determinants identified span from the overall health system, labour market, social economic, cultural, health facility and individual levels. Most interventions I found in literature concentrated on health facility level. That is mainly on management systems which looked at performance management, recognition systems and quality improvement(62). Culture, gender and age seem important determinants to influence performance. Nonetheless, I did not discover any interventions to address these factors. No interventions focused on placing HCW's who speak the same language as the local people in the various settings to help with easy communication and for the health worker to feel comfortable in performing her duties. Nor are interventions addressing different age groups of workers. This is important and

managers must pay particular attention to address them. Female health workers for instance must be particularly protected from harm, and in local communities where most of the health workers are women, this cannot be over-emphasized. Interventions on job security and employee safety is paramount and need to be considered as a matter of urgency(42)(57).

Supportive supervision and recognition systems are not optimally done(79). The example of Tanzania shows how preparing and equipping managers with the right skills enables them to carry out supportive supervision using the PDCA approach(107). It is good that task shifting has been considered in Ghana to improve performance of nurses and midwives by allowing them to concentrate on more complex aspects of care. Notwithstanding this, lower level cadres need to be trained and supervised on the job to maximise performance(94). In the example from Nigeria, in-service training and performance improvement systems were established. Enough evidence was not found in literature reporting use of recognition systems to improve HCW performance in Ghana. PBF seems a good reform for policymakers to consider but it requires a whole health sector reform as seen in Rwanda and I am not convinced Ghana is in the position to immediately implement PBF in the health sector. It is good that lessons are learnt from pilot projects and how this influence performance of HCW's for future consideration.

Evidence from available literature indicates that the MoH and the GHS focus interventions more on performance factors with much attention on management systems and quality improvement. Though I see a lot of policies, plans and strategies documented, information about the implementation and evaluation seems missing. So where is all the evidence? How can we know how these interventions are impacting on work performance if no one is evaluating them?

CONCEPTUALIZATION OF HCW PERFORMANCE AND THE FRAMEWORK FOR IMPROVING PERFORMANCE

The framework used for the analysis was helpful and most suitable. It allowed for analysis of determinants influencing HRH performance at the various levels. It also gave directions in looking at interventions to address substandard performance in Ghana and other parts of Africa. It covered the external environment factors which allowed for more comprehensive analysis. In analyzing determinants, the framework was adapted to allow community and client factors to be looked at under socio-economic factors. Cultural factors were also included to better understand the contextual factors. I did not discuss regulations and standards in detail because they are part of the enabling environment. Nonetheless though the framework has a good beginning, it also has some flaws. It does not capture everything that I identified. Management systems were not explained to indicate what it covered and which aspects were more critical i.e. enabling part or implementation part. Quality improvement was mainly on the PDAC cycle with regulations and standards. The use of job aids which are also used for quality improvement had no place in it.

5.2 CONCLUSION AND RECOMMENDATION

MNCH workers were at the core in reaching MDG's goals of reducing maternal and neonatal mortalities and morbidities. Many countries in Sub-Saharan Africa could not achieve targets that were set. Moving forward, the sustainable development goals present opportunities for LMIC's and the rest of the world to end the needless deaths of women and children and achieve the targets set for SDG 3.1 & 3.2.

The factors identified at the three levels-the general health system, workplace and individual level were to some extent addressed by interventions identified. Certain factors were not address e.g. cultural, gender and age. To improve health worker performance, managers need to address factors at all the various levels. Not only on the topic but also how it is done and the enabling environment that allows it to be carried out. Local managers play a crucial role in this as seen in management systems and recognition systems. Their capacity and decision-making space especially at the primary level are of paramount importance for health worker performance to be optimised. At the primary level, facility managers need to be better equipped and better resourced with decision space and with money to help their workers perform better. Many plans are in place but often fails mainly due to unfavourable enabling environment. I have seen that the intensions are there but the enabling environment is limited in Ghana, but also in other parts of Africa. All the interventions risk for failure if the whole governance of the health system is improved.

The wealth of a nation is determined by its health with the health workforce at the core. LMIC's in making efforts to develop must therefore institute measures that will keep the few HRH motivated and well performing so as to achieve wealth through health. Indeed, there can be no health without a well performing workforce. In order to better do this, the following recommendations are proposed;

RECOMMENDATIONS

The recommendations for programmatic actions to improve MNCH workers performance at the primary level in Ghana are made based on the findings of this study. They are categorized into the roles expected to be played by policy makers and health managers involved in HRH management.

Recommendations for policy makers (Government, MOH, GHS and Donors)

- ✚ Decentralise HRH management to districts and local levels and institute measures to train managers in HRH management with continuous support, supervision and equity in resource allocation.
- ✚ Increase the decision space of local managers and build their capacity to be able to implement various strategies of improving performance.
- ✚ Critically evaluate ongoing pilot project on PBF if the country has the capacity to expand and maintain a national scale-up in consultation with relevant stakeholders.
- ✚ Gender specific interventions must be developed and translated into policy to provide security and safety at the work site for women.
- ✚ Evaluate various HRH performance improvement strategies so that lessons can be learnt and needed changes made. Lessons must be learnt from other SSA countries that have seen some success in improving worker performance.

Recommendations for health managers

- ✦ Implement use of performance appraisal with feedback and support.
- ✦ Improve in-service training including on-the-job training.
- ✦ Opportunity for training and continuous education should be transparent and based on health worker need assessment to know what needs to be improved.
- ✦ Managers must use good leadership style that encourage team work coaching, good feedback, reward and recognition of good performance.
- ✦ Maintain good working environment to protect workers from harm e.g. adequate protective measures to reduce fear of infections and improve quality care.
- ✦ Implement gender and age specific interventions that protect women and targets different age groups for maximal effect.
- ✦ Interventions to improve working conditions must ensure that relevant supplies are always available.

Recommendations for further studies

- ✦ There is the need for additional evidence to assess effectiveness of various HRH management policies and strategies on improving performance and the capacity of management at the primary level in implement these interventions as well as critical evaluations.

Finally, a concerted effort by all stakeholders; government, HCW's, national and international NGOs, and the private sector are needed to optimize the performance of the existing health workforce in MNCH services in Ghana especially at the primary level and the general health sector for better health outcomes.

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ANNEXES

ANNEX 1: OVERVIEW OF HEALTH WORKFORCE IN GHANA

In 2011, about 53000 people were employed in the health sector. This number comprised of those in the public sector, Christian Health Association of Ghana (CHAG), private, Islamic missions, quasi-government and other organisations. About 81.5% of the total health workforce are employed by the MoH while the private sector employs about 10% of professional health workers(25). By 2014, the number of health staff employed by the MoH had increased to 84008, this increment was mainly due to the establishment of new nursing and Midwifery training schools in all regions of the country. About 90% of government's budgetary allocation to the health sector goes into paying staff salaries(16).

The nurse/midwife to population ratio is 0.926/1000 far below the WHO recommendation of 2.3/1000 population. The national Midwife to women in fertile age (WIFA) population ratio was 1:1374 in 2014 whereas doctor to population ratio stood at 1:9043 in 2014(16). Greater Accra region, the capital of the nation, houses most of human resources for health (HRH) in Ghana, about 20.77%. There are also disparities within the various regions in the distribution of HRH(16)(29). The three northern regions continues to experience poor numbers of HRH(25). The distribution of HRH from 2010 to 2014 is presented in figure 3 and 4.

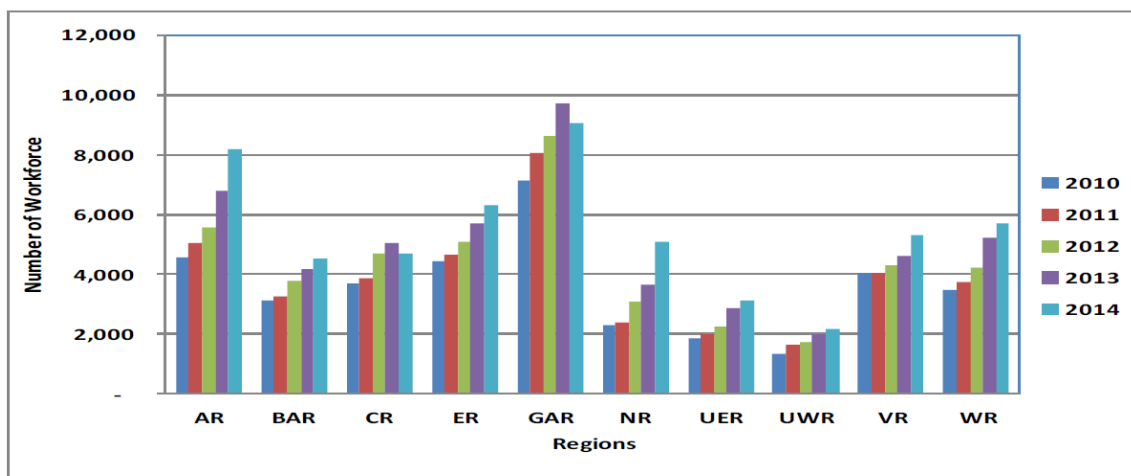


Figure 6: distribution of general health workers by regions 2010-2014(16)

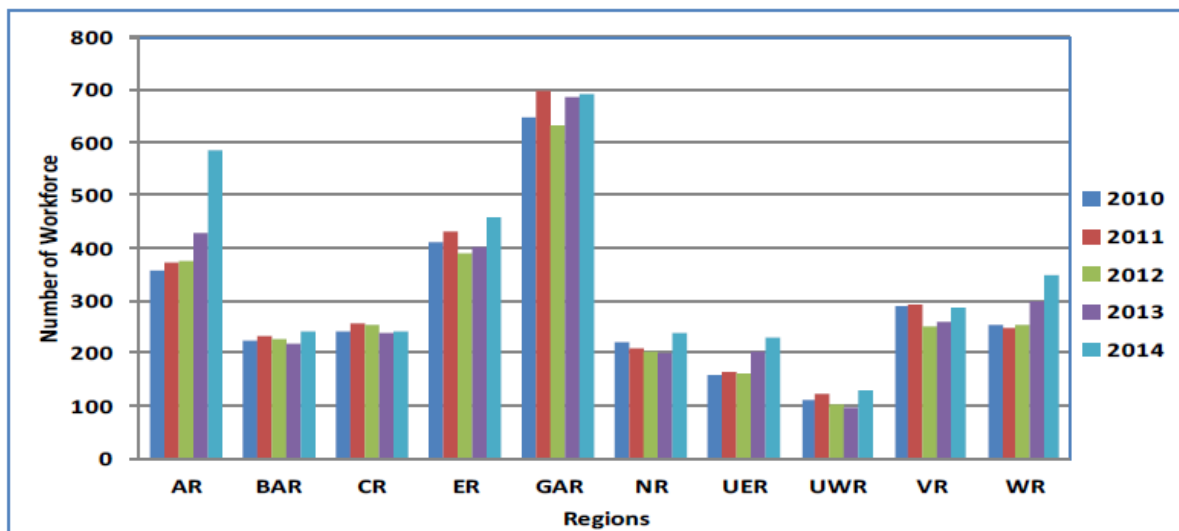


Figure 7: distribution of midwives by region 2010-2014(16)

Source: Ghana Health Service (GHS) annual report 2014

ANNEX 2: OVERVIEW OF MATERNAL AND NEONATAL CARE

Over the past decades, Ghana has embarked on a number of sexual, reproductive, maternal and neonatal health activities and programs in the quest to ensure good health of adolescent girls, pregnant women and their new-borns in reaching the Millennium Development Goals 4 and 5(8)(30). Such programs included:

- Implementation of the Child Health Policy and Child Health Strategy
- Sustaining the Expanded Program on Immunization (EPI) for children.
- Working with District Assemblies to strengthen and increase the number of Community Health Planning Services (CHPS) compounds for improved delivery of maternal and child health care.
- Implementation of free maternal health services, repositioning family planning and training.
- Strengthening the MDG Accelerated Framework (MAF) initiative to boost activities related to the reduction of maternal mortality.
- Implementation of Emergency Obstetric and Neonatal Care (EmONC) in all 10 regions.

These policies and programs led to the achievements over the past decade in MNCH mortalities. About 73% of women delivered in a health facility in 2014, an increased from 57% in 2008. Skilled birth attendants (doctors, nurses/midwives and community health officer) rate was 74%. 81% of mothers and their babies of those who deliver at health facility receive postnatal check-up within the first two days after delivery. Ghana has 90% immunisation coverage rate with about 1% of districts reporting coverage rate of less than 50%(30). Causes of maternal and child mortalities in Ghana is shown in figures 5 and 6.

Causes of maternal deaths, 2013

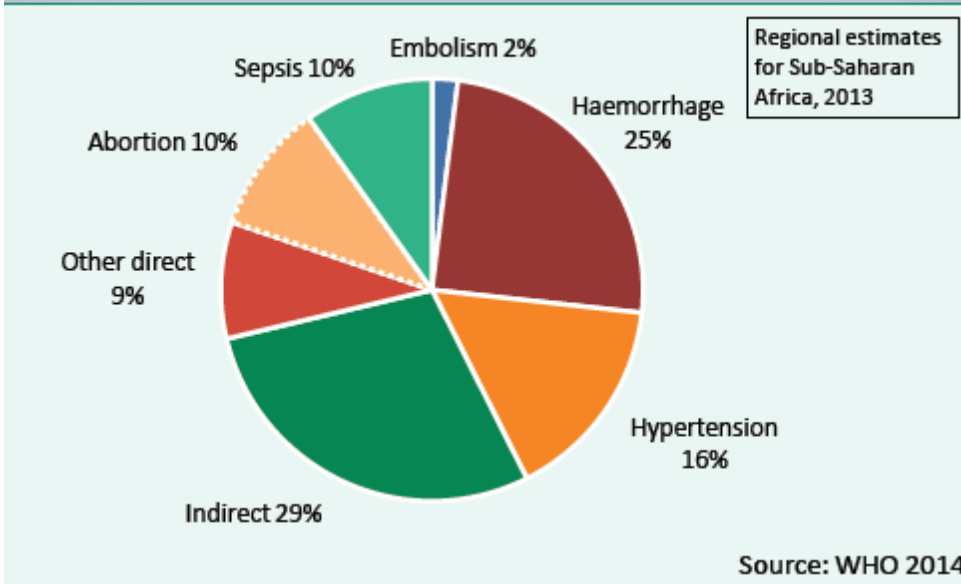


Figure 8: causes of maternal deaths in Ghana(15)

Causes of under-five deaths, 2015

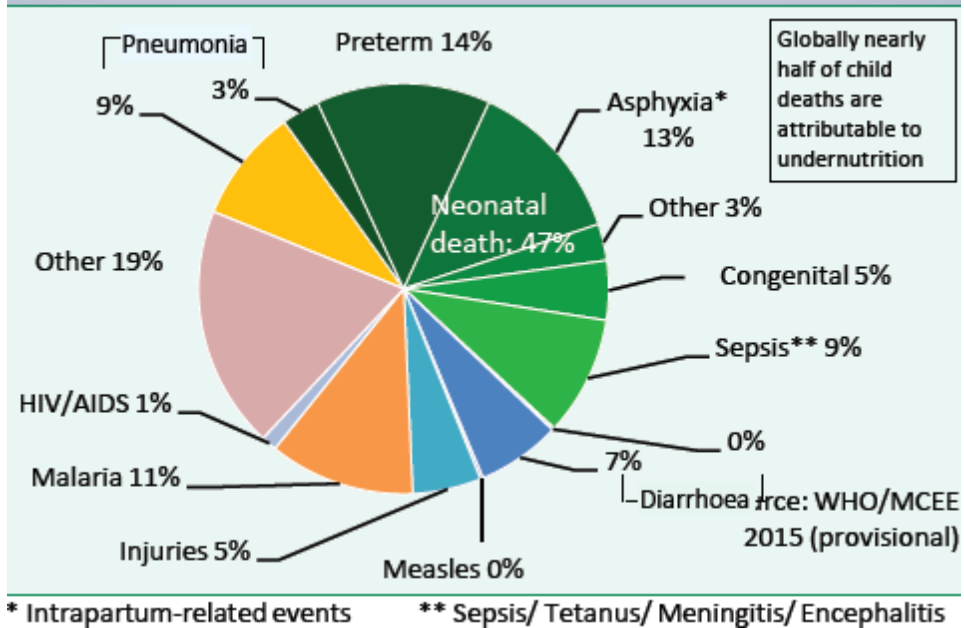


Figure 9: causes of neonatal and under 5 deaths in Ghana(15)

Source: Countdown to 2015 (2014)

ANNEX 3: INDICATORS OF PERFORMANCE BY THE WORLD HEALTH ORGANISATION

Availability

Availability of health personnel is assessed by presence at work, waiting times of patients, staff ratios and staff turnover(42). In resource poor settings, most health workers are not available to provide the essential services to clients and patients due shortage of staff, high staff turnover, poor working conditions, among others. High levels of absenteeism are recorded in most facilities especially at the rural areas where the working circumstances are difficult(76).

Competence

Competence is described by the knowledge of health care process and skills and abilities employed in using the knowledge. It results from the initial training that health workers acquire in training schools before service, in-service training, and continuous education and experience which determines what the health worker "know how to do"(41). Competence is shown by adherence to protocols, guidelines and interpersonal standards(42).

Leonard et al describes health workers ability to use their knowledge and skills in the workplace as capacity which also determines their ability to use and access equipment, infrastructure and consumables (41).

Responsiveness

Responsiveness is considered as how well the health system meets the expectation of both clients and health providers for the non-clinical aspects of the health care. It is divided into two main domains; interpersonal and structural domains. Interpersonal domain includes dignity, autonomy, communication and confidentiality while the structural domain is made up of quality of basic amenities, choice, access to social support networks and prompt attention(117). It is the proactive quality of service with client satisfaction and improved health (42). The use of norms and codes of conduct, basic amenities and supervision boost responsiveness of the health system(1).

Productivity

Productivity is the outputs of the health system which is determined by the number of patients seeking care and the efficiency of service providers(42). Leonard et al looked at three factors that determine productivity in their three-factor model for health worker productivity. These were organizational efficiency, health worker effort and service demand. Organizational inefficiency results from organization of services in efficient ways aiding health workers to produce outputs. Health worker effort depends on factors such as knowledge and skills, presence and time efficiency. Lastly, when fewer patients seek care, productivity decreases as health care providers may have long waiting times to receive patients thereby leading to underutilization of the service(41)(42)(57)(44).

ANNEX 4: THEORIES AND FRAMEWORKS ON THE CONCEPT OF (HEALTH WORKER) PERFORMANCE

Murph 1989 defined job performance as “the set of behaviours that are relevant to the goals of the organisation or the organisational unit in which a person work”(73)(90).

Psychologists and sociologists have viewed and analysed performance in different dimensions as it plays a major role in achieving organisational goals. It is considered as a multi-dimensional concept(73)(42) and various models have been developed to understand human performance(45). Human performance technologists try to study performance of workers using different models to analyse the organizational and individual worker attributes to performance(46)(88). Other writers look at the strong relationship that motivation has with performance and look at performance in the line of motivating workers for results(118).

Impleman 2007, Asgari and Vakili 2012 and Parker et al 2006 looked at the relationship between job performance and personality whiles Thomas et al 2006 and Chen and Silverthome 2008, looked at locus of control (The extent to which people believe they have power over events in their lives) and performance. They viewed performance in two main categories:(1) initiative performance and (2) compliant performance. According to them, initiative performance is when workers perform or work beyond the basic requirement of their job. They use their own initiatives apart from what has been assigned them to achieve the goals of the organization. Compliant performance on the other hand is when workers do only what has been assigned to them, according to Blan 1993(73)(119)(120).

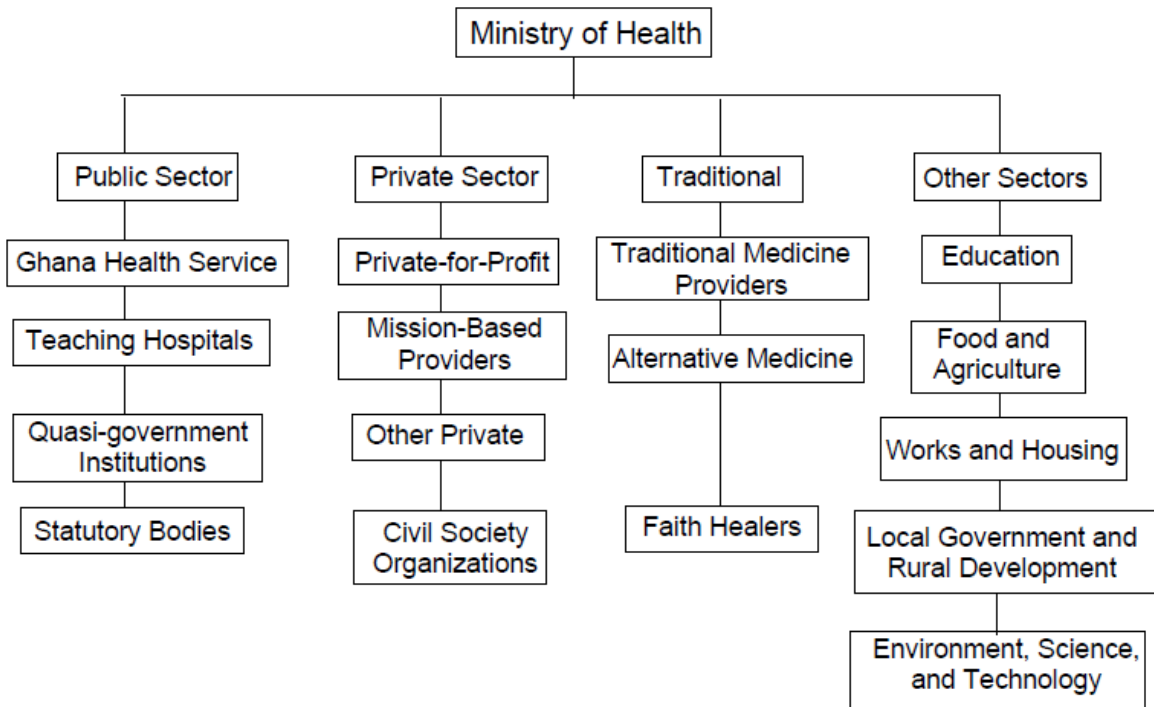
Boon et al 2012 described “four behavioural families” that are strongly related to job performance; (a) the organizational citizenship behaviours-behaviours that improve efficiency and the organizational performance, (b) work withdrawal-behaviours that hinder good performance and leaves job tasks unfulfilled and may lead to frequent absenteeism, (c) organizational retaliation-behaviours that intent to breach the relationship with employers and harmful effects on performance and finally (d) job withdrawal behaviours where employees make efforts to withdraw from the work role or from the job(90).

Hartt et al in their work “where the performance issues are and are not” (2016) confirmed earlier theories that the majority of performance problems (65%-74%) can be attributed to the organizational system or the environment; these involve factors that are under the authority, control and responsibility of management whiles about 35% or less depends on the individual worker(46). They break down the various equations used by Bichelmeyer et al 2006 in explaining human performance. The figure below is the equations used which has been broken down to their individual parts to explain performance.

Several studies have looked at the diversity and complexity of health worker performance and its impact on the overall health goals, analysing it from different perspectives(41)(42). Bawo et al(41), used the three gap model of quality of care to analyse performance of health workers. This model describes each health worker with competence (knowledge), capacity (equipment), and performance (effort). These issues are interrelated and may affect each other. The authors described the gaps as “know gap” (difference between targeted performance and competence), “know-do gap” (difference competence and capacity), and the “can-do gap” (difference between capacity and performance). These gaps must be addressed individually as per each worker as each worker’s performance may be affected by different gaps(41).

Koopmas et al(43) used the Heuristic framework of individual worker performance to describe work performance in four dimensions (1) Task performance; which uses indicators such as completing job task, work quality, work quantity, job skills, keeping knowledge up to date, decision making, etc. (2) contextual; with indicators as extra task, effort, initiative, attention to duty, resourcefulness, etc (3) Adaptive performance; generating new ideas, adjusting goals and plans to situation, learning new tasks and technologies, and cultures, etc. (4) Counter productive work behaviour; these includes off task behaviours, absenteeism, tardiness, doing task incorrectly, thefts, accidents, etc. These levels and indicators are used to analyse health worker performance(43).

ANNEX 5. THE MOH AND ITS RELATION WITH OTHER SECTORS



ANNEX 6: THE ORGANISATION OF THE HEALTH SERVICES IN GHANA.

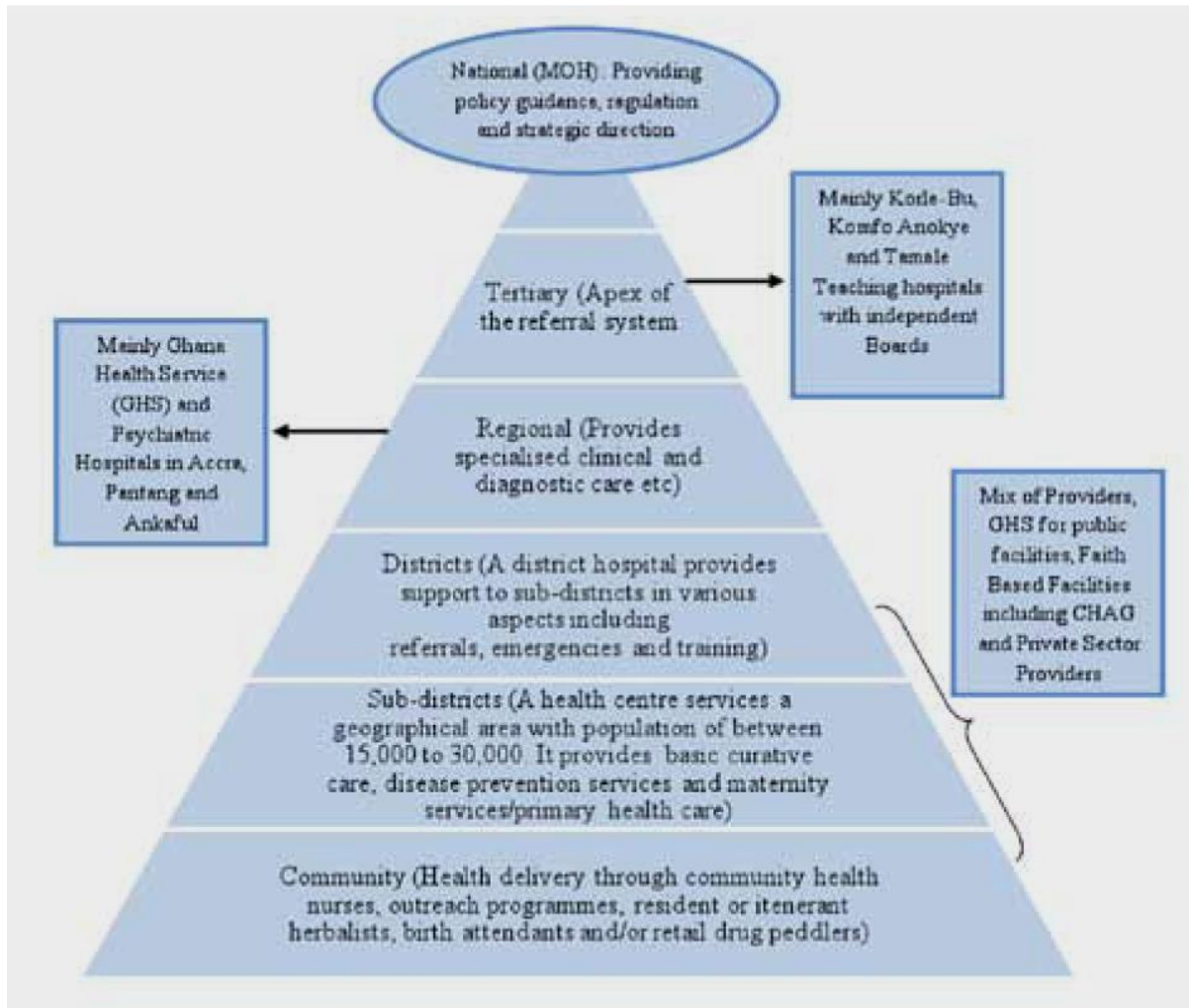


Fig 11: Organization of public health services in Ghana

Source: Adjei S et al, 2011 (17)

ANNEX 7: GHS PERFORMANCE APPRAISAL SYSTEM MAP

System Map 1: GHS Pilot Staff Performance Appraisal (SPA)

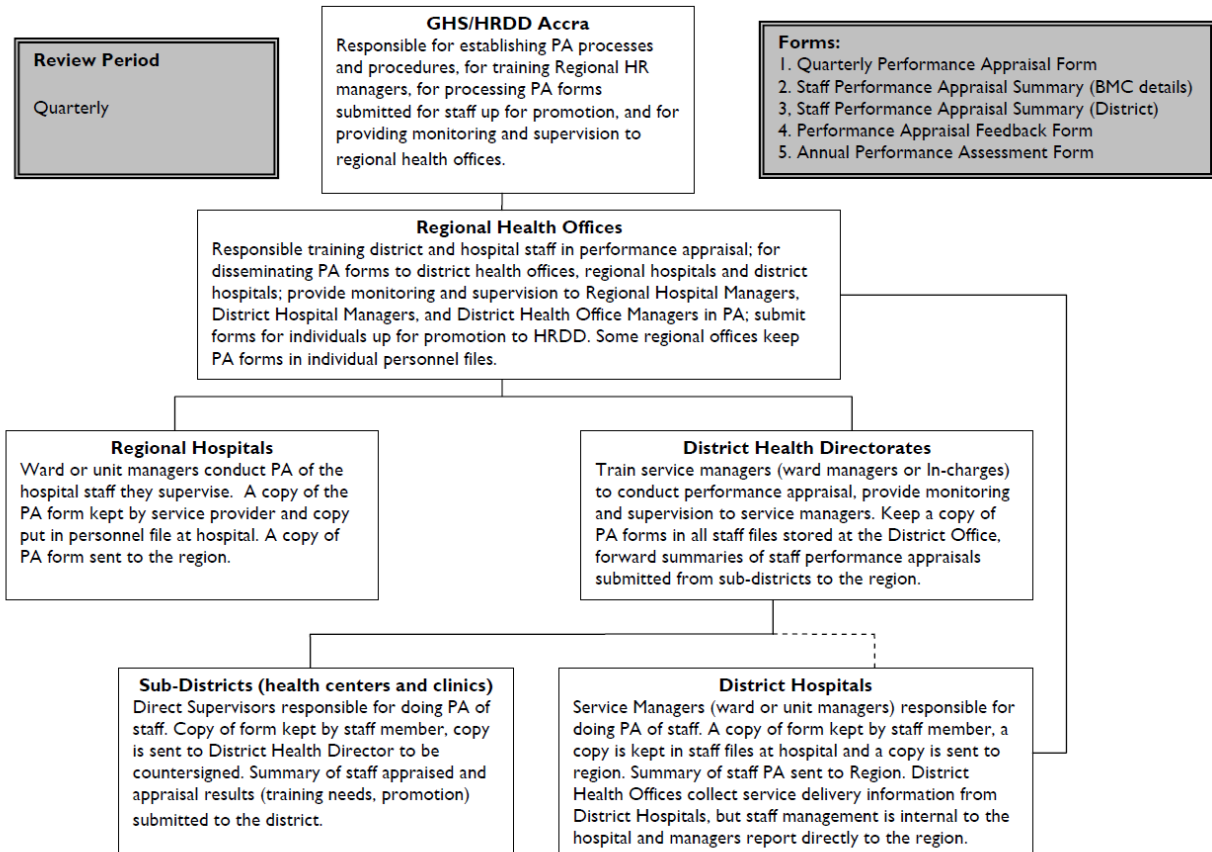


Figure 12

ANNEX 8: GHANA CIVIL SERVICE PERFORMANCE APPRAISAL SYSTEM PLOT

System Map 2: Civil Service Performance Appraisal System

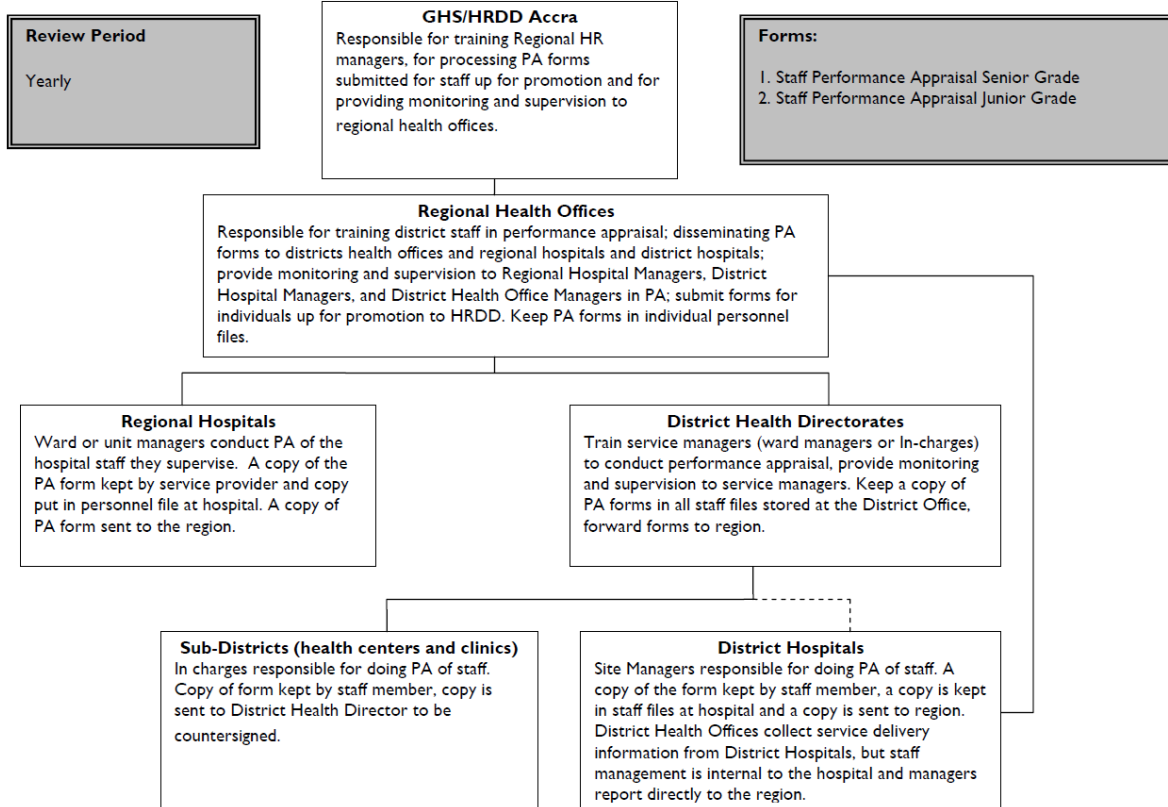


Figure 13