

APPRAISAL OF HEALTH WORKFORCE RETENTION IN RURAL AREAS OF AMURU DISTRICT, UGANDA

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Master of Business Administration (NGO Management)

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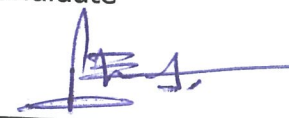
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"This thesis is my original work and has not been presented for a Degree or any other academic award in any University or Institution of Learning"

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LIST OF ACRONYMS

CAO	Chief Administrative Officer
DMO	District Medical Officer
DSC	District Service Commission
UGX	Uganda Shillings
HC II	Health centre level II
HC III	Health centre level III
HC IV	Health centre level IV
HCW	Health Care Workers
HIV/AIDS	Human Immune Virus / Acquired Immune Deficiency Syndrome
HSD	Health sub district
JMS	Joint Medical Stores
MDG	Millennium Development Goals
MoH	Ministry of Health
NGO	Non - governmental organization
NMS	National Medical Stores
NRH	National Referral Hospital
NUMAT	Northern Uganda Malaria Aids and Tuberculosis
OPD	Out Patient Department
PHC	Primary Health Care
PHP	Private Health Practitioners
PNFP	Private not-for-profit
RRH	Regional Referral Hospital
TCMP	Traditional and Complementary Medicine Practitioners

UCMB	Uganda Catholic Medical Bureau
UPMB	Uganda Protestant Medical Bureau
VHT	Village Health Teams
WB	World Bank
WHO	World Health Organization

ABSTRACT

The research findings noted that there is greater unmet health needs in rural and remote locations than in peri-urban areas of Amuru district. The study sought answers to the following research questions: - is there health workforce imbalances and deficit in rural areas of Amuru district; what factors compel health workers to come, to stay and leave in rural areas of Amuru district; and what specific health workforce retention strategies are in rural areas of Amuru district?

The qualitative descriptive study design was used so as to facilitate exploration of the issues in the study objective. The study used two primary methods of data collection- the questionnaires and interview guide for key informants at the management levels.

The overall health workers motivation is very poor and there is need for government to act as soon as possible. More than half of the health workers may leave if working conditions does not improve. Access to equipment, supplies, drugs, electricity and water are seriously unavailable. Other incentives should include training opportunities, study leave, housing, transport allowances and clear career structures.

The majority of the health facilities do not have the required minimum number of health workers. Health facilities in peri-urban areas have more number of health staffs.

It is recommended that the retention schemes are established, mobilize stakeholders, build local government management capacities, design financial incentives, and monitor demographic trends of health workforce in rural and remote areas.

CHAPTER ONE

THE PROBLEM AND ITS SCOPE

Background of the study

Many countries in middle-income and low-income today suffer from health workforce shortages and or uneven distribution of health personnel. This has been aggravated more recently by the disintegration of health systems in low-income countries and the global policy environment. One of the most damaging effects of severely weakened and under-resourced health systems is the difficulty they face in producing, recruiting and retaining health professional, particularly in remote areas. Low wages, poor working conditions, lack of supervision, lack of equipment and infrastructure, all contribute to the health flight of health care personnel from remote areas (Lehmann, Dieleman, & Martineau, 2008).

The health workforce, physical facilities and consumables are three major inputs into any health system (WHO, 2000; Homedes & Ugalde, 2004; Kabene, Orchard, Howard, Soriano, & Leduc, 2006). A growing body of evidence suggests that the quality of a health system depends greatly on highly motivated health workers who are satisfied with their jobs, and therefore stay at their stations and work (Kanfer, 1999; Awases, Nyoni, Gbary, & Chatora, 2003; Dieleman, Coung, Anh, & Martineau, 2003; Luoma, 2006). According to World Health Organization, (WHO) sub-Saharan Africa faces a great challenge in this respect, with low health worker to population ratios and poor health indicators (WHO, 2006).

The health worker crisis in the sub-Saharan region has numerous dimensions. There are inadequate numbers of workers, poorly distributed with an unplanned brain drain (regionally and internationally) (WHO, 2006a). Workers experience low salaries; poor, unsafe work environments; lack of defined career paths; and poor quality education and training. Public expenditure ceilings have led to hiring freezes. Various sources report the lack of a holistic approach to health worker issues at country level (Awases et al., 2003; WHO, 2006a).

It costs a lot to educate health workers and, for some countries in East and Southern Africa, training capacity simply does not exist. The time lag between education and practice, and between changes in student intake and changes in supply of a particular category of professionals, is quite long in the health sector (Hall, 1998; Zurn, Dal Poz, Stilwell, & Adams, 2002). Moreover, production without retention strategies leads to loss of staff, and erodes supervision, mentorship and support from the referral system (Kirigia, Gbary, Muthuri, Nyoni, & Seddoh, 2006).

Health worker retention and migration are very important topics to the Uganda Ministry of Health and others concerned with public health in developing countries. In 2004, the Joint Learning Initiative (JLI) published a report estimating that one million additional workers are needed in sub-Saharan Africa alone- nearly triple the number currently working in the region (JLI, 2004).

According to the World Health Organisation, 36 of the 57 countries that are suffering from serious shortages of health workers are in sub-Saharan Africa, and more than four million additional doctors, nurses, midwives, managers, and public health workers are needed to fill in the gap. Countries with the highest relative need have the lowest number of health workers. The Africa region suffers from more than 24 percent of the global burden of health, but has access to only 3 percent of the world's health workers (WHO, 2006). In contrast to the WHO's recommendation of at least one doctor per 5,000 people, ten African countries average one doctor per 30,000 or more people (Schrecker & Labonte, 2004). And, these statistics mask the rural and urban divide, as doctors congregate in urban areas leaving the rural areas even more underserved (WHO, 2001).

At the same time as low-income countries are struggling to train new health workers to fill the workforce gap in sub-Saharan Africa, countries are also struggling to retain the workers that they have already trained. Migration of health workers is often stepwise. Workers first migrate from rural areas to urban areas then out of the country (WHO, 2006). In August of 2006, the Centre for Global Development published a database representing the first systematic effort to collect information on the bilateral net flows of African-born physicians and nurses to nine important destination countries. According to this "brain drain" database, Uganda is 22nd on the list with 45 percent of its doctors working abroad (Clemens & Pettersson, 2006).

In Uganda, health users consider medicine availability to be a key determinant of quality in health services (Ministry of Finance and Economic Planning, 2002). Access to affordable medicines is included amongst the health-related Millennium Development Goals. Medicines are major health expense for poor household in most developing countries where 50-90 percent of medicines are paid for by the patients themselves, while in many developed countries, 70 percent of medicines are publicly funded through reimbursement plans and other mechanisms (Quick, Hogerzeil, Velasquez, & Rago, 2002). The Uganda National Health Policy, 1999 delegated operational responsibility for delivery of the minimum package from the district to the Health Sub District. The national standard was to have the following structures in place and functional at district level (Figure 1.1). In this structure we have:-

- i) District Health Services (District level, 500,000 population)
- ii) Health Sub-District
 - General Hospital/Health Centre IV (County level - 100,000 pop.)
 - Health Centre III (Sub-country level - 20,000 population)
 - Health Centre II (Parish Level – 5,000 population)
 - Health Centre I (Village Health Team - 1,000 population)

The functions and responsibilities of each level of the delivery system were defined with minimum service standards and staffing levels set for each tier of service delivery.

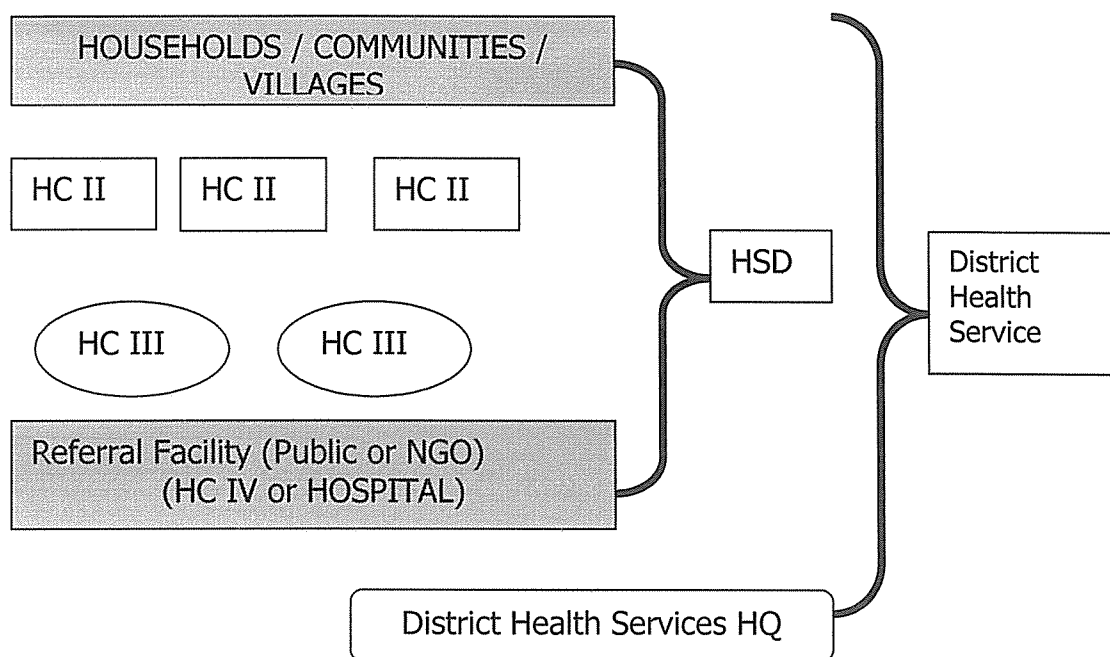


Figure 1.1: The District Health System in Uganda

At the Health Sub District the management team is expected to provide overall management of the health units and community level health activities under its jurisdiction.

Statement of the problem

The global shortage of health workers is huge and this has affected the minimum level of health outcomes in rural and remote areas. In Uganda, geographical access to health care is limited to about half of the population, i.e. population living within five kilometers of a health service unit. Rural communities are particularly affected, mainly because health facilities are mostly located in towns and along main roads. It has also

been recognized that, there are marked variations in access to health care both within and between districts, and even among these health facilities, many do not provide the full range of essential primary health care services.

World Health Organization has recently launched a program to support countries to increase access to health workers in remote and rural areas through improved retention. The program consists of three strategic pillars: building the evidence base, supporting countries to implement and evaluate effective strategies, and producing evidence-based recommendations to improve retention of health workers in remote and rural areas. In this context, researchers are invited to submit articles as a contribution to a special theme issue that will explore the challenges of health worker retention in remote and rural areas. Based on this call, this research is designed towards contributing to the body of knowledge through appraisal of health workforce retention in rural areas of Amuru district in Uganda.

Purpose of the study

The purpose of the study was to determine the health workforce availability and retention in rural and remote areas of Amuru District.

General objectives

To contribute to the body of knowledge on the increased access of health workforce in rural and remote areas through improved retention strategies.

Demographic objectives

To understand factors that contributes towards health workforce retention in rural areas of Amuru district of Uganda

Research objectives

This study was guided by the following objectives:-

- 1- To identify health workforce imbalances and deficits in rural areas of Amuru district.
- 2- To determine factors that decide health workers to come to, stay in and leave in rural areas of Amuru district.
- 3- To determine specific health workforce retention strategies in rural and remote areas of Amuru district.

Research questions

The study sought answers to the following research questions:-

- 1- Is there health workforce imbalances and deficit in rural areas of Amuru district?
- 2- What factors compel health workers to come to, stay and leave in rural areas of Amuru district?
- 3- What specific health workforce retention strategies are in rural areas of Amuru district?

Research hypothesis

The study hypothesis derived from the research questions that were tested are:-

- 1- There are no differences in the health workforce availability in rural and urban areas of Amuru district.
- 2- There are no health workforce recruitment, retention and attrition in rural areas of Amuru district.
- 3- There are no health workforce retention strategies in Amuru district.

Scope

Geographic scope: Amuru District is bordered by Adjumani District to the north, Southern Sudan and Lamwo District to the northeast, Gulu District to the east, Nwoya District to the south, Nebbi District to the southwest and Arua District to the west. The administrative headquarters of the district at Amuru, are located approximately 60 kilometres, by road, west of Gulu town. The coordinates of the district are: 02 49N, 31 57E. The following four sub counties of Pabbo, Lamogi, Atiak, and Amuru were covered during the study. The district is predominantly a rural district, lacking any tarmac road, despite its size. The district population is growing at an estimated annual rate of 3.5%. It is estimated that the population of the district in 2010 is approximately 234,100.

Content scope: The content of the study looked at the type of health facilities and who operates them; work status, conditions and qualifications of the workers; secondary employment records of the workers; occupational mobility and socio demographic characteristics. Issues on health infrastructure standards and gaps were considered during the study. The human resources levels or number of staffing,

motivation, accommodation, drugs and medical supplies were also addressed during the study.

Significance of the study

Ministry of health

To the Ministry of Health, the study findings has helped the government to come up with strategies to address those issues related to health workforce retention in remote area of Amuru district and other districts in Uganda

District local government

To the district local government, the study findings has provided a platform for advocacy and streamlining health services deliveries in the remote and hard to reach areas of Amuru district and other districts in the same category can learn from the results of the findings.

Civil society organization and Non- governmental organization

To the Civil Society organizations and Non-governmental Organizations, the findings provided a platform for advocacy towards providing and strengthening health workforce retention in rural areas of Amuru District where needs is greatest.

Researchers

To the researcher, the study findings provided information, knowledge and identified gaps that needed further research in similar rural setting such as in Amuru district

Operational definition of key terms

Appraisal of health workers: - Reviewing health manpower development as a tool of improving national health systems. A proper appraisal of human resource for health needs to be carried out to guide planning, policy, and management. Most appraisals include an assessment of the current workforce and future requirements, including the aims of quality, equity, and efficiency. And to ensure sustainable solutions, human resource policymaking and systems should be analyzed. A broader understanding of organizational goals, and strengths and weaknesses in areas other than staffing will assist with the development of appropriate and feasible human resource solutions. In addition, an analysis of the policy environment covering stakeholders, opportunities, and threats is needed. The appraisal should identify whether the wider oversight system ensures that human resources are addressed adequately in the health sector.

Workforce: - The workers employed in a specific project or activity. All the people working or available to work, as in a nation, company, industry, or on a project forms the force of workers- hence workforce.

Retention strategy. - Any employee retention strategy would necessarily include a plan for redressing employee grievances and ways and means to address employee issues. This would mean that the employees would be enabled to take their issues regarding pay, their work, their role etc. to their supervisors and expect to get a fair hearing in the process. An effective retention strategy would focus on preventing as well as addressing grievances.

Rural Areas:-Rural areas are areas that are not urbanized, though when large areas are described country towns and smaller cities will be included. They have a low population density, and typically much of the land is devoted to agriculture.

Imbalances: - There are various approaches to defining imbalances. From an economic perspective, a skill imbalance (shortage/ surplus) occurs when the quantity of a given skill supplied by the workforce and the quantity demanded by employers diverge at the existing market conditions. Labour market supplies and demands for occupational skills fluctuate continuously, so at times there will be imbalances in the labour market. In other words, a shortage/ surplus are the result of disequilibrium between the demand and supply for labour. In contrast, non-economic definitions are usually normative, i.e. there is a shortage of labour relative to defined norms. In the case of health personnel, these definitions are based either on a value judgment – for instance, how much care people should receive – or on a professional determination – such as deciding on what are the appropriate numbers of physicians for the general population.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

Concepts, ideas, opinions from authors / experts

Zurn, Mario, Dal, Barbara, and Orvill, 2004, noted that health workers retention in general covers two main aspects:- the extent of the problem.- that is descriptive studies highlighting the extent of imbalances and deficits in health personnel in rural and remote area; analysis of factors influencing decisions and choices of health workers to come to, stay in or leave remote and rural areas.; retention interventions, either proposed and or evaluated- description of potential or propose interventions, which could be designed in a specific context, given the factor analysis, but which were never implemented; and evaluation of specific retention strategies (Zurn et al, 2004). Then they developed a conceptual framework to explain the demand for and supply of health labour. Also included in the framework is the health care system, and in particular, some of its features that are likely to have impact on health workforce imbalances. Policies constitute another crucial element of the framework. The framework also incorporates financial, physical and knowledge resources that contribute to model the health workforce. Finally, "global" factors such as economic, socio demographic, political, geographical and cultural factors are included. These elements contribute directly or indirectly to shaping and transforming the entire society and hence the health workforce (Zurn et al, 2004).

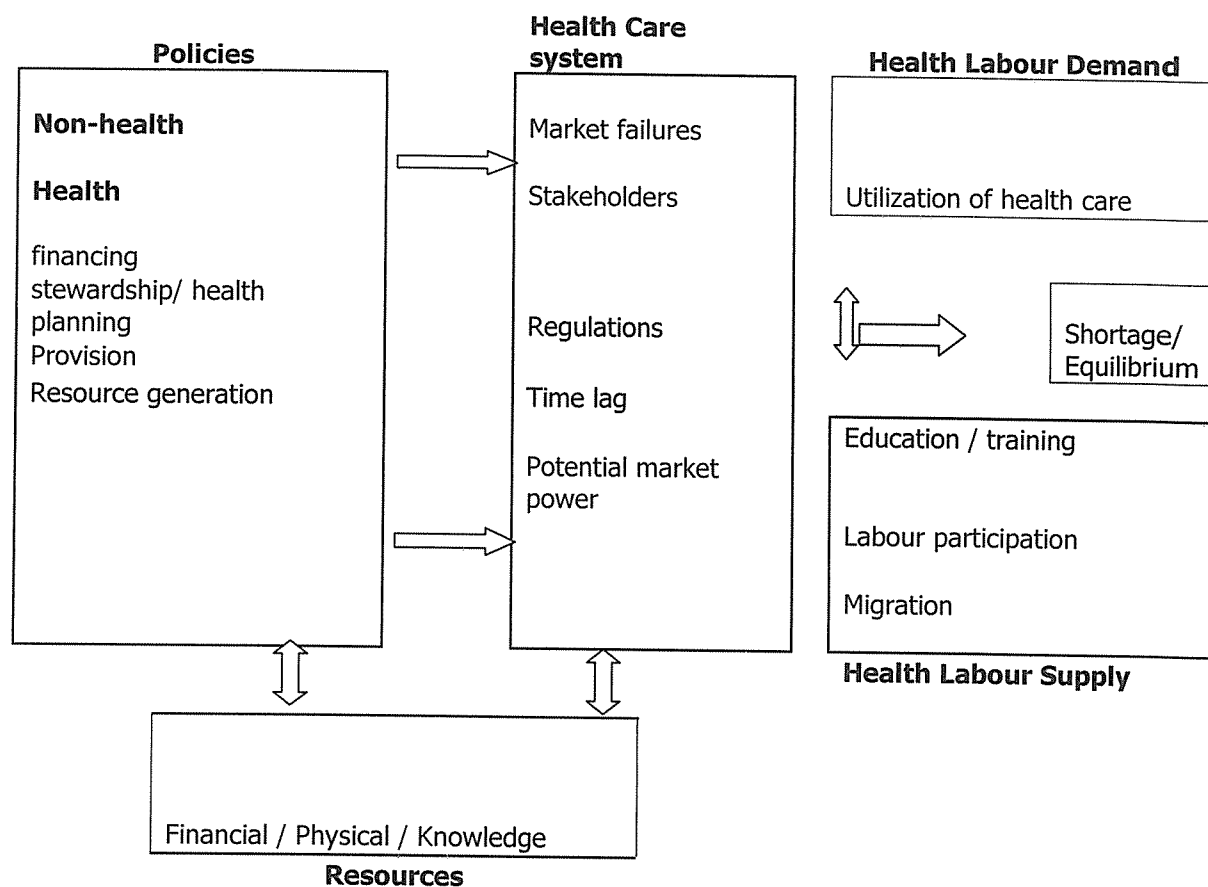


Figure 2.1: Conceptual framework (Zurn et al, 2004)

As the conceptual framework (Figure 2.1) displays, a shortage in the health labor pool is not caused by a single event, but instead impacted by multiple inter-related factors. Health policy, financial, physical, and knowledge resources, and the health system itself all interact with the supply and demand of health workers to create a shortage, equilibrium, or oversupply of health labor. All of these factors are also strongly influenced by these broad socio-demographic, economic, cultural, and geographical forces at work in the region of interest.

Health sector reforms are also believed to contribute to the health crisis in sub-Saharan Africa. Structural adjustment programs of the 1980's and 1990's forced reductions in public expenditures and affected essential public health services through the quest for efficiency, greater involvement of the private sector, and decentralization (Sanders, Todd, & Chopra, 2005).

The Uganda National Health System comprises all the institutions, structures and actors whose actions have the primary purpose of achieving and sustaining good health. The boundaries of Uganda's National Health System encompass the public sector including the health services of the army, police and prisons; the private health delivery system comprising of the private not-for-profit organizations (PNFP), private health practitioners (PHP), the traditional and complementary medicine practitioners (TCMP); and the communities.

Uganda's government health system consists of the district health system {Village Health Teams, (VHT), Health Centre II, III and IV and District General Hospitals} and Regional Referral Hospital (RRH) and National Referral Hospitals (NRH), which are self accounting and autonomous institutions, respectively. District health services are managed by the ministry of local government. The district health system is further divided into Health Sub-Districts (HSDs).

According to Amuru District Development Plan, 2006, the Doctor to population ratio is 1:150,000 compared to national ratio of 1:18,600

meanwhile the Nurse and Midwife to population ratio is 1:2,677 compared to national ratio of 1:2,870. accessibility to the nearest health facility is 60% of which 40% of these facilities have been abandoned or closed due to insecurity; 1 health centre IV is fully operational and 5 HC III all are operational and 19 health centre II of which 8 are non operational (Amuru DDP, 2006).

In Amuru district in particular, the health workforce retention and distribution has reached alarming state. According to Amuru District Development Plan (Amuru DDP, 2006), the district has only one medical doctor for a total population of 154,000 persons. There are a total of 25 health facilities (1 HC IV; 5 HC III; 19 HC II- of which 8 are closed due to lack of health workforce). (Amuru DDP, 2006).

Theoretical perspectives

There are many different theories and models coming from different fields which explain the factors impacting on workforce availability and mobility. Some of these, such as the Neoclassic Wage Theory, suggest that the choice is driven largely by financial motives and by the probability of finding employment (Boyle & Halfacree, 1998). Behavioral theories, such as those developed by Maslow and Herzberg, show a more complex decision-making process regarding the movement of labour with a particular emphasis on the importance of job satisfaction.

Given the importance of behavioral theories, it is critical to have a very good understanding of these factors. Often, however, understanding them

requires careful research methods, as these factors are related to human behavior and individual preferences, which are difficult to quantify. Various methods have been proposed to identify the factors related to choices of location, from more traditional semi-structured interviews or focus groups, to more recent methods such as the discrete choice experiment. The latter method is approached by which choices are presented to health workers, and they are asked to choose between two possible scenarios until a set of factors is identified that fully explain the decisions to remain in rural or remote areas (Chomitz, Setiadia, & Azwar, 1998; Mangham & Hanson, 2007; Mangham, Hanson & McPake, 2008). The complexity of these factors makes their categorization difficult, but they are generally discussed as individual, organizational or broader environmental factors. They do not influence health workers' choices and decisions for location or practice in an isolated manner, but rather interact and influence each other. Generally discussed as individual, organizational and larger environmental factors, they need to be well identified so that appropriate response can be designed. Therefore, the research methodologies used to elicit these factors needs to be harmonized and their pertinence improved.

In the recent literature of health workforce mobility relating both to international and internal migration, factors have commonly been categories into "Pull" and "Push" factors. "Pull" factors are identified as those which attract an individual to a new destination. These might include improved employment opportunities and or career prospects, higher income, better living conditions or a more stimulating environment.

"Push" factors are those which act to repel the individual from a location. They often mirrored "pull" factors and might include loss of employment opportunity, low wages, poor living conditions, etc. (Boyle & Halfacree, 1998).

Rolfe, Leshabari, Rutta, and Murray 2008, observed a trend amongst nursing officers and midwives to switch to self-employment as they approached or entered retirement. Reported push factors centered without exception, around financial insecurity, inadequacy of pensions and fear of a decline into poverty. A stable income, flexible working arrangements and a sense of autonomy were all identified as 'pull factors' (Rolfe, Leshabari, Rutta, & Murray, 2008).

The United Nations itself recognizes the difficulty of defining urban and rural areas globally, stating that, "because of national differences in the characteristics that distinguish urban from rural areas, the distinction between urban and rural population is not amenable to a single definition that would be applicable to all countries". Rural areas are usually defined as "what is not urban" (United Nations Population Division, page 4. 2004), and so inconsistencies in the definition of what is urban lead to inconsistencies in characterizing what is rural.

Each country has its own definition for these terms, taking into account in most cases two main elements: the settlement profile (population density, availability of economic structures) and the accessibility from an urban area (distance in kilometers or hour's drive).

Because of difficulties in agreeing on a single definition, for the purpose of this research paper, the following definitions are proposed: Rural areas are considered to be those areas which are not urban in nature. An 'urban agglomeration' refers to the de facto population contained within the contours of a contiguous territory inhabited at urban density levels without regard to administered boundaries (United Nations Population Division, 2008). This paper however focuses on research conducted mainly in rural areas, with less emphasis on areas in peri-urban or Internally Displaced Peoples (IDP) camps.

The World Health Report 2006: working together for health sounded the alarm that, without sufficient numbers of adequately trained and supported health workers, there is a significant risk of not attaining the health related Millennium Development Goals (MDGs) (WHO, 2006).

Country evaluations of disease-oriented programmes have found that the lack of appropriately trained and motivated health workers is one of the major bottlenecks in implementing evidence-based health interventions to improve maternal and child health, and to address HIV/AIDS, malaria and tuberculosis. The absence of well educated and properly managed health workers was also identified as one of the health systems constraints to achieve the MDGs, along with poor infrastructure, drugs and supply systems, and information systems (Travis et al., 2004).

The Millennium Development Goals Report, 2007, indicates that at the midpoint between the adoption of the MDGs and the 2015 target date, the record of achievement is mixed, in spite of important progress in mobilizing financial resources. As a result, more attention is now being paid to factors that constrain progress. These include the "chronic shortage of well trained health workers worldwide", as noted above, both in terms of numbers of clinical and non-clinical health workers and the necessary administrative and logistics staff (Kober & Van Damme, 2004). Calls for augmenting the number of human resources for health are more often made in relation to the implementation of specific disease programmes. As the recently created Global Health Workforce Alliance (2006) puts it,

...the health workforce crisis is severely hampering the ability of additional financial resources – made available through new modalities, such as debt alleviation or the Global Fund to Fight AIDS, Tuberculosis and Malaria, GAVI, PEPFAR etc – to attain their goals. In many countries, there is simply insufficient human capacity to absorb, deploy and use efficiently the new money offered by global health initiatives (GHWa, 2006, p. 5).

Related studies

Imbalances and retention of health workforce

The geographical distribution of health personnel refers to their spatial allocation. It is said to be imbalanced when a norm is applied, such as population to personnel ratio, or more sophisticated needs-related indicators. Geographical distribution also determines which services, and

in what quality and quantity, will be available. Imbalances raise problems of equity (services not being available according to needs), of efficiency (surpluses / shortages) and of effectiveness of services, let alone of satisfaction of users. The health-related MDGs cannot be achieved if vulnerable populations do not have access to skilled personnel and to other necessary inputs. A perfect balance is probably utopian, but it is conceivable to achieve a better distribution through strategies based on good understanding of its dynamics.

Cohen and Zaidi, 2002, noted various approaches to defining imbalances (Cohen & Zaidi, 2002). Roy, Henson and Lavoie, 1996, noted an economic perspective, where by skill imbalance (shortage /surplus) occurs when the quantity of a given skill supplied by the workforce and the quantity demanded by employers diverge at the existing market conditions (Roy, Henson & Lavoie, 1996).

Unbalanced distribution of health personnel between and within countries is a worldwide, longstanding and serious problem. All countries, rich and poor, report a higher proportion of health personnel in urban and wealthier areas. In Nicaragua, around 50% of the health personnel are concentrated in the capital, Managua, which comprises only one-fifth of the country's population (Nigenda & Machado, 2000). In Mexico, it is estimated that 15% of all physicians are unemployed, underemployed or inactive. Yet despite this apparent surplus, rural posts remain unfilled (WHO, 2000). Indonesia's vast size and difficult terrain present an enormous obstacle for the delivery of health services and for a balanced

distribution of health personnel. Doctors and nurses are reluctant to relocate to remote islands and forest locations that offer poor communications with the rest of the country and few amenities for health professional and their families (Chomitz et al., 1998). The imbalanced distribution of health personnel can contribute to great disparities in health outcomes between the rural and urban population.

Institutional imbalances occur when some health care facilities have too many staff because of prestige, working conditions, ability to generate additional income, or other situation-specific factors, while others are understaffed (De Geyndt, 1999). Institutions such as magnet hospitals, for example, are hospitals characterized by adequate to excellent staffing, low turnover, rich nursing skill mix and greater job satisfaction, among other factors, even in the face of a general health personnel shortage (Gleason, Sochalski & Aiken, 1999). Imbalance in the health workforce is a major challenge for health policy-makers, since human resources- the different kinds of clinical and non-clinical staff that make each individual and public health intervention happen- are the most important of the health system's inputs (WHO, 2000). It remains a major concern to this day, reported in both developed and developing countries and for most of the health care professions.

Choices of health workers to come, to stay and leave in remote areas

A study conducted among rural health worker in Viet Nam identified motivating and discouraging factors for health worker performance, which

encompassed both financial and non-financial incentives. Motivating factors include appreciation by managers and the community, income and job stability, while discouraging factors were mostly related to low salaries and difficult working conditions. These studies suggest that policies oriented at promoting worker motivation need to be aligned with individual, organization and reform goals (Dieleman et al., 2003).

Health workforce retention strategies in rural areas

Health workers have always tended to move in search of better living and working conditions, improved salaries and opportunities for professional development, be it within their own country, from rural to urban areas, or from public to private sector, or from one country to another (Awases et al., 2003).

Much is known already about the factors that influence health workers' choices of location and their decisions to go to, stay in or leave these areas. However, there is very little evidence on specific operational solutions and recommendations that countries can adapt to their specific context in responding to this challenge; in particular evidence is lacking on the design, implementation and evaluation of these strategies (Dolea et al., 2009).

Mathauer and Imhoff (2006) discussed the role of non-financial incentives in the retention of human resources. These include the involvement of health staff in running health services and in management decisions (Mathauer & Imhoff, 2006). The 'treat, train, retain' initiative that WHO

launched in 2006 recommends including a package of HIV treatment, prevention, care and support services, as well as occupational health and safety measures, as incentives for health workers in high-risk environments. An example of such an environment is Malawi, where the increase in health worker illness is high and the number of nurse deaths represents 40% of the average annual output of nurses from training (Kober & Van Damme, 2004).

Healthcare workers (HCWs) in the sixteen countries in east and southern Africa (ESA): Angola, Botswana, DRC, Kenya, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, South Africa, Swaziland, Tanzania, Uganda, Zambia and Zimbabwe offered a variety of non-financial incentives: Typical training and career path-related incentives include continuing professional development, opportunities for higher training, scholarships/bursaries and bonding agreements, and research opportunities (Dambisya, 2007).

Like any other category of worker, health service providers are sensitive to incentives. Decisions such as whether to seek employment in the health sector or not, stay in the country or migrate, or work in an urban or rural setting, are influenced by perceived differentials between the options before them (Vujicic & Zurn, 2006). Important lessons could be learned from voluntary associations – particularly church-run health facilities – regarding the retention of staff over the long term. When compared to the public sector, the Christian Health Association of Malawi (CHAM) has had considerable success in retaining its staff. This has been linked to the

strategic use of non-monetary incentives such as frequent training, housing and better working conditions (Wyss, Prytherch, Merkle, Weiss, & Vogel, 2006).

Egger and Adams, 1998, identified key determinants of successful strategies include: length of time on the national priority agenda, long-term political commitment, and integration of efforts with those of other sectors such as education and civil service and ability to reconcile different expectations from varied stakeholders. The importance of involving the key actors in the policy formulation and implementation process stands out as a crucial element in the success of a policy (Egger & Adams, 1998).

CHAPTER THREE

METHODOLOGY

Research design

This qualitative study explores retention of health workers working in rural health facilities in Amuru District. A qualitative descriptive study design was chosen because it is a low inference method. Information is analyzed and interpreted in simple language to facilitate straightforward answers to health workforce retention in the study area. The study design was approved by the Institute of Distance Learning / Faculty of Business Management of Kampala International University.

Research population

The total numbers of health workers were 102 – that comprise both clinical and non-clinical workforce in the nine health facilities of Amuru district.

Sample size

The study of 127 samples was drawn from 152 population that was randomly selected health workers from across all the randomly and purposeful selected health facilities in government aided health units of Amuru district. All the health facilities in Amuru district are located in small trading centers, former IDPs, rural or remote areas. Random and purposeful sample selection was done based on ease of access, functionality and presence of staffs at the time of the survey.

To determine the sample size, a statistical formula for sampling from small population by Evans Morris was used.

$$n = \frac{Nz^2pq}{[E^2(N-1) + z^2pq]}$$

Where

- n is the required sample size
- N is the population size
- p and q are the population proportions.
- z is the value that specifies the level of confidence and for this survey was 90%, in which case z is set to be 1.645.

Sampling procedures

Study participants were identified through purposive sampling and based on their availability at the health unit during the time of the study. All clinical and non-clinical health staffs currently employed in the 9 randomly selected health units were eligible to participate. A purposeful sampling was done that focuses on: District Health Officer, the in-charge of health centers IV, III and III; randomly selected nursing staffs, clinical officers, and health assistants from the health facilities. Amuru district has one health centre four, five health centre III, and 19 health centre II managed by both government and private organizations.

Research instruments

The study used two primary methods for collecting data.

Questionnaire: The questionnaire was a modified assessment tool of human resources for health care providers accessible from World Health Organization website that was developed by Dr Alexandre Goubarev and Dr Mario Dal Poz. The questionnaires were self administered by health

staffs in the selected health units. The questionnaire for individual health professionals had four sections attached in Appendix I which has the following sections: - section one (101- 105) covers the socio demographic characteristics; section two (201- 221) covers work status, condition and qualification; the third section (301-309) covers secondary employment; and fourth section (401-411) covers occupational mobility. The questionnaires were designed in a simple way that gave the respondent ease to fill in by themselves. Majority of the questions in the questionnaires are close ended. This means the researcher identified and listed the most likely responses to the questions. For most parts, the interviewer or respondent has to check or circle the choice among the answers listed. There are few open-ended questions at the end of the questionnaire. For these questions interviewers or respondents filled down the answers by writing in the space provided.

Interview guide: An interview guide for key respondents was developed that covers areas on how government, stakeholders and community can improve on and ensuring health workforce are attracted and retained in rural and remote areas. A follow up questions were sent to the key informant who is the District Health Officer of Amuru district through an email. Further clarifications were done thereafter through email.

Validity and reliability of the instrument

Data gathering techniques were used and data measured what it was intended to measure and accurately. Some common errors at the data-gathering stage were minimized so not to hamper interpretation of the findings. The following were taken care of during the data collection

exercise. The sampling population was representative of the population under study- not too small and unrepresentative of the study. The data-gathering instrument from World Health Organisation was adopted and reviewed to make sure information from biased sources were not collected. All the important aspects of the research were tackled and enough information was gathered to help in the interpretation of the study findings.

Data gathering procedures

A proposal outlining the purpose of the study, the research questions, the data collection methods, and the write up of the study was submitted and approved.

The researcher was assigned a supervisor to help in the entire process of the study. Correction and in-depth proposal write up was further done and finally approval to conduct the data collection was granted. A letter of introduction from the Institute of Distance Learning to the District Health Officer of Amuru district (Appendix I) was given to the researcher. The Amuru DHO was met and he provided the names of all the health centres in the district noting those which are far, non-functional and grades / levels. From these lists presented, it was agreed that data be collected from the following health facilities: - Attiak Health centre IV, Pabbo, Amuru, Bibia and Kalidima health centre III. The following health centre IIs were selected: - Pawel, Parabongo, Awei, Jenggari, Otong, Guruguru, Olwal, Labongogali, and Okunggedi.

During the first day of data collection from the field, the researcher visited Pawel Health centre II, Attiak Health centre IV, Bibia health centre III,

Bira health centre II and Pogo health centre II. The mobile telephone contacts of all the in-charges of the health units were noted and the researcher promised to call back before coming to the health centre to pick the filled in questionnaires.

The other health centres were Guruguru health centre II, Kalidima health centre III, Olwal health centre II, Labongogali health centre II, Awei health centre II, Amuru health centre III and Pabbo health centre III.

Data analysis

Data entry for both quantitative data (questionnaires) and qualitative data (key informant) was entered in a computer spreadsheet in order to prepare for data analysis and report writing. Data entry of a single questionnaire took about 15 minutes depending on the typing skills and ease of reading the written response by the respondent. For the quantitative data entry, the researcher used a free data entry to enter the data from the questionnaires to the SPSS software. The purpose of using SPSS software was to make data entry and management easier. In all, the process of entering data into the computer took three days. Basic statistical procedures such as frequencies cross tabulation and mean were used for the data analysis. The data analysis was based on the information obtained and scores awarded responding to the number of frequency to each outstanding issue. Based on the scores, the information was tabulated, depending on the best approach to be used to depict the real issues at hand. Descriptive statistics were used to analyzed and explain through presented tables from questionnaire responses. This was analyzed and presented as texts together with the quantitative data.

Ethical considerations

The researcher took reasonable steps to ensure the competence of the work and to protect patients, health workers, research participants and others from harm. The design, conduct, and research report presented is in accordance with recognized standards of scientific competence and ethical research. In the planning of this research, efforts were put to minimize the possibility of misleading results. Ethical approval for the whole study was provided by Kampala International University, Kampala, and the Amuru District Local Government through the office of Amuru District Health Office. Supervision and quality control was provided by the researcher during the study. The participants were assured that their names will not appear in the final report of the study.

Limitations of the study

The research had the following limitations right from the design stage through to data collection and steps taken to address those limitations. One month to data collection time, Amuru district was split to create Nwoya district out of it. This affected the initial population sample presented in the research proposal. The assessed health facilities were government health units against the initial design of all the health facilities in the district. Getting health workers before 10:00 am and after 3:00 pm was quite difficult, so the researcher had to go and wait at the health facilities to get the administrators of the units. As with rapid qualitative study, not all relevant documents were accessed but efforts were made to use the available resources to input into the report. The transferability of the study findings is limited by the unique geographic setting and the

characteristics of the participants. Rural and urban areas of Amuru district are not easy to differentiate as with other parts of the region. Therefore, the study does not provide hard evidential data but used the sample health units selected to provide a "snapshot" of the situation in Amuru district of Uganda.

CHAPTER FOUR

PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

Demographic characteristics of the respondents

The demographic characteristics deals with the ages of the respondents, proportion of the participants in the study sample, operational health facilities visited and total number of health workers in the studied health units.

The Table 4.1 shows the number of respondents who participated during the study. There were 127 respondents of which 73 (57%) were males and 54 (43%) were females drawn from the nine health facilities under the study.

Table 4.1: Proportion of the respondents by gender

Sex	Numbers of respondents
Male	73
Female	54
<i>Total</i>	<i>127</i>

Source: Field data, July 2010

The Table 4.2 shows the proportion of respondent's qualification. The bar graph shows the highest level of education reached to practice as health care provider of each three categories. Majority (86%) of the respondents is certificate holders, 11% are diploma holders, and meanwhile 4% does not hold any qualification.

In Amuru district, Nursing Assistants constitutes majority of the health workforce and they do hold positions in health centres II- with management responsibilities. Majority of these health care providers have been in their jobs for an average of less than six years. They have worked on an average of three years in the current health facilities and about half have been working in the same rural district before coming to the current health facility. There were no significant differences among health care worker profiles in remote and rural areas compared to those working in peri-urban areas of Amuru district.

Table 4.2: Qualification of the respondents

Qualification	Number	Percent
Certificate	109	85.8
Diploma	14	11.0
None	4	3.2

Source: Field data, July 2010

The Table 4.3 shows the proportion of different grades and functional health facility that were sampled and visited during the study. There was only one health centre IV (100%), four fifths of health centre III (80%) and 55% of health centre II that were visited during the study.

Table 4.3: Operational health facilities visited in Amuru district

Grade/ Level	Visited	Operational	Percent	Comments
Health centre IV	1	1	100%	The highest level in the district
Health centre III	4	5	80%	Other 1 are NGO health units
Health centre II	6	11	55%	8 others non operational

Source: Field data, July 2010

Research question 1: Is there health workforce imbalances and deficit in rural areas of Amuru district?

Uganda does not adequately account for unique demographic features and health issues which vary according to remoteness from major towns or cities. Addressing rural and remote health workforce shortages in Uganda should begin with the development of a well-researched national rural and remote health strategy. Another example would be gender imbalances, which influence the geographical distribution because women tend to avoid rural and remote areas. As shown in Table 4.4, there were more females in the same level of health facility in peri-urban health units than those in rural and remote areas. There were fewer women in Bira health centre II, Pawel health centre II, and Labongogali health centre II compared to Awei health centre II that is considered to be in peri-urban setting.

Table 4.4: Staffing in the health facilities studied

Health unit	Grade	Male	Female	Total
Attiak	IV	16	8	24
Pabbo	III	9	14	23
Amuru	III	14	18	32
Kalidima	III	11	6	17
Bibia	III	8	10	18
Guruguru	II	3	2	5
Olwal	II	3	2	5
Bira	II	2	2	4
Pawel	II	3	3	6
Labongogali	II	5	3	8
Awei	II	3	7	10
Total		69	83	152

Source: Field data; July 2010

The Table 4.5 gives the proportion of the occupation of the respondents in the study. When the respondents were asked their occupation at the current health units, majority (71.6%) reported they are nursing assistants, far less (6.2%) are clinical officers and registered nurse with the same scores each. Meanwhile, the enrolled nurse, laboratory assistant, health assistants, and orthopedic clinical officer each had 4% of the respondents.

Further analysis tells you that the majority is lower level of workers as clinical officers are not willing to go, work and stay in rural areas of Amuru. These lower cadres in most health facilities are the ones managing – providing administrative as well as services delivery to

patients. Ideally, HCII has to be managed by enrolled, comprehensive or midwife but not nursing assistant as the case in Amuru district.

Table 4.6: Proportion and occupation of the respondents

Occupation	Frequency	Percentage
Nursing Assistant	91	71.6
Enrolled Nurse	5	4
Health assistant	5	4
Registered nurse	8	6.2
Laboratory assistant	5	4
Clinical officer	8	6.2
Orthopedic clinical officer	5	4
Total	127	100

Source: Field data; July 2010

The Table 4.6 shows the comparison of staffs in the health facilities of the same grade of health centre II. Awei health centre II has the highest number of staffs compared to the other health facilities of the same grade. The least number of staffs are seen in Bira health centre II, meanwhile Pawel, Olwal and Guruguru health centre IIs had about the same number of staffs – four staffs. These staffs include the clinical and non-clinical staffs / guard / cleaner.

Unbalanced distribution of health personnel between and within countries is a worldwide, longstanding and serious problem. All countries, rich and poor, report a higher proportion of health personnel in urban and wealthier areas. In Nicaragua, around 50% of the health personnel are

concentrated in the capital, Managua, which comprises only one-fifth of the country's population (Nigenda & Machado, 2000). In Mexico, it is estimated that 15% of all physicians are unemployed, underemployed or inactive. Yet despite this apparent surplus, rural posts remain unfilled (WHO, 2000). Indonesia's vast size and difficult terrain presents an enormous obstacle for the delivery of health services and for a balanced distribution of health personnel. Doctors and nurses are reluctant to relocate to remote islands and forest locations that offer poor communications with the rest of the country and few amenities for health professionals and their families (Chomitz et al., 1998). The imbalanced distribution of health personnel can contribute to great disparities in health outcomes between the rural and urban population.

Table 4.6: Health units, staffing and recommended number in each level of facility

Health Unit	Female	Male	Total	Recommended staff numbers
Bira H/C II	2	2	4	9
Pawel H/C II	3	3	6	9
Labongogali H/C II	3	5	8	9
Awei H/C II	7	3	10	9
Olwal H/C II	2	3	5	9
Guruguru H/C II	2	3	5	9
Bibia H/C III	10	8	18	19
Amuru H/C III	18	14	32	19
Pabbo H/C III	14	9	23	19
Kalidima H/C III	6	11	17	19
Attiak H/C IV	8	16	24	45

Source: Field data, July 2010

The Table 4.7 shows the comparison of staffs in the health facilities of the same grade of health centre II. Awei health centre II has the highest number of staffs compared to the other health facilities of the same grade. The least number of staffs are seen in Bira health centre II, meanwhile Pawel, Olwal and Guruguru health centre IIs had about the same number of staffs – four staffs. These staffs include the clinical and non-clinical staffs / guard / cleaner. As health professionals concentrate in urban areas and seek career advancement there, they may soon opt to work in the private sector, which may be the reason to move to an urban area in the first place. Consequently, rural-to-urban brain drain is compounded by public-to-private brain drain (Ferrinho & Van Lerberghe , 2000). Ultimately, the inequitable socioeconomic development of rural compared to urban areas presents the main constraint for achieving a balanced distribution of human resource for health (Van Lerberghe, Ferrinho, Conceicao, & Van Damme, 2002).

Table 4.7: Comparison of health workforce in level II health facilities

Health units II	Female	Male	Total	Recommended
Bira H/C II	2	2	4	9
Pawel H/C II	3	3	6	9
Labongogali	3	5	8	9
Awei	7	3	10	9
Olwal	2	3	5	9
Guruguru	2	3	5	9

Source: Field data, July 2010

The Table 4.8 below gives further analysis of the health workforce in the three health facilities of Kalidima health centre III, Pabbo health centre III, Bibia health centre III, Amuru health centre III and Attiak health centre IV. The total number of staffs in Attiak health centre IV is almost equivalent to total number of staffs in Pabbo health centre III. Meanwhile the number of staffs in Kalidima and Bibia health centre III is far less than those in Pabbo health centre III. There are more female staffs in Pabbo, Amuru and Bibia health centres III than those in Attiak health centre IV and Kalidima health centre III. Amuru health centre III has more staffs of the same level due to its location and previous IDP centre. This attracted more staffs and resources to put up more structures for more services as required at the health centre III level. The study analysis supports the report done by Baer, Gesler and Konrad, 2000, that noted the health workers variations are the result of a mix of decisions by individuals, communities and governments, which are in turn influenced by personal, professional, organizational, economic, political and cultural factors. Rural-urban inequities, inadequate medical education systems, migration, public-to-private brain drain and inadequate payment incentives are just some of the factors identified as contributing to an imbalanced supply of health personnel. These factors often interrelate and affect one another in many ways. For example, inadequate remuneration and working conditions result in personnel resisting redeployment, as well as promoting rural-to-urban migration (Baer, Gesler, & Konrad, 2000).

Table 4.8: Comparison of health workforce in level III and IV health facilities.

Health unit	Female	Male	Total	Recommended number
Pabbo H/C III	14	9	23	19
Amuru H/C III	18	14	32	19
Bibia H/C III	10	8	18	19
Kalidima H/C III	6	11	17	19
Attiak H/C IV	8	16	24	45

Source: Field data, July 2010

The geographical distribution of health personnel refers to their spatial allocation. It is said to be imbalanced when a norm is applied, such as population to personnel ratios, or more sophisticated needs-related indicators. Geographical distribution matters a lot, since it determines which services, and in what quantity and quality, will be available. Imbalances raise problems of equity (services not being available according to needs), of efficiency (surpluses/shortages) and of effectiveness of services, let alone of satisfaction of users. The health-related MDGs cannot be achieved if vulnerable populations do not have access to skilled personnel and to other necessary inputs.

Research question 2: What factors compel health workers to come to, stay and leave in rural areas of Amuru district?

The Table 4.9 shows the kind of work being done by the respondents at the current health facilities for pay. Dispensing had the highest number with 14 scores, followed by administration and consultation. Others were

home visits, school health programs, family planning services, and immunization. Three respondents reported that they work without getting pay from anybody.

Table 4.9: Work done at the current health facility for pay

Work for pay at current health facility	Frequency
Research	1
Dispensing	14
Administration	8
Patient consultation/ direct pay	2
Consultation with agencies/ professionals	6
Teaching	5
Family planning	1
Facilitation for VHT	1
ANC and Delivery	1
Laboratory / diagnostic procedures	2
Not worked for pay	3
Clinical management of patients	1
Assisting midwife in maternity	1
EPI	1
School health	1
Home visiting	1
Inspection	1

Source: Field data, July 2010

The Table 4.10 below shows the monthly salary of the respondent. The mode of the respondent income was UGX 190,000 with 18 respondents, followed by UGX 214,000 per month with 14 respondents. More than 60% of the respondents get less than UGX 220,000 per month. Those who earn more than UGX 466,000 were less than 15% of the respondents. The least paid respondent was UGX 100,000 per month.

In Uganda, the general government remuneration package does not favour lower health professional cadres and more so those working in rural and remote areas such as Amuru district. This was stated by Dovlo, 2002, that in poor countries, remuneration is usually low and working conditions unsatisfactory. Remuneration, in particular, seems to constitute the most basic influence on retention of health professionals (Dovlo, 2002).

The above supports the study finding that, the monthly salaries to health workers are very low as it is the same in other parts of the country. The entire health workforce in Amuru district gets monthly pay meanwhile almost half reported that they do not get any form of allowances in their current work locations. Yet allowances and well paid salaries do constitute one of the key motivation tools for the workers in rural and remote areas of Amuru district.

Table 4.10: Monthly salary of the respondents

Amount UGX	100,000	168,000	190,000	214,000	320,000	466,000	471,000	571,698	Don't know
Number of respondents	5	5	18	13	9	4	9	4	9

Source: Field data, July 2010

The Table 4.11 shows the sources of extra fees from the health facilities the respondents work from. Immunization scored the highest with 78 scores, followed by dispensing medicines with 16 scores and to lesser extent outreach activities, PHC and school / home education. Three scores were from respondents who said they do not receive any extra fees or payments from the unit. From this the allowances as extra pay they get through Expanded Programs for Immunizations (EPI) programs as they go out of their work stations. The government and health partners have place special funds towards national immunization days.

Table 4.11: Sources of extra fees from the current health units

Activity for extra fees	Frequency
Outreach on HIV/AIDS	4
Immunization	78
Dispensed medicine	16
School and home visits	4
Primary Health Care	4
Other medical supplies/ consumables	4
No extra payments	12

Source: Field data, July 2010

The Table 4.12 shows the salary payments schedule. When the respondents were asked if they have ever experienced delay in salary payments in the last 12 months, half responded they had delay in their payments. Meanwhile less than half (46%) said they have not experienced any salary payment delays in the last 12 months. The other 4%

responded it is not applicable to them. When asked the duration of the delay, four respondents said they experienced delay up to a period of one month. The other respondents mentioned the days ranging from 10-21 days, meanwhile an extreme case of a respondent said the delay lasted up to 14 months. When asked the reasons for such delays, the respondents gave different reasons such as MoH budgeted funds got finished, CAO / DHO can explain, meanwhile others said they do not know as no explanation were given. One respondent said they sometimes get less than what they expect to be paid during the month.

Table 4.12: Timely salary payments

Salary delay	Frequency	Percent
Yes	63	50
No	59	46
Not applicable	5	4

Source: Field data, July 2010

The Table 4.13 display additional benefits the respondents get from the employer. As noted in the study, more than half (54%) of the respondents reported of receiving some housing or meals allowances. It is noted that, while available fiscal resources can be used directly for recruitment purposes, one approach to addressing factors of health workforce retention in rural and remote areas involves the strategic use of allowances and continuous education within the health ministry. Alternative uses of allowances can provide direct incentives to improve health worker retention, as well as improve health-care delivery outcomes, particularly in remote and rural areas such as Amuru district.

Creating allowances is another strategy to circumvent civil service rigidities but this has the disadvantage that this income does not count towards pensions. Allowances can also have perverse effects. Allowances for attending workshops, for example, make a significant contribution to many health workers' income, but encourage them to spend less time in the work place. Raising salaries requires additional funding. To implement this there is difficulty in finding the necessary fund; these are serious macroeconomic constraints to increase government spending. Other measures that do not require new funds are therefore worth exploring.

Table 4.13: Additional benefits given to the respondents

Additional benefits	Frequency	Percent
Allowances for meals	53	42
Allowance for housing	16	13
None	58	46

Source: Field data, July 2010

The Table 4.14 shows the percentage of respondents attending any continued health or medical or professional education program or workshop or training in the last 12 months. When asked, 87% reported to have attended training in the last 12 months against 13% who did not have that opportunity. On average, the number of days spent on the training has been 10 days- ranging from 5-12 days per session.

Table 4.14: Respondents continued education program

Response	Number of respondents	Percent
Yes	111	87
No	16	13

Source: Field data, July 2010

The Table 4.15 represents the type of services the respondents received extra fees in the last 30 days when they worked. More than half (60%) got their extra fees from immunization, meanwhile 20% each got from training schools clubs or water source committee and another 20% from laboratory or diagnostic procedures.

When asked how much they earn by working in that second location in the last 30 days, only one respondent mentioned 5,000 Uganda shillings per week, meanwhile four said it has been very rear to get such type of earnings. When asked further the kind of benefits they receive for working in the other location, two out of four reported that they are given meal allowance, meanwhile one out of four reported transport allowance and another a quarter reported nothing is paid while working there.

Figure 4.15: Types of services for extra fees

Services for extra fees	Training school health clubs	Laboratory / diagnostic procedures	Immunization
Frequency of respondents	24	25	76

Source: Field data, July 2010

The Table 4.16 shows the number of years worked in the current health unit. When asked how long they have been working in the current health facility, 33% reported to have worked for three years; meanwhile 28% reported of working for two years. Those who reported to have worked for one year, five years and six years were 11% each of the total respondent. Only 6% reported to have worked for less than one year at the health facility during the time of the study.

Table 4.16: Years worked in the current health facility

Years in current health facility	< 1	1	2	3	4	5	6
Number of respondents	5	10	37	42	0	21	10

Source: Field data, July 2010

The Table 4.19 shows the previous work location before coming to work in the current health facility. When the respondents were asked to describe their last place worked before coming to the current facility, 58% had worked in government health centre, 14% had worked in government hospital, 14% worked in private or NGO clinics and another 14% worked in other private health facilities. This shows that the major health workers employer is the government that employed majority (58%) of the health workers. This is basically due to its employment stability that guarantees the employee continuity as well as gratuity and pension benefits after retirement.

Table 4.17: Previous work location before coming to the current facility

Work location	Frequency	Percent
Government health centre	73	58
Government Hospital	18	14
Private/ NGO mobile clinic	18	14
Other public health facility	18	14

Source: Field data, July 2010

The Table 4.18 shows the type of previous work done for pay by the respondents before coming to the current work location. The respondents were asked what kind of work they did in the previous work location for pay, up to 38% reported on dispensing, followed by consultation with agencies about 20%. Meanwhile 17% of the respondents mentioned administrative or supervisory work. Ten percent of the respondents reported teaching, meanwhile 7% each was from direct patient pay. Other services of 3% each were from laboratory and diagnostic services, prescribing for patients and other management of sick patients. About 7% of the respondents reported they have not worked for any pay in the previous work location.

Table 4.18: Type of work in the previous health facility for pay

Work in the previous facility for pay	Percent
Dispensing	30.5
Direct patient pay	6
Consultation with agencies/ professional	21.5
Teaching	10
Prescribing for patients	3
Not worked for pay	6
Administration/ supervision	16.8
Laboratory / diagnostic procedures	3.2
Others- management of patients	3

Source: Field data, July 2010

The Table 4.19 below shows the location of previous worked station. When asked the location of the previous work station, about half of the respondents reported of working in the same town or rural district. About 35% reported working in a different rural district before coming to the current work place. Those who worked in a different town were 10% and less than five percent came from another region. This shows that getting employment outside the geographical region is not so easy due to the current decentralisation of recruitment by the district service commission.

Table 4.19: Previous work location

Previous work location	Frequency	Percent
In the same town/rural district	63	50
In a different rural district	44	35
In a different town	13	10
In another region	6	5

Source: Field data, July 2010

In the Table 4.20, the respondents were asked on what factors have attracted them to come and work in the current location. There were different reasons with the majority (64%) of the respondents reported they came to enhance their career as there were vacancies in the district, meanwhile 18% said because of the health infrastructure. Things noted in career development were need to joining MoH; need to practice the profession, and vacancies that existed in the health unit that needed to be filled. The respondents noted that they were posted by the district as the appointing authority, and this posting is done after recruitment. They further noted that sometimes they are transferred by the district and should not be taken as a punishment but a change of work place. Things noted by the respondents were having a heart of helping the community, interaction with the community and improving life are the factors that attracted some staffs in the health units. On infrastructure, issues that came out were that these health facilities were good due to availability of a laboratory, good staff quarters and having a touch of health facility. Others mentioned by the respondents were availability of drugs as it was

easy to get, vaccines available at the unit; and the health centre is near the headquarters.

Table 4.20 Factors that attracted the respondents to the current location

Factors	Frequency	Percent
Drugs	11	9
Infrastructure	23	18
Nearby home	11	9
Career development	81	64

Source: Field data, July 2010

The Table 4.21 gives reasons for drugs shortages in Amuru district. Majority (78%) of the respondents reported they had drug shortages in the last three months. Meanwhile 22% reported they have not experience any drug shortages in the last three months. When asked for the reasons to their best knowledge for having drugs stock- outs, majority (65%) responded that it was the responsibility of National Medical Stores (NMS) to supply and deliver the drugs directly up to the health units, 14% did not know and 7 % noted that there were too many patients to be served with little drugs delivered.

When the respondents were asked on how they manage their drugs stocks. They noted that drugs are usually brought from NMS after every two months, but in most cases it is not being followed. Once the drugs are delivered, it is received by logistician / store staff who receive stocks and put in stores. Then from the stores they use stock cards to monitor its consumption through monitoring forms tagged on daily, weekly and monthly consumption forms at the units. It was noted that the health

management committee do see the vouchers and stock cards and OPD forms to confirm that drugs has arrived and used well. They also noted that medicines are ordered based on the disease pattern at the facility. From the stock cards, they use the principle of first expiry first out.

Table 4.21: Reasons for drugs shortages in Amuru district

Reasons	Frequency	Percent
NMS not delivered	82	65
Don't know	18	14
Too many patients	9	7
Others	18	14

Source: Field data, July 2010

The Table 4.22 shows the gaps at the health facilities visited. When the respondents were asked on how they would describe the health facility standards and gaps in the units they are working in currently. More than half (52%) noted that the infrastructure at the units are inadequate to accommodate staffs, not enough working space and making clinical officers not available at the units most times. They further noted that in the only health centre IV in Amuru district, it has no theatre, no equipments and few staffs. The issue of staffing came up at this point with about 11% as the gaps whereby it was noted that the qualified staffs for example midwife is not available at Kalidima health centre III. Meanwhile about 11% noted no gaps at the units and about 7% responded as fair standard.

Table 4.22: Gaps at the health facilities under the study

Gaps to be addressed	Frequency	Percent
Infrastructure	67	52
Transport	7	6
Supervision	7	6
Staffing	15	12
No gaps	15	12
Funds to run the facilities	7	6
Fair condition	7	6

Source: Field data, July 2010

Research question 3: What specific health workforce retention strategies are in rural areas of Amuru district?

According to the findings, the most important 'push factor' is the poor (and often late) pay of salaries as a major contributor to this low retention in rural and remote areas. Pay rates have been eroded by years of slow economic growth and inflation. Poor numeration and incentives is the leading reasons why health workers in Amuru district will leave. When the respondents were asked on what kind of improvements needed to be addressed so that the health workers may not leave the unit. In Table 4.23, majority (32%) of the respondents noted salary as one of the factors that once it has not improved they will consider leave working at the current health unit. They noted that the current salary is low, sometimes delayed, and with frequent names missing from the salary pay roll and no justification is given to the affected staff. The second with one-fifth of the

respondents was health infrastructure. They noted issues related to no adequate accommodation for the health staffs and lack of rooms to conduct their work properly as they will be underutilized. The third with 10% was understaffing at the health units. They noted that with poor staffing, there is difficulty in working on patients as many come from far places. Also understaffing contributes to low level of technical personnel which leads to increased workload, and reduced efficiency in work. Other issues that were mentioned were: no motivation to staffs; lack of lights at the units; lack of seriousness by staff and district official to make the work improve; and political leaders approach to work by segregation due to selfish and personal gains would make them leave working in the current health units.

In Uganda, one of the pushes has come from the state itself in the form of civil service downsizing schemes, including early retirement, voluntary departure and retrenchment. Unfortunately, with voluntary redundancy / retirement schemes it has tended to be the workers whose skills are most scarce (and therefore in greatest demand in the private sector) that have left, exacerbating already existing imbalances in the skills mix.

Other issues such as political leaders interfering in the running of the health facilities to suit their personal interests from self minded politicians is one of serious push factor. The respondents mentioned other factors of not being confirmed in the employment as required under the civil service terms, lack of seriousness by the staffs and the district official to make the unit improve. It is noted that the stakeholders who should work out jointly to make the health units improve-this involves the staffs themselves,

district leaders / politicians, central government and these requires serious commitment at all levels but is lacking.

Table 4.23: Improvements needed for the respondents not to leave working in the health units

Reasons for leaving	Frequency	Percent
Salary	40	32
Understaffing	20	16
Infrastructure	27	21
Workload	7	5
Not confirmed in work	7	5
Political interference	7	5
Others	20	16

Source: Field data, July 2010

The opinions of the respondents were sought on what to be done to motivate them. The Table 4.24 presents their sincere opinion of the respondents on what government, stakeholders, and community should do to improve on health workforce attraction and retention in rural and remote areas of Amuru district. An equivalent percentage scores of 16 percent stated that staff continued study or education, salary increase and more staffs recruitment are very important issues to be addressed. Specific issues raised on staff education or studies were: need to encourage long distance studies, continuous education program be encouraged, planned workshops be conducted, refresher courses for nursing assistants, and taking staffs to other places to see and learn. On

salaries, they needed an increment, which is attractive, promptly paid and with other facilitations to improve on health workers welfare. Issues of staffs names disappearing from the pay roll and taking long without any action or delay of salary payments were noted. Still on the same weight percentage was recruitment of more staffs to ensure the standards are met and to minimise workload. Drugs and medical supplies scored 10% in the fourth position. Things mentioned were:- enough drugs be delivered to the health units, frequent supplies done and measures taken to ensure they are not stolen by staffs.

For accomodation, it was mentioned that it should improve, good standard, and be enough for health workers by constructing more units. Meanwhile for transport it was noted that the incharges be given motorcycles, the units should have vehicles for easy movements or referral, for efficient work and easy communication. Motivation of heath workers scored 5% at it was noted that the Village Health Teams be motivated by the government. Othe issues were corruption, provison of allowances, lights at the units, support supervison, upgrading the health centres and workload.

Table 4.24: Opinion on attraction and retention of health workforce.

Opinion	Frequency	Percent
Accommodation	11	9
Allowances	4	3
Corruption	4	3
Drugs /supplies	13	11
Lights	4	3
Motivation of staffs	7	5
Recruitment of new staffs	20	16
Salary	20	16
Study / trainings	20	16
Transport	11	9
Supervision	4	3
Upgrade / promotion	4	3
Workload	4	3

Source: Field data, July 2010

The Table 4.25 provides a comparison of work the respondents did for extra pay in the previous location and the current work station. The proportion of the previous work location for pay is far more than what they are doing in the current work station. Dispensing still continued to be highest at both work locations, meanwhile consultations with agencies or professional is far lower than what was before. Other areas are the administrative role is quite reduced compared to the previous work locations. The same with teaching and direct patients pay. Other services that did not appear in the current stations were laboratory and diagnostic services, and others such as management of the sick patients.

Table 4.25: Comparison of service sources for extra pay from previous and current work centres

Service sources	Current-frequency	Previous-frequency
Dispensing	23	104
Direct patient pay	42	85
Consultation with agencies/ professional	18	109
Teaching	32	95
Prescribing for patients	0	108
Not worked for pay	42	85
Administration/ supervision	10	51
Laboratory / diagnostic procedures	0	10
Others- management of patients	0	15

Source: Field data, July 2010

CHAPTER FIVE

FINDINGS, CONCLUSIONS, RECOMMENDATIONS

In this chapter of findings, conclusion and recommendations, a systematic approach has been laid down to address and answer the research questions on health workforce imbalances and deficits in rural and remote areas of Amuru district. Other issues discussed focuses on factors that compel health workers to come to, stay and leave in rural and remote areas. Further discussions on specific health workforce retention strategies that are in place of the study area are addressed. The key issues discussed addresses the demographical dimensions of the current health professionals who are based in rural and remote areas of Amuru district. It also provided the imbalances of health professionals in rural and remote areas of the study area. This research findings highlighted areas for future research and policy directions to address the issues identified by the study that needed urgent attention.

FINDINGS

Research question 1: Is there health workforce imbalances and deficit in rural areas of Amuru district?

Distribution of health workforce in rural areas of Amuru district

According to the research findings, only one-fifths of the health facilities in Amuru district have the required number of staffs. And these are those who are based in peri-urban settings such as Pabbo and Awei trading

centres. The findings agrees with the MoH report of 2009, which noted that this is common in the entire Uganda as filling in the established health workforce positions is difficult, especially in rural and remote villages. The Ministry of Health 2009 Health Sector Strategic Plan gives the proportion of established posts filled at different levels of health care (HC II-NRHs) in Uganda. The majority of the vacancies in the public health sector are in HC IIIs up to the general hospitals with HC II having the highest number of vacancies at 67%. These HC IIs are located in rural communities and the absence of staff affects the way they seek care. Nurses are critically required especially at HC II-IV and yet most of the vacancies for nurses are at that level. The vacancy rates for nurses at HC II, III and IV are at 53%, 54% and 37%, respectively. In November 2008 only 51% of the approved positions at national level were filled. This has not changed since then as shown in a recent report (MoH, 2009).

There are a wide range of reasons why there are huge vacancies in the public health facilities such as: insufficient training capacity, low remuneration and poor working conditions in the public sectors, making it difficult for the sector to recruit and retain staff. The process of recruitment is complex and lengthy and it involves many stakeholders thus delaying recruitment. The lack of coordination and joint planning between the training schools and the MoH and the Health Service Commission causes a long gap between the times the health workers have come out of the training institutions and when they are hired in the health system (MoH, 2009b). The report continued to note that migration of health workers is at alarming proportions due to more attractive

salaries and opportunities abroad. There is also inequitable distribution of health workers among districts, between rural and urban areas and between public and private providers. Nearly 70% of medical doctors and dentists, 80% of pharmacists and 40% of nurses and midwives, are in urban areas serving 13% of the population (MoH, 2009b).

According to the research findings the level of health workforce imbalances and deficits in rural and remote areas of Amuru district is high. This deficit and imbalances is not the economic dimension that has motivated the health workers to go, work, stay and live in the rural and remote area. It is the self motivation of helping their community. The health workers see that they are the ones to provide services in those rural and remote areas and they feel if they do not do it, nobody from another region will come and serve the community. They see it as their personal commitment to join the District Local Government as health professionals and that is why most staffs are the lower cadres who are willing to enhance their career in those rural and remote locations. From the study, majority (over 60%) of the respondents were 35 years and less meaning the more experienced are not willing to work or stay in those location. This could be due to family pressures, other better opportunities in other facilities or even private clinics in urban centres which are usually more paying.

The above findings disagree with the Nigenda and Machado (2000) report that found out in Nicaragua, around 50% of the health personnel are concentrated in the capital, Managua, which comprises only one-fifth of the country's population (Nigenda & Machado, 2000). This is so with

Amuru district, that does not have any urban settings. But the young professionals who are working in these locations are happy to help and support their community irrespective of the working conditions as it is in Amuru district of Uganda.

Location variation of health workforce

According to the research findings, Awei health centre II has the highest number of staffs compared to the other health facilities of the same grade. The least number of staffs are seen in Bira health centre II, meanwhile the following health centre IIs- Pawel, Olwal and Guruguru had about the same number of staffs – four to five staffs. These staffs include the clinical and non-clinical staffs / guard / cleaner. The total number of staffs in Attiak health centre IV is almost equal to total number of staffs in Pabbo health centre III. Meanwhile the number of staffs in Kalidima health centre III is far less than those in Pabbo, Bibia and Amuru health centre III. It is considered that Kalidima health centre III is located far off location that lack even police post to provide security required by the health staffs. Yet Awei health centre II, located just some five kilometers away from Kalidima health centre III and has more staffs who are stationed at the health facilities- since they have a police post and availability of transport to Gulu town is very easy. Location variation of health staffs in Amuru is very pronounced, whereby far off and remote locations do not have qualified health professionals heading. For example, in Guruguru health centre II, it is being headed by a nursing assistant with two other staffs. They share a room with a male colleague meanwhile a nurse is given the next room. They hardly stay for long in the location as there are no basic amenities yet the community needs

their services. So it should be noted that management style, incentives, career path, salary scales, recruitment, posting and retention practices are some of the organizational factors that can influence the location variation and distribution of health workforce to leave in rural and remote geographical settings.

The mal-distribution of health workers in rural health facilities in Amuru district

The research findings revealed that, the distribution problems of health workers should not be overstated. It should be acknowledged that although there are many under-staffed health facilities in Amuru district, there are others with more than the required staffing levels. For example, the number of health workers in Awei health centre II is twice the number of staffs in Guruguru health centre II. This mal-distribution could be associated with lack of political will to ensure such far yet needy areas are given preferential services. The allocation of health workforce sometimes could be more closely related to influence of the family members such as husbands demanding their wives to be posted in nearby locations. It could also be related to better facilities such as ease of accessing public transport compared to far and remote rural areas.

The research finding agrees with Nigenda and Machado (2000) on the mal-distribution of health workforce within the same geographical settings and under the same administrative boundaries. This means, a concerted effort should be put in place in Amuru district to address this uneven

distribution of health workers in peri-urban as well as rural and remote areas.

Research question 2: What factors compel health workers to come to, stay and leave in rural areas of Amuru district?

Poor remuneration and incentives package

The research findings revealed that incentives should include training opportunities, study leave, housing, transportation allowances and clear career structures. The study findings suggest that a mix of continuing education, provision of housing and establishment of clear career structures could lead to improved job satisfaction and retention.

The above findings agrees with what Travis et al (2004), and earlier theories of workers motivation that noted the absence of well educated and properly managed health workers was identified as one of the health systems constraints to achieve the MDGs, along with poor infrastructure, drugs and supply systems, and information systems (Travis et al., 2004). Early theory in workers satisfaction and motivation identified compensation as a hygiene factor rather than a motivation factor. This means that basic salary satisfaction must be present to maintain ongoing job satisfaction, but this by itself will not provide satisfaction, and increasing amounts of salary will not contribute to increasing levels of job satisfaction. Challenges also exist with the appropriate use of financial resources locally.

The researcher therefore, concludes that salary increases are more effective when contingent on meeting performance objectives. This is in line with Mathauer and Imhoff (2006), that noted, while policy-makers often cite that low salaries result in poor health workforce retention or performance, there is little evidence that simply increasing salaries leads to improved performance (Mathauer & Imhoff, 2006). On the other hand, in countries such as Rwanda where salaries are tied to performance indicators, improvements were noted in both health worker productivity and health-care delivery. However, successful implementation of strategic allowances, as with other incentives, also depends on institutional and contextual factors such as local-level capacity, legal infrastructure and government flexibility with labour regulation (Vujicic, Ohiri & Sparkes, 2009).

Pull factors- the come, stay and leave factors

The 'pull' factors are primarily the better opportunities and conditions that health workers can obtain in other countries, in NGOs, in the for-profit private health sector, and outside the health sector altogether or even in a specific geographical location. In Amuru district, majority (64%) of the respondent said they came as a result of career advancement. This ranged from joining the MoH / District Local Government since the vacancies existed in the district. They noted other factors as working with the community and improving the life of the community members, and need to practice professional career. Some health units visited had good infrastructure such as Pawel that has staff quarters, children's ward, OPD and water nearby. Less than one-fifth of the respondents mentioned good infrastructure with good staff quarters, with better facilities such as

laboratory has pull them to work in such units. Meanwhile those who noted that the availability of drugs and vaccines pulled them to come and work in the current health facilities were 9% of the respondents. They noted the ease to get drugs and vaccines due to their availability at the unit. Another nine percent of the respondents mentioned the easy to reach the district headquarters and supervisor can easily pass by since it is near to the major road.

Retaining skilled health workers in service delivery, management and support and their equitable distribution to ensure access to quality services for all is crucial. Both financial and non-financial incentives influence workers' motivation, ability and willingness to act productively and efficiently, as well as their willingness to remain in their jobs even those posted in rural and remote areas such as Bira and Pogo health centre IIs of Amuru district.

Push factors-send, discouraging factors

Late and poor salary payments

According to the research findings, the overall health workers motivation is very poor and there is need for government to act as soon as possible. One nurse made it in her response that, "to be sincere, the government should really increase the salary pay of the health care providers especially those in the rural areas and remote areas as well by motivating them by building good accommodation". It was noted that, even vehicles or ambulance to improve on the performance of work especially when

there are cases which needs referral, there is no vehicle so the patients look for their own means of transport.

The above findings agrees with what Dieleman, et al, 2003; Hongoro and Normand, 2006; Lehmann et al 2008; all noted that these factors that influence health workers choices to location and their decisions to go, to stay or leave in rural and remote areas are already know. Then it calls on policy makers to make a special provision to ensure health workers are motivated to go, to stay and leave in rural and remote areas so as to serve the population.

Poor working conditions and facilities

The research finding shows that there are significant problems with working conditions in all health facilities. Access to equipment, supplies, drugs, electricity and water are seriously not available in all the health facilities visited during the study. The researcher noted through observation that all health facilities are operating without access to electricity or solar lights, and some facilities are operating with extreme staff shortages. While working conditions were poor, living conditions are bad. Sometimes lack of supplies or equipment is viewed as beyond the means of anyone to control, but when poor management or corruption is perceived to be at the root of the problem, health workers registered frustration. It was noted in Attiak health centre IV that the theater is not functional and has no supplies or qualified staffs such as anesthesia and medical doctor to work in the facilities. Besides, the poor equipments and supplies are not to be seen in the health unit. Yet at health centre IV under the MoH standards, they are to provide services such as operation,

blood transfusion, admission, referral among other. Yet this is not being conducted in Attiak health centre IV due to not facilitated and equipped as required.

Understaffing of health workforce

The findings from the study indicated that understaffing constitutes 16% of the reason of worker can leaving working in the units. Since understaffing leads to workload leading to technical personnel, hence increased work that leads to reduced efficiency. There is also difficulty in dealing with patients who come from far of places that have to be attended to, yet might come late and this also makes work very difficult. Understaffing is being experienced in all the health facilities in Amuru district. For example, the health centre IV which is in Attiak has only 24 health workers and is being headed by a clinical officer, yet it should be headed by a medical doctor. Other health center that are far off and non operational for many days in a month such as Bira and Okunggedi health centre IIs that was visited and found closed. This was attributed to few staffs that could not stay for long in those hard to reach areas- and also need to check on their families since these locations are non family station in nature.

Research question 3: What specific health workforce retention strategies are in rural areas of Amuru district?

The need to address shortages in the health workforce has been the focus of recent global debate. However, in the study evidence suggests that there is no specific health workers retention strategies put in place. Then

addressing factors of health worker retention is equally important, particularly where fiscal constraints inhibit the recruitment expansion of the health workforce.

Decentralized health workers recruitment

The research findings supported the benefits of decentralization of recruitment of staffs at the District Local Governments through the DSC with light co-ordination of recruitment policy undertaken at the central government. It is appreciated that this approach allows flexibility at local level and improved ownership of decision making and of responsibility.

Simananta and Aramkul, 2002, noted that decentralization has been shown to improve administrative efficiency in some cases where responsibilities of hiring and firing of health workers have been devolved to the local level. In the United Republic of Tanzania, partial devolution of recruitment processes for junior-level health care staff to the district level led to a decreased administrative burden at the central level, which could then focus on senior-level recruiting functions. Similar gains in efficiency were observed in Thailand, where recruitment processes decreased from 68 to 31 days with the devolution of responsibility to local line ministries (Simananta & Aramkul, 2002).

In China, the devolution of recruitment procedures to the township level showed that health centres were better able to match demand with supply costs (Liu, Marineau, Chen, Shan & Tang, 2006); and in Uganda, one study indicates that approximately 75% of health workers interviewed said that salary disbursement procedures were more efficient after devolution

to the district level (Vujicic et al., 2009). Moreover, studies have also found that devolved recruitment functions by divisional-level authorities in Pakistan have reduced levels of physician absenteeism (Simananta & Aramkul, 2002).

The only fear is that where there are no strong institutions and where vices such as tribalism, corruption, nepotism, etc. are still rife, such delegation, if not properly handled, may be abused and the resultant malpractices may be difficult to correct. The researcher noted the support new health workers would require after posting to a location. Most of them have no transport, sometimes accommodation is wanting and bridge funds before the first salary comes that should be addressed by the district local government.

Institutional conflicts

According to the research findings, some health workers in public health facilities in Amuru district are illegally charging patient's fees. Also it was noted that some of the health staffs are stealing drugs and supplies from public facilities for their private practices. Many health workers are not properly supported to go for upgrading or continued education program. But also on the other hand, when workers take leave for studies (or other purposes), they are still listed as current workers at their facilities, creating shortages but not vacancies that can be filled. As noted by many in- charges, there is lack of transparency of the funds sent to run the health facility as a sign of corruption among some who hold positions of powers at the district level.

A study conducted by Jitta, Arube-Wani, and Muiyinda, 2008, on user's satisfaction and understanding of client experiences showed that in general they were dissatisfied with a wide range of issues such as long waiting times and unofficial fees in the public sector, quantity of information provided during care and other behavioral problems relating to health workers. Some of the recommendations from this study include improvement of service availability, improving staffing levels, sustaining a reliable drug supply and removal of unofficial fees, among others (Jitta et al., 2008).

These ethical issues represent significant challenges to the management in the control of the health system, and are likely to contribute significantly to health worker satisfaction, motivation and morale. Many of these issues cannot be addressed at the facility level and will need the attention of the Ministry of health or those in the position authority to make follow-up.

Medicine and supplies management

According to the research findings, majority (78%) of the respondents reported they had drug shortages in the last three months. Meanwhile 22% said they have not experience any drug shortages in the last three months. When asked for the reasons for having drugs stock outs, majority (64%) responded that it was the responsibility of National Medical Stores (NMS) to supply and deliver the drugs directly up to the health units, 14% did not know and 7 % noted that there were too many patients to be served with little drugs delivered.

Stock-outs are common in all the health facilities in Amuru district and are worst in rural areas and poor people are the most affected. Stock-outs force people to buy medicines at much higher prices from the private clinics. More often, though, patients simply go without the medicine they so badly need – often with life-and-death consequences. The failure to properly stock public health clinics and pharmacies with essential medicines stems in part from economic constraints and bureaucratic obstacles. But above all, it is a failure of political will.

Yet in Uganda, medicine procurement is financed from Primary Health Care (PHC) recurrent budget, credits established with the National Medical Stores (NMS), the Joint Medical Stores (JMS) and, to lesser extent, user fees from faith-based NGO institutions. Ministry of Health guidelines require that at least 50% of districts' non-wage budget is spent on medicines at Health Centre II to IV, and 30% in hospitals but in practice, wide variations exist. When medicines are unavailable at the NMS, districts are permitted to procure from the JMS and if this is not feasible, then from private sector sources. The Government forecasts how much medicines will be needed to treat the population, based on the major public health challenges in the country. Orders and tenders are then generated by the National Medical Stores. Medicines are then purchased and stored centrally. Currently, districts buy drugs either through the conditional grants or through District Medicines Credit Line System, where districts can buy essential drugs from NMS on credit and the finance ministry pays later. Where drugs are not available, NMS is required to issue a certificate of non-availability so that districts can

procure the essential medicines from elsewhere, like the Joint Medical Stores.

Stock outs appear to be very common in Amuru district as reportedly the blame is on NMS by not delivering the drugs as requested or planned by the district. With this wide concern, the NMS has not taken initiatives to explain why such delays in the delivery of medicines in the rural and remote areas of Amuru district for the last three months before the study. Yet access to essential medicines is a human right and a cornerstone of an effective primary health care system.

The World Health Organization (WHO) defines essential medicines as “those that satisfy the priority health care needs of the population ... Essential medicines are intended to be available within the context of functioning health systems at all times, in adequate amounts, in the appropriate dosage forms, with assured quality, and at a price the individual and the community can afford.” At the World Health Assembly in 1977, our governments made a commitment to ensure these essential medicines are available in public health facilities.”

CONCLUSIONS

The overall work satisfaction among Amuru health workers is poor—more than half the respondents said that they will leave if working conditions does not improve. Concerns about poor salaries are higher than other issues identified in the study. Furthermore, working and living conditions

are very poor, and the workload is not much mentioned as there are fewer drugs delivered or even takes many months to receive a consignment. Working conditions are better in Pabbo, Attiak and Awei health units compared to other health facilities that are far off and remote. These locations do have better facilities such as: - housing, daily market, police post, public transport, but compensation in terms of salaries are the same throughout the district. Despite these conditions, most of the health workers have been in their jobs for less than three years and are loyal to their work.

It is important to emphasize that each district health management is specific and workforce issues are multidimensional and interconnected. As such, contextual factors need to be clearly identified, so that the complexity and interconnection of issues is taken into account when relating to each specific national context. Evaluation studies are thus crucial in order to understand interrelationships between determinants of geographical imbalances and strategies to correct them.

Individual factors have a more immediate influence on the geographical distribution of health personnel, whereas factors linked to the organizational and community environment have an intermediary influence between the broader environmental factors and individual decisions. Actions to influence those factors to ensure that they produce the expected effects will be more complex and difficult, and will require more time.

Some demographics of the health workforce will be important to monitor during a policy planning process. The majority of the health worker is not young and has family members to support though not having them at their work stations. Most workers are employed where they were born or trained, suggesting some implications for recruitment and retention. Some of the field observations about ethical and organizational issues bear further examination. Systems that tolerate incompetence, inattention, inequity, faulty decision making or corruption are signaling to health workers that their work is not valued.

As with any major policy initiative, the success of the process of recruiting and retaining the health workforce is linked to some critical factors, such as political commitment; strategic planning and management capacity; clear objectives and reliance on a mix of strategies; mobilization of stakeholders; sound information bases; and continuous assessment of the effects of interventions. Adequate financial resources are an obvious prerequisite to cover the salaries and benefits of new staff, the costs of training them, the costs of interventions to reduce attrition and the costs of infrastructure, equipment and consumables that additional staff will need to deliver services.

A country-led process that locates national health workforce strategic plans within broader national policies that ensures broader stakeholder consultation is very critical. It is important that short- and longer-term strategies are combined, not only to produce additional staff, but to retain those that are in place by protecting them from insecurity and other risk that is associated in working in rural and remote areas of Amuru district.

RECOMMENDATIONS

Establishment of retention schemes by central government

The key role of any central government is to ensure that its people are healthy and by establishing retention schemes will ensure health workers are motivated to work in rural and remote areas of the country. The central government should therefore establish a system that provides opportunities for health students training through placement programs in rural and remote regions. In doing this, it will ensure students familiarize themselves with this unique practice and rural setting that may encourage them to seek employment in the region upon completion.

Conduct wider mobilization of stakeholders

The success of any significant intervention in the health arena depends on the mobilization of stakeholders. Often lacking is the motivation of community representative to monitor activities at the health facility level and demand feedback on service provision. The researcher recommends the entire stakeholder who has a stake in health should be mobilized and equipped to significantly contribute towards the achievement of health outcomes at all levels

Build local government management capacity

Building local government management capacities are other preconditions for successful retention of health workers in remote and rural areas. To achieve these, it requires technically prepared personnel to conduct the process and manage implementation of change at the local government

level as an important process. The researcher recommends building local government management capacities in the areas of financial transparency, no political interference and training opportunities, which can empower health workers to work in remote and rural areas of the country.

Designing financial incentives for rural health workers

Designing a pro-rural health national financial policies that covers incentives such as hardship allowances, recognition, leave days, that is aimed improving the morale of health workers in rural and remote areas of the country would be an asset to the community who leave in remote and rural areas such as in Amuru district. As from the study, there are no any other incentives being received by health workforce in remote and rural areas- so designing financial incentives such as lunch refund, housing, transport refund and hardship allowances could do much for a short while as the health needs are enormous in Amuru district. These financial incentives should be tagged to performances related outcomes through health centre management committee's reports. Monthly appraisals be conducted and based on field reports such incentives are administered to the health workers in such settings through appropriate community structures.

Monitoring demographic trends of health workforce

The findings of this study clearly indicated that demographic trends are immediate threats to the sustainability of the health workforce in Amuru district. Many rural health workers are very young in the profession. The

researcher recommends further research in developing demographic monitoring tools at the district and national levels.

Examining the values and beliefs of younger health professionals

The researcher recommends further research in examining the values and beliefs of younger health workforce professionals in rural and remote areas so to inform recruitment and retention strategies of health workforce in rural and remote areas.

Strengthen Amuru Health Sub-District (HSD) system

Amuru district has only one HSD located at Attiak health centre IV which is located about 80 kilometers to the nearest hospital. It carries an oversight function of overseeing all curative, preventive, promotion and rehabilitative health activities including those carried out by other health service providers in the sub district. There is need to strengthen and equip the only health facility in the district to ensure it meets the minimum requirements of an HSD facility.

Strengthen and support health centre's III and II

The HC IIIs provide basic preventive, promotion and curative care and provide support supervision of the community and HC II under its jurisdiction. The entire functional health centre's III and IIs in Amuru district are poorly equipped with supplies, equipments and personnel. There is need to open up the other non-functional health facilities in all the remote and rural areas as people go back to their homes. This should

be coupled with a clearly laid down strategies that has financial commitment from the government as a matter of urgency.

Conduct exploratory research on the roles of VHT in rural and remote health facilities

While VHTs are playing an important role in health care promotion and provision, the coverage of VHTs is however still limited. The VHTs have been established in most villages of Amuru but only few have been trained and equipped with essential supplies as recommended by MoH. There is need to conduct an exploratory research focusing on the current and potential role of VHTs in rural and remote health facilities is required.

Further research areas

Additional research is needed to assess past and current experiences and related evidence on rural and remote health workforce retention in other parts of Uganda. Though each district in Uganda needs to formulate its own strategy, lessons can be learned from others from different locations.



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APPENDIX I

TRANSMITTAL LETTER



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INSTITUTE OF OPEN AND DISTANCE LEARNING OFFICE OF THE DIRECTOR

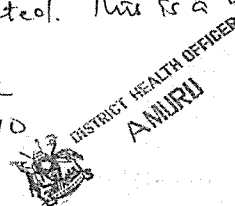
22nd June 2010

THE DISTRICT HEALTH OFFICER
P.O. BOX AMURU DISTRICT
LOCAL GOVERNMENT

*Permission granted. This is a very
useful study*

Signature

1/7/2010

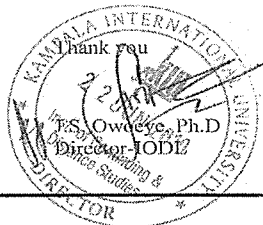


Dear Sir/Madam,

INTRODUCTION LETTER FOR RESEARCH

I have the pleasure to introduce **Okello Paul – MBA/20519/71/DU** to you. He is a student of Masters Degree in Business Administration at Kampala International University. He is carrying out his research on “**Appraisal of Health Workforce Retention in Rural Areas. A Case Study in Amuru District**” He is at the data collection stage and your Institution / Organization has been identified as his area of study. It will therefore be appreciated if you can give the best assistance to him for a dependable research work.

The university will be counting on your kind cooperation.



“Exploring the Heights”

APPENDIX II:
RESEARCH INSTRUMENT- QUESTIONNAIRE
QUESTIONNAIRE ON HEALTH WORKFORCE RETENTION OF HEALTH WORKERS

Date of the interview: Day..... Month Year.....

TO BE READ BY THE RESPONDENT

You have been randomly selected to be part of a survey on health and workforce resources, and this is why we would like to interview you. This survey is conducted by Okello Paul who is a student for Kampala International University pursuing Masters of Business Administration (NGO Management). The survey is currently taking place in several health units / facilities in Amuru District.

Interview will take approximately 25 minutes. I will ask you some questions about your work as a health care provider, including the practices and experiences in this and other facilities where you worked before. Information you provide will be used only to understand about the types of activities, payments and general working conditions of health workers in different areas.

The information you provide is totally confidential and will not be disclosed to anyone. It will be used only for research purposes. Your name, and the name and location of this facility, will be removed from the questionnaire, and only a code will be used to connect your answers with the facility without identifying you.

Your participation is voluntary and you are free to answer any or all questions in the questionnaire. If you have any questions about this survey you may ask me or contact ***Kampala International University***.

Name of district: Name of Sub County:.....
Name of Parish:..... Name of Village:.....

Section 1: Socio demographic characteristics

101 Code number of respondent _____
(Record sex as observed)

Male_____

Female_____

Age_____

Identification

102 Name of the health facility:_____

103 How many staffs do you have? *(to be asked once for each unit only)*

Male_____ Female_____

Total_____

104 Type of facility

Hospital_____	1
Health centre IV_____	2
Health centre III_____	3
Health centre II_____	4
Mobile Clinic _____	5
Pharmacy_____	6
Other (specify): _____	7

105 This health facility operated by:

Government	1
Private, for -profit entity	2
Non-governmental organization (NGO)	3
Charitable organization	4
Religious /Faith Based organizations	5
Others (specify)	6

SECTION 2: Work status, conditions and qualifications

I would like to ask you some questions about your work as a health care provider and practices at this facility.

201: How would you best describe your occupation at this facility?

Medical doctor _____ 1

Dentist _____	2
Pharmacist _____	3
Enrolled Nurse _____	4
Enrolled Midwife _____	5
Register Midwife _____	6
Register Midwife _____	7
Comprehensive Nurse _____	8
Clinical officer _____	9
Laboratory technician _____	10
Laboratory Assistant _____	11
Nursing assistant _____	12
Nursing Aid _____	13
Dispenser _____	14
Dental Assistant _____	15
Optometrist / Optician _____	16
Physiotherapist _____	17
Traditional / faith healer _____	18
Other (specify) _____	19

202: what was the highest level of schooling you reached to become a practicing health care provider?

Certificate _____	1
Diploma _____	2
Bachelor degree _____	3
Master's degree _____	4
Doctorate _____	5
Other health degree (specify) _____	6
Other non health (specify) _____	7
No formal certificate _____	8

203: In which year did you reach this level? _____

204 In which institution did you reach this level? Name of the school / college _____

205 how many hours a week does you usually work at this facility, excluding unpaid mealtimes and on-call hours?

(On-call hours are those, such as during nights and weekends, when you must be available for duty but do not have to be physically present on the hospital ward or in a clinic or laboratory except when patient needs require it) Hours_____

206 Did you work on-call hours at this facility in the last 30 days?

Yes_____ (1) No_____ (2)

207 If yes, how many on-call hours did you work here I the last 30 days?

Hour's _____

208 What type of work do you usually do at this facility for pay?

Direct patient pay _____ 1

Consultation with agencies / professionals _____ 2

Administration / Supervision _____ 3

Teaching _____ 4

Research _____ 5

Laboratory / diagnostic procedures _____ 6

Dispensing _____ 7

Other (specify) _____ 8

Not worked for pay _____ 9

209 How many patients have you personally seen here in the last 30 days?

Number _____ 1

Do not know _____ 2

210 How would you describe the method by which you are usually paid at this facility?

Salary _____ 1

Fee-for-service only _____ 2

Capitation (fixed per patient) _____ 3

Capitation plus fees for extra services _____ 4
Other (specify) _____ 5

211 for which type of services do you usually receive extra fees?
(Circle all that apply)

Dispensed medicines _____ 1
Other medical supplies / consumables _____ 2
Immunizations _____ 3
Laboratory / diagnostic procedures _____ 4
Other (specify) _____ 5

I am interested in knowing the average income of health workers and people trained in the health field. Such information is of value when discussing health care financing options for your country.

Remember that whatever you say is confidential and will be used only for research purposes.

212. Thinking over the past year, can you tell me what your average earnings from working at this facility have been? Please tell me the amount per week or per month or per year, whichever is easiest for you.

Per week _____ or per month _____ or per year _____

Refused _____ 1

Don't know _____ 2

213. In the past 12 months, have you experienced a delay in receiving your pay as scheduled from your employer?

Yes _____ 1

No _____ 2

Not applicable _____ 3

214. How long would you say the delays have lasted, on average?

(Record in days, weeks or months as answered)

Number of day's _____ or number of week's _____ or number of month's _____

What was the reason for such delays?

215 Do you receive any of the following additional benefits from working here?

(Read each type of benefits and record all answers)

Allowances for meals	_____	1
Allowances for housing	_____	2
Allowances for transportation	_____	3
Paid vacation	_____	4
Health care insurance / medical expenses	_____	5
Other (please specify)	_____	6
None	_____	7

216. Do you regularly receive any in-kind payments from patients or extra payments for making referrals or from other sources?

Yes	_____	1
No	_____	2

217 Are you currently certified to practice as a health care provider by any national certifying body?

Yes	_____	1
No	_____	2

218 Which certifying body? Name of the boy:

219 are you currently a member of any professional association (s)?

Yes	_____	1
No	_____	2

Which association (s)? [Name of association (s)]

220 in the past 12 months, have you been in any health / medical professional training or continue education programs?

Yes _____ 1

No _____ 2

221 For how many days (in the last 12 months) have you been on such programs? Number of day's _____

SECTION 3: Secondary employment

Now I would like to ask you some questions about your work activities at other locations.

301. In addition to your work at this facility, have you worked at another location in the last 30 days?

Yes _____ 1

No _____ 2

302. How would you best describe this other place where you worked?

Government hospital _____ 1

Government health centre _____ 2

Government health post _____ 3

Government mobile clinic _____ 4

Other public health facility (specify) _____ 5

Private / NGO hospital _____ 6

Private / NGO health clinic _____ 7

Private / NGO mobile clinic _____ 8

Other private health facility (specify) _____ 9

Pharmacy _____ 10

Other non-health (specify) _____ 11

303. How many hours a week does you usually work at this other location, excluding unpaid mealtimes and on-call hours?

Hour's _____

304. Did you work on-call hours at this other location in the last 30 day? If Yes: how many on –call hours did you work there in the last 30 days?

Hour's _____
None _____

305. What type of work do you usually do at this other location for pay?

(Circle all that apply)

Direct patient pay _____	1
Consultation with agencies / professionals _____	2
Administration / Supervision _____	3
Teaching _____	4
Research _____	5
Laboratory / diagnostic procedures _____	6
Dispensing _____	7
Other (specify) _____	8
Not worked for pay _____	9

306. How would you describe the method by which you are usually paid at this other location?

Salary _____	1
Fee-for-service only _____	2
Capitation (fixed per patient) _____	3
Capitation plus fees for extra services _____	4
Other (specify) _____	5

307. For which types of services do you usually receive extra fees there?

(Circle all that apply)

Dispensed medicines _____	1
Other medical supplies / consumables _____	2
Immunizations _____	3
Laboratory / diagnostic procedures _____	4
Other (specify) _____	5

308. What are your average earnings from working at this second location?

Please tell me the amount per week or per month or per year, whichever is easiest for you. *(Remember that whatever you say is confidential and will be used only for research purposes).*

Per week _____ or per month _____ or per year _____

Refuse _____

Don't know _____

309. Do you receive any of the following additional benefits from working there?

(Read each type of benefits and record all answers)

Allowances for meals _____ 1

Allowances for housing _____ 2

Allowances for transportation _____ 3

Paid vacation _____ 4

Health care insurance / medical expenses _____ 5

Other (please specify) _____ 6

None _____ 7

SECTION 4: Occupational mobility

I would like to ask a few questions about your work experience.

401. How many years of experience do you have in practice as a health care provider?

Year's _____

402. For how long have you been working at this facility here?

(Record in weeks, months or year as answered)

Number of weeks _____ or month's _____ or year's _____

403. How would you describe the last place where you worked before coming to this locality?

Government hospital _____ 1

Government health centre _____	2
Government health post _____	3
Government mobile clinic _____	4
Other public health facility (specify) _____	5
Private / NGO hospital _____	6
Private / NGO health clinic _____	7
Private / NGO mobile clinic _____	8
Other private health facility (specify) _____	9
Pharmacy _____	10
Other non-health (specify) _____	11

404. What type of work did you usually do at that last location for pay?
(Circle all that apply)

Direct patient pay _____	1
Consultation with agencies / professionals _____	2
Administration / Supervision _____	3
Teaching _____	4
Research _____	5
Laboratory / diagnostic procedures _____	6
Dispensing _____	7
Other (specify) _____	8
Not worked for pay _____	9

405. Where was your former work located?

In the same town/ rural district _____	1
In a different town _____	2
In a different rural district _____	3
In another region (specify) _____	4

406. In the last 3 months is there a period you had no drugs at the unit?

Yes _____

No _____

If Yes: what were the problems? _____

407. How are the drugs / stock managed? _____

408. How would you describe the health infrastructure standards in this unit? Any gaps?_____

409. What factors have attracted you to come and work in this health unit?

410. What do you think if it does not improve will make you to leave working in this unit?

411. In your sincere opinion, what should be done by government to improve on health workforce attraction and retention in remote and rural areas in Amuru?

The questionnaires from 101-405 are modified assessment tool of human resources for health: health care providers questionnaire of World Health Organization Headquarters, Geneva, Switzerland by Dr Alexandre Goubarev and Dr Mario Dal Poz (free download tool courtesy of WHO).

Thank you for your time to answer these questions

APPENDIX III
INTERVIEW GUIDE

Date of the interview: Day..... Month..... Year.....

Code number of the respondent:

(Record sex as observed)

Male Female.....

Age

Title of the respondent:

What can you say about the health workforce in the area of your jurisdiction?

.....

What are the strategies put in place to address health workforce recruitment, retention and attrition in your area of jurisdiction?

.....

.....

In your sincere opinion, to address health workforce availability in this area / region, what should government, stakeholders, and community do to attract and retain health workers in remote and rural areas?

.....

.....

Any additional information you would like to share with the researcher?

.....

.....

Thank you for your time to answer these questions

APPENDIX IV

RESEARCHER'S CURRICULUM VITAE

Personnel details

Family name: Okello

First name: Paul

Nationality: Ugandan

Date of birth: 30th April 1962

Place of birth: Inomo, Apac District, Uganda.

Civil status: Married to a wife.

Telephone number: + 256 701 578080 or +249 905790539

Email: pkello2002@yahoo.co.uk

Skype: okello.paul2

Educational background

- I hold a Degree in Bachelor of Science (BSc) in Agriculture of Makerere University, 1990.
- Diploma in Modern Management, 1994- College of Professional Management, Britain
- MBA (NGO Management) 2007- Jan 2010 Kampala International University (Student- remaining only Viva Voce)

Further trainings among others:

- Financial for non-finance managers facilitated by Acclaim Africa Ltd (May 2005). *This covered the areas of: - Audit; Simple Bookkeeping; Bank statements and reconciliations; budgeting and cash flows, managing finance officers.*

- Personal safety in Emergency facilitated by RedR (February 2004). *Topics covered are: - hostage, abduction, and kidnap; standard operation procedures and contingency; security strategies, image and acceptance; incident response and reporting; ambush; violence mapping and practical scenarios.*
- Emergency Planning and Preparedness training held in Addis Ababa, Ethiopia (September 2003). *The training covered: - needs assessments, food security frame work in emergency, convoy management, and relief to development, SHPERE minimum standards, Stress management, HIV/ AIDS, Proposal Writing and reporting.*
- USAID Grants Managers training (May 2003). *This is to enhance the skills in management of Grants from donors. It covered: -Audit; Procurements; Financial Management and Reporting.*
- Africa Region Food Security Training, Addis Ababa, Ethiopia (August 2002). *To improve the standards of Food Security Programming in Africa Region. It covered the areas of Food security concepts; Food utilization and nutrition; Food security strategy development; PRA methods and Appreciative Inquiry, Monitoring and Evaluation.*
- Planning and Management of Community development projects (June 2002). *Covered proposal development and writing, monitoring and evaluation, community participation, needs assessments and report writing.*

- Micro enterprise development training in Nairobi (February 1997).
It covered credit appraisal, disbursement, loan repayments, and training of clients, managements and risk reduction strategies.
- Participatory Rural Appraisal (PRA) training in Lira (December 1995), two week's course.

Work experience

Country Director- South Sudan (March 2011- to date) - World Relief

Responsible and accountable for the overall programmatic and financial management of World Relief's operations, as well as logistical operations in South Sudan. The key role is to ensure that the programs implemented in Sudan are within the framework of WRs objectives and donor requirements, and are according to the guidelines, policies and procedures, as well as incorporate elements of the organizational mission, vision, and values. Providing strong leadership to a growing and diverse country program, with direct oversight and management of international and local staffs. Ensuring the formal and informal review/evaluation of staff performance, including written evaluation of each direct report on a semi-annual basis. Providing professional, personal, and spiritual leadership to the World Relief country team in all aspects of its operations, assigning and delegating tasks where required. Develop, implement, and update a three to five year strategy for World Relief programming in South Sudan. Have ultimate responsibility and accountability for all financial matters in the field. Responsible for developing the overall country strategy. This includes developing and managing the program budget.

Develop appropriate institutional structures and strategies for all long-

term WR work, with special attention to establishing strong partnerships with existing entities and national institutions.

Country Director- Darfur – Sudan (July 2010- March 2011) - World Relief;
Responsible and accountable for the overall programmatic and financial management of World Relief's operations in Darfur, as well as logistical operations in Khartoum.

Country Program Manager (Uganda)- Medical Assistance Programs (MAP) International- *From May 2007 – November 2009. I was responsible in providing strategic, administrative and operational leadership to the country program. This was to ensure the development, implementation and integrations of relief and development programs that serve MAP's programmatic vision within Uganda Country program. Managed and ensured quality engagement through appropriate structures, standards, staffing, available resources, and policies adhered to for the strategic program areas, which correspond to the standards set by the country and International Office.*

Program Manager- Jogjakarta (Indonesia) - World Relief: - *From November 2006 – May 2007; Was responsible and accountable for the overall planning and management of World Relief's Disaster Response projects and operations for Core House Project in Jogjakarta – central Java, Indonesia.*

Operations Manager and Interim Field Director (Sudan-Darfur) World Relief: - *From December 2005 to 30th September 2006, worked with*

World Relief- Darfur Relief Collaboration. As Operations Manager (as Interim Field Director for one month), I assisted the Field Director in the management of the entire program - Food security, Nutrition, Health, NFI, Water and Sanitation (having four expatriate and 42 national staffs under my direct supervision). The specific tasks involved: - Supporting the Field Director in developing and implementing the program. Initiation and undertaking needs assessments and monitor the interrelated factors affecting the program, representing the Field Director in his absence to the Government authorities, UN, NGOs and maintain relationship.

Agriculture and Food Security Manager (Sudan- Darfur)- World Relief: - From July 2005 to November 2005. The position was responsible for the development and implementation of the World Relief / DRC Food Security program in Darfur. This is part of the multicultural team, worked very closely with local communities and authorities, relevant government departments, UN agencies and NGOs. Major activities included donkey improvement, de-worming and use, seed and farm input procurement and distribution, training of beneficiaries on tree planting, crop production and wood fuel-efficient stoves.

Programme Officer (Uganda) - Save the Children: - From June 2003 to July 2005, worked for Save the Children in Uganda for Children Affected by Armed Conflict and Disaster (CACD)- Emergency.

Agriculture Extension Supervisor (Uganda)- World Vision:- From October 2000 to May 2003, worked for World Vision as Agriculture Extension Supervisor and Acted as Project Manager (6 months). The position was to

provide the entire coordination of Food Security plan and training activities in the programme areas of Gulu district. I supervised 10 field extension staffs, distribution of farm inputs (seeds and hand hoes), carry out assessments, staff and community trainings on improved practices and wood fuel efficient stoves construction, taking charge of the project assets and resources, and accounting for them all.

Area Credit Manager- Lira District Local Government: - From Nov. 1997 to September 2000, worked for Lira District Local Government Development Programme (LDDP) as Area Credit Manager. Supervise all the credit delivery and recovery process from the beneficiaries.

Agriculture Officer- CPAR: - From July – October 1997, I worked for Canadian Physician for Aid and Relief (CPAR) as Agricultural Officer. This was towards provision of technical support to the field staff in the programme operational areas.

Agriculture Trainer- World Vision:- From May 1991 to October 1996, I worked for World Vision as Agriculture Trainer, providing technical skills to farmers on household food security intervention for increased food and incomes.

Other relevant data

- Very good at computer in words, excel, power point and outlook.
- Driving skills for motor vehicles class "A" and "B"

- Project proposal development and writing
- Very good interpersonal and communication skills
- Excellent report writing
- Good advocacy skills
- Working through partnership and representation.

Qualities:

- *Hard working, adaptable and innovative.*
- *Honest and Accountable*
- *Dependable*
- *Team Player*

Referees:

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