# academicJournals

Vol. 6(2), pp. 16-23, March 2015 DOI 10.5897/MPR.2014.0110 Article Number: A82BFC951813 ISSN 2141-2596 Copyright © 2015 Author(s) retain the copyright of this article http://www.academicjournals.org/MPR

**Medical Practice and Review** 

# Full Length Research Paper

# Retention challenges of human resources for health: What are the alternatives incentives for retention of skilled health workers in Uganda health sector?

# Hizaamu Ramadhan

C/O Uganda Management Institute, Plot 44 52, Jinja Road, P. O. Box 20131, Kampala, Uganda.

Received 5 March, 2014; Accepted 23 March, 2015

Available literature shows that retention of human resources for health is underpinned by a number of factors in Motivation-Hygiene Theory key which include human resource development, financial incentives, and personal and professional support mechanisms. These are all linked to motivation and productivity. There is convergence of opinion that staff retentions required packaging different bundle of incentives depending on the staff cadres and location in the health service delivery system. This paper which was premised on literature review analyzes the main issues that impinge on retention of human resources for health in the region and Uganda in particular. It further delves into the options that the ministry of health and government of Uganda can consider to minimize staff migration from rural areas to greener pastures. The discourse in this paper ends with a conclusion against the backdrop of how these challenges can be addressed and the emphasis for pragmatic approaches as opposed to theoretical perception in addressing the challenges in human resources for health retention.

**Key words:** Human resources for health, human resource retention.

# INTRODUCTION

The belief among scholars that human resources are the most important element in delivering health services is cosmopolitan. In fulfilling the mission, goals and objectives of the health sector in Uganda largely depends on having the qualified staff in the appropriate positions at the right time. According to Siddique (2003), Wood (1999), Ogbonna and Whipp (1999) and Budhwar (2000), it requires that such staff are committed towards delivering on their mandates given the appropriateness of

the work environment. To this end, management of human resources for health (HRH) has continuously occupied a central stage since its effectiveness determines health service delivery outcomes.

Health worker retention and migration are very important areas to the Uganda Ministry of Health. Joint Learning Initiative (2004) published a report estimating that 1 million additional health workers are needed in Sub-Saharan Africa alone, nearly triple the number

\* E-mail: rhizaamu2002@yahoo.com. Tel: +25677408816 or +25675408816.

Author(s) agree that this article remain permanently open access under the terms of the <u>Creative Commons Attribution</u> <u>License 4.0 International License</u>

currently working in the region. The World Health Organization (WHO) has since updated these data, and the outlook is even grimmer. According to the WHO, 36 of the 57 countries that are suffering from a serious shortage 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 this gap. Countries with the highest relative need to have the lowest number of health workers. The Africa region suffers from more than 24% of the global burden of health, but has access to only 3% of the world's health workers (WHO, 2006) and Uganda is not an exception to this. 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 and Labonte, 2004). And, these statistics mask the rural/urban divide, as doctors congregate in urban areas leaving the rural areas even more underserved. 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. Such a situation is also reflected in the Uganda situation. 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 Center 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 Clemens and Pettersson (2006), Uganda is 22nd on the list with 45% of its doctors working abroad. The bottom line is that the 21st century organization is one in which human resources are the greatest asset. Despite efforts invested in addressing retention of HRH in Uganda, the problem has continued to persist, thus affecting the quality of health service delivery. The need by the Ministry of Health in Uganda to go beyond lip service to ensure that HRH become a core component of its strategic planning in both the private and public sectors cannot be over emphasized.

This paper gives an account of the contextual underpinnings to the retention of human resources for health in Uganda and further delves into the options that the ministry of health and government of Uganda can adopt. The discourse in this paper is grounded on literature review and it ends with a conclusion against the backdrop of how these challenges can be addressed and the emphasis for pragmatic approaches as opposed to theoretical perception in dealing with retention of health workers.

#### **Problem statement**

The inability to retain HRH in Uganda's health care delivery system has continued to adversely affect service

delivery over the years. A trained and skilled health workforce at the right place with adequate motivation and support are crucial to achieving the Millennium Development Goals (MDG) targets by 2015. Despite a concerted effort in Uganda to provide a national system approach for the recruitment and placement of such a health workforce, the system is found to be fragmented, politicised and under financed. According to Marek et al. (2005), attraction and retention of qualified and skilled health workers, especially in rural and remote areas remains a challenging issue for the Uganda health system. There have been disparities observed in the placement of staff where political influence has been observed in the placement of a new cadre in urban areas or suburbs. In the Uganda public sector, health care workers are especially dissatisfied and demoralised with the irregular nature of transfers that do not appear to follow any specified human resource policies. Moreover, the poor access roads to health facilities coupled with irregular support supervision by district and national level technocrats; low salaries and lack of social amenities in rural areas contributes to widespread staff absenteeism (Ministry of Health Uganda, 2013).

In Uganda, although there is agreement that HRH must be given priority in budgetary allocations, little attention has been focused on literature review regarding the important issues that HRH face in order to stay in their places of posting. The thinking that salary increment or availing social amenities will result in staff retention does not seem to hold fort given the fact that the health workers in highly paying private health service provider continue to leave (Ministry of Health Uganda, 2013). During the financial year 2012/2013, Government of Uganda opened up to recruitment of additional health workers to address understaffing. A total of 6,172 (actual need for Health Centre fours and Health Centre threes at the time was 10,210 vacancies) health personnel was approved for recruitment. Based on actual needs for health workers, 10,210 vacancies were advertised and 86% of the candidates that were offered the job reported to work. According to the Uganda Ministry of Health Annual Health Sector Performance Review 2012/2013 (Table 1), enrolled nurses, clinical officers, laboratory technicians and assistants had the highest recruitment rates. Dispensers, nursing officers, midwives, public health dental officers, theatre assistants, ophthalmic clinical officers and anesthetic officers were among the cadres who turned up least.

The overall recruitment rate for all cadres was at 71%, that is, 7,211 out of 10,210 jobs advertised but this did not reflect the actual number of staff who reported for duty. It was likely that the overall reporting and retention could have been below the recruitment rate given the limited staff accommodation facilities; opportunities for further career development and other incentives especially in the hard to reach and stay areas of Uganda. A health workers audit carried out by the Ministry of

Staff cadre	Positions advertized	Positions filled	%
Nurses (all categories)	3,108	2,688	86
Clinical officers (all categories)	1,254	989	79
Laboratory technicians and assistants	1,246	905	73
Midwives (all categories)	1,610	1,067	66
Other cadres	1,997	1,270	64
Doctors (all categories)	371	196	53
Dispensers	179	43	24
Anesthetic officers and assistants	445	53	12
Total	10,210	7,211	71

**Table 1.** Summary of the recruitment rates by cadre.

Annual Health Sector Performance Report 2012/2013.

Health in 2011, established that 42% of all health worker positions were vacant. Staff shortages were more acute for lower level health facilities such as for health centre where around 55% of the positions were vacant, compared to Regional Referral Hospitals with an average of 28%. Overall, the proportion of filled positions went up from 56% in 2010 to 58% in 2011 which was still below the target of 75% staffing level set by the Ministry of Health (Ministry of Finance, Planning and Economic Development Uganda, 2013). This pointed to the need for improving staff financial and non financial incentives to attract specialized health worker cadres especially in the rural areas which have shouldered the biggest burden of the effects have continued to get the least share of health services, thus affecting development initiatives in the country. Such developments continue to undermine the government's commitment towards equitable development opportunities for its population.

This literature review based article analyzes the incentives or interventions health workers themselves most prefer through discrete choice analysis and their motivational preferences for potential strategies to increase attraction and retention in the country's rural and remote settings.

# Objectives of the review

The review was intended to specifically aggregate issues that impinge on attraction and retention of HRH in their areas of posting for improved quality of health services in Uganda. It aimed at creating a better understanding of how the retention of HRH is understood in the reality of Uganda's and global perspectives. The priori expectation was that such gaps would be relevant to the management of HRH at national and district local government levels. This review was premised on the following research questions:

(1) How is the HRH function regarded by different scholars?

(2) What are the bundles of incentives needed to increase attraction and retention of the HRH?

#### **METHODOLOGY**

This article draws its foundation from literature and theoretical review using qualitative approaches. It establishes the available literature in the field of HRH retention in Uganda and at global level. The abundance of literature on HRH could not facilitate an exhaustive review; however, the issues brought to surface can form the basis for empirical research in this area. In order to capture as many relevant publications as possible, a wide range of databases were searched to identify primary studies relevant to this review.

# Theoretical framework

This paper is underpinned by the Herzberg (1959) Motivation-Hygiene Theory. The theory recognizes two factors that involve job content (motivation factors) which tend to lead to job satisfaction. These factors are related to the nature of the work itself and the rewards that flow directly from the performance of the work. In relation to human resources for health, the motivating factors include employee growth; the work itself, responsibilities assigned to the staff; achievements made on the job, career advancement; and recognition for good work done. Absence of these factors on the job tends to lead to dissatisfaction among workers. This implies that such workers who are "not satisfied" do not only tend to restrict productivity; they just do not get involved in their job or put forth the extra effort to do a good job. On the contrary, workers who are "satisfied" put in additional effort thus increasing productivity. The factors which involve job context (hygiene factors) tend to lead to job dissatisfaction and include policies and administration, supervision, interpersonal relations, status, working conditions, security and salary. When these factors are considered good, or acceptable, workers do not tend to become "satisfied", they simply become "not dissatisfied". However, productivity is not restricted but is just held at an acceptable level. When workers become dissatisfied with any of these factors they tend to restrict output. It should be noted that the two dimensions are not opposite ends of the same continuum, but instead represent two distinct continua. A few job characteristics functioned in both directions. This implies that motivation of health workers requires putting these factors in appropriate bundles to enhance productivity and maximize staff retention. The contents of the bundles depend on different situations in which health workers find themselves and which health service managers should manipulate to retain staff. This paper

limits itself to four categories, namely, human resource development, financial incentives, and personal and professional support mechanisms; which combine both the hygiene and motivation factors.

#### **RESULTS AND DISCUSSION**

Hereunder, an analysis of the scholarly perspective to the HRH function as well as incentives needed to increase attraction and retention of HRH is elaborated.

# The scholarly perspective to the HRH function

There are varied definitions of human resource management espoused by different scholars and practitioners. But simply put, human resource management is the organizational function that deals with recruiting, managing, developing and motivating people, including providing functional and specialized support and systems for employee engagement and managing systems to foster regulatory compliance with employment and human rights standards (Strandberg. According to Flippo (1984), human resource management is "planning, organizing, directing, controlling of procurement, development, compensation, integration, maintenance and separation of human resources to the end that individual, organizational and social objectives are achieved." From the aforementioned definitions, one can consider human resource manage-ment as the art of and maintaining procuring, developing competent workforce to achieve the goals of an organization in an effective and efficient manner. These definitions hold for human resources for health which is essentially concerned with all the activities that contribute to successfully attracting, developing, motivating, and maintaining a high-performing workforce that result in improved health service delivery. HRH being a human resource management function, it can be considered as "a set of organization-wide and people-oriented functions or activities deliberately designed to influence the effectiveness of employees in the organization" (Inyang, 2001). Storey (1995) sees human resource management as a distinctive approach to employment management which seeks to achieve a competitive advantage through strategic deployment of highly committed array of culture, structure and personnel techniques. The human resource is, in fact, one significant resource and a source of distinctive competence in the organization, which must be planned to enhance organizational survival and growth (Inyang, 2000; Oribabor, 2000). A health system with health professionals in the required quantity and quality at leadership, managerial, and technical levels, deployed where and when needed, and motivated to perform their functions is the basis for quality health services delivery.

Gilson and Erasmus (2005) noted that by encouraging the retention of health staff within countries especially in the public and rural health services that preferentially serve the poorest populations, is important that policy and decision makers see the problems of retaining staff in these locations (the push factors underlying migration) as linked to the factors that undermine motivation and productivity. They further argue that policies to address retention issues (and so encourage health workers to stick and stay in country settings) are, thus, also likely to address poor motivation and weak productivity. These two sets of problems often go hand in hand with poor health worker's attitudes and behaviours towards patients. So tackling these problems may have double benefits for health system performance, contributing to adequate availability of competent staff, as well as enhanced staff responsiveness to patients.

The WHO (2010) global policy recommendations on rural retention provides guidance by describing various strategies countries can pursue to increase access to health workers in rural and remote areas through a range of retention interventions. These cover four main categories: human resource development, financial incentives, and personal and professional support mechanisms which are all linked to motivation and productivity as posited by Gilson and Erasmus (2005). Due to the complex nature of the social, professional, and economic factors that influence motivation and productivity, a bundle or combination of well-selected interventions is needed to make rural postings more attractive to health workers as suggested by the global recommendations.

# Incentives needed to increase attraction and retention of HRH

There are various forms of incentives which can be packaged severally to attract and retain human resources for health depending on different contexts. Below is an analysis of four main incentives categories which include human resource development, financial incentives, and personal and professional support mechanisms upon which the findings of this paper are premised.

# **Human resource development**

According to German Technical Corporation (2007) report on Malawi health care systems, career development is seen as an important means of retaining staff. A number of initiatives are usually undertaken to have medical, nursing and clinical officer specialists, and other health professionals undergo continuing professional development as a measure to attract and retain them. This helps staff to progress in their career without having to be away from patient care. The lack of a career structure for health workers is a serious defect in any HRH system. While a lot of emphasis is placed on technical skills development, there is limited focus on health management and leadership which is a major component of health service management, yet health professionals are in position of management and leadership in the

health facilities. Their inability to effectively manage these establishments is a disincentive arising from mismanagement of the local resources including subordinate staff. This in itself contributes to staff attrition.

Maseko et al. (2008) contended that training and professional progress were important motivational determinants, as they enabled health professionals to take on more demanding duties and positions and to achieve personal goals of professional advancement. They argued that training nurtures personal objectives of health workers and their value system while allowing them to cope better with the requirements of their job. Where opportunities for training are available, they tend to be especially important for young health professionals. This is especially so if the training is coupled with support supervision rather than an inspectorial approach; there is value added to human resource development and health service delivery. It facilitates on job skills transfer without diverting staff from their routine duties. The implication is that upgrading staff qualifications through local continuing education and support supervision is a factor in retaining staff in rural health facilities.

Career development can improve self-efficacy and therefore an individual's locus of control within their work setting. Lehmann et al. (2008) established that poor career paths and promotion opportunities lead to health workers feeling stuck and therefore more susceptible to the "pull" factors of migration. In the Uganda case, health workers are reluctant to work in rural areas as the opportunity for career development was less than that found in urban areas. Health workers take pride and are motivated when they feel they have the option to progress within their health system, an opportunity which is usually more readily available in urban areas where access to information is much easier. Job definition is also significant, not only in terms of affecting general satisfaction and organizational commitment, but also in supervisor-assessed conscientiousness and how staff assessed how they were getting along. It can be concluded that where health workers are assured of career development, their retention is likely to be enhanced. A strategy which gives incentives to staff located in remote areas take precedence in career development which can be an added incentive to health worker retention.

#### Financial incentives

Studies evaluating the importance of salaries and incomes of health workers on health systems performance show that health workers salaries and income affect health systems performance in multiple ways. The classic studies by Hertzberg et al. (1959) described basic pay and safety as hygiene factors without which motivation, performance, morale and the ability of employers to attract and retain staff were not affected by other incentives. In their study, Muula and Maseko (2006) noted that financial incentives alone did not resolve

motivation problems when applied on their own. In a related study by Mathias (2008), it was concluded that financial incentives alone would not keep health workers from migrating but the fact that they take on second jobs was a pointer to the likely attrition. This implies that financial incentives should be integrated with other forms of incentives to form bundles that reinforce one another in order to motivate and retain health workers. However, when the salaries are very low in absolute terms, they can particularly de-motivate health workers since they feel that their skills are not valued. Furthermore, they became overworked when taking a second job to supplement their income. In Uganda, taking on second jobs is a common occurrence and they range from working in private health care to running private health-related businesses (such as drug stores, private dispensaries) and non-related health related activities. Health workers also engage in extracting informal fees from patients, or seeking per-diem payments by attending workshops and seminars.

# **Remuneration differentials**

According to the Uganda National Development Plan (2013) from 2010/2011 to 2014/2015, the health sector has experienced challenges related to recruitment and retention of qualified staff mainly due to low remuneration. In 2010, there was a very low doctor to patient ratio of 1:24,725 and a nurse to patient ratio of 1:11,000. Both at an international and regional level, remuneration of health workers in Uganda is much lower than most other countries. For example, a doctor in Kenya earns approximately four times more than their counterpart in Uganda (Ministry of Health Uganda, 2008). As a result, staffs leave government facilities to work elsewhere or are engage in secondary forms of employment.

A study conducted in Ghana by Witter et al. (2007) showed pay structures and sources of income varied widely among health care cadres. For example, 26% of the public sector doctor's monthly income was basic salary as compared to 43% for mid-level workers such as medical assistants. Allowances for additional hours worked contributed the largest portion of the doctor's income. Similar findings were found in Zambia where 40% of the total income of public sector doctors was composed of allowances (Ministry of Health Zambia, 2007). This may imply that allowances decompress the salary structures of health workers in Africa. A comparison of doctors and community nurse's salary in Ghana showed that doctors' income was three times higher than that of community nurses. This increased to four times higher when allowances were included (Witter et al., 2007). A similar situation existed in Zambia where doctor's allowances in the public sector meant that they were paid four times more than nurses or midwives (Ministry of Health Zambia, 2007). McCoy et al. (2008) have argued that the size of pay differentials between

different types of health workers (e.g. doctors and nurses) could also affect morale, working relations and available mix of cadres. Such differences might also affect both retention within countries and distribution of health workers between geographic areas-urban/rural and between public and private sectors.

# Levels of remuneration

The limitations in adequacy of health workers incomes reflect the endemic deficiencies of remunerations among public servants in Uganda. Government funding for the health sector has continuously remained inadequate to provide the salaries and allowances required to attract and retain the needed number of health sector staff. Salaries for health workers need to be raised to meet those of neighbouring countries such as Kenya, otherwise the country stands an ever increasing risk of trained staff to continue leaving the country for better paying jobs abroad. Witter et al. (2007) noted that public sector nurses in Ghana earned nearly eleven times as much as the gross national income per person, whereas public sector doctors earned about thirty two times the gross national income per person. General civil service salaries were only four times the gross national income per person. Differences in earning between doctors, registered nurses, auxiliary nurses in the public sector and average gross national income person have also been studied in Burkina Faso and Nigeria and huge differences have been reported (Gupta et al., 2003; Ensor et al., 2006). In Malawi, nurses working with international Non Governmental Organizations (NGOs) earned 54 times more than the gross national income per capita, while those working with local NGOs earned about 36.5 times more that the gross national income per capita (Imani Development, 2005). Such salary differentials may not necessarily apply in Uganda given the very low salaries earned by the lower health worker cadres like nurses. The differences in earning power could be explained by several factors one of which is the geographic area where the health worker is based. For example, opportunities for private practice are mainly found in urban areas where most of the rich live, while in rural areas, opportunities exist to grow food. Furthermore, incomes for different grades of health workers are high in the private for profit health sector as compared to the public sector or not for profit-private health sector.

# Remuneration, performance and motivation

Studies by Chirwa et al. (2008) assessed the effects of locum and relief schemes on staffing levels. An additional study by Mathias (2008) demonstrated the impact of locum scheme on health service performance. In all cases, these studies showed reduced maternal mortality and increased caesarean sections. There were, however,

significant unintentional disincentives found in both relief and locum schemes. Although salaries are important; they were not what motivated staff. A study by Bradley and McAuliffe (2009) of midwives and clinicians in four Malawi rural hospitals found that insufficient financial remuneration had a negative impact on retention and performance. The main demotivating factors identified were limited opportunities for career development and further education and inadequate or non-existent human resources management systems.

A study by Lehmann et al. (2008) showed that financial package was only one of a number of incentives that South African doctors felt would attract them to stay in remote areas. A systematic review of incentives to attract health staff to remote areas in Africa found that the usual incentives available to health sector human resources management are probably insufficient to provide the package of incentives needed to attract staff to stay in remote areas. It can be concluded that a multisectoral approach is needed to build up what might be termed the basic bundles of health staff retention especially in remote geographical areas of the country.

# Personal and professional support mechanisms

Recognition and appreciation either from managers, colleagues, or from the community is a factor in health staff retention. A study by Mathauer and Imhoff (2006) confirmed that the starting hypothesis that non-financial incentives and human resource management tools play an important role with respect to increasing motivation of health professionals. Adequate human resource management tools can uphold and strengthen the professional ethos of doctors and nurses. This entails acknowledging their professionalism and addressing professional goals such as recognition, career development and further qualification. It must be the aim of human resources management/quality management to develop the work environment so that health workers are enabled to meet their personal and the organizational goals. It was also noted that workers are encouraged to take results from their work, which is useful to the society and in taking care of people. In Uganda, often reform programmes have focused on a limited number of channels, such as financial incentives to influence worker behaviour, and neglected less tangible incentives such as recognition and achievement. The current staff appraisal systems are more formal and done annually rather than striving to acknowledge staff contribution on more regular basis. It is important to also focus on recognition, as good relations with superiors can be an important motivating factor.

The role that management plays in providing professional support mechanisms is a strong motivational factor. Through an encouraging and supportive attitude, superiors can strengthen their subordinates' self-efficacy and thus foster personal efforts for the achievement of

organizational goals; which is what Maseko et al. (2009) termed as the "can-do" component of motivation. However, studies consistently provided opinions from health workers who stated that their supervisor's management and leadership skills were inadequate and this led to demotivation of the workforce. In Uganda, the support supervision mechanisms are rather insufficient given the limited resources that health managers get to move down to lower health care delivery systems. Skilled managers have the ability to professionally motivate their employees by ensuring that staffs are able to do their jobs. All too often in resource-poor institutions, management roles are assigned to staff who are not adequately trained. Effective managers are also responsible for lobbying on behalf of the needs of the health workers, and without their commitment to the staff, factors affecting the motivation of health workers will not be identified or addressed.

Hospital infrastructure and availability of necessities required to perform tasks are the other personal and professional support mechanisms. The lack of materials to use in executing tasks is a de-motivator. Lehmann et al. (2008) contend that the work of health workers is demanding and efforts made to ensure that they are able to do their job utilizing their knowledge to the fullest, within a safe environment, should be an intrinsic component of any plan to increase retention. For workers to be effective, they must have drugs and supplies, and be able to use these inputs efficiently to maintain a level of motivation. Even if the knowledge, skills and staff levels are high, the delivery of services will remain poor, without functioning facilities, proper equipment and available drugs. Hospital infrastructure and the availability of supplies should be a principal consideration and patient care. whether preventative, primary, emergency or ongoing, cannot be effectively carried out without the correct resources. Poor infrastructure does not warrant confidence from the health workers working there, or from the patients who are seeking treatment.

# **Conclusions**

The findings from literature review suggest that there may be a number of effective strategy bundles to attract and retain health workers in rural and remote areas of the country. There is convergence of opinion that no single strategy can be used to retain HRH; and these differ from one situation to the other. Any form of incentives for retention of HRH should take into account the four main categories: human resource development, financial incentives, and personal and professional support mechanisms that are directly linked to motivation and productivity. While salary is important to all cadres, it is notable that when a combination of other highly valued interventions is offered, such as career promotion and study opportunities, salary became less of an issue. This position is consistent with recent literature, which

contends that increasing salary alone is not enough to motivate health workers to work in rural and remote areas; a bundle of appropriate incentives is needed.

# RECOMMENDATIONS

Any decision regarding which incentives or interventions to include in a national retention strategy needs to be determined by stakeholders based on political and economic feasibility. A key factor in the decision-making process should focus on the capacity to deliver on the selected incentives or interventions. Regardless of the incentives or interventions that will comprise the retention strategy, functionality of the human resources management systems must be emphasized. This includes having strong HRH planning skills and effective human resource information systems to keep track of how many health workers are practicing in rural and remote areas and the schedule for when they are due to receive their particular incentives.

#### **Conflict of interest**

The author has not declared any conflict of interest.

#### **REFERENCES**

Bradley S, McAuliffe E (2009). Mid-level providers in emergency obstetric and newborn health care: factors affecting their performance and retention within the Malawian health system. Hum. Resour. Health 7:14.

Budhwar PS (2000). Strategic Integration and Development of Human Resource Management in the UK Manufacturing Sector. Br. J. Manag. 11(4):285-302.

Chirwa M, Bowie C, Lungu D, Maseko F, Nkosi L (2008). Study Report on Locum System in the Health Sector, Malawi. College of Medicine, Blantyre, Malawi.

Clemens MA, Pettersson G (2006). Medical Leave: A New Database of Health Professional Emigration from Africa. Washington DC: Center for Global Development. Working Paper No. 95.

Flippo EB (1984). Personnel Management (Sixth Edition), McGrawHill Book Company, New York.

Ensor T, Chapman G, Barro M (2006). Paying and motivating CSPS staff in Burkina Faso: evidence from two districts. Initiative for Maternal Mortality Programme Assessment. Aberdeen, Scotland: University of Aberdeen.

German Technical Corporation (GTZ) (2007). Human resources for health. Health Management Unit.

Gilson L, Erasmus E (2005). Supporting the retention of health resources for health: SADC policy context. Centre for Health Policy, School of Public Health University of Witwatersrand. Regional Network for Equity in Health in Southern Africa (EQUINET) Health Systems Trust (HST) Equinet Discussion Paper No. 26.

Gupta MD, Gauri V, Khemani S (2003). Decentralized delivery of primary health services in Nigeria: survey evidence from the states of Lagos and Kogi (Ingles). Development Research Group, Human Development Sector, Africa Region, World Bank.

Herzberg F (1959). The Motivation to Work. Print book: English, 2nd ed. New York: Wiley.

Imani Development (2005). NGO Remuneration Survey: Imani Enterprise, Blantyre, Malawi.

Inyang BJ (2000). Human resource planning (HRP) and budgeting: An

- agenda for a functional public service. Afr. J. Bus. Econ. Res. 1(1):138-146.
- Inyang BJ (2001). Harmonizing human resource management (HRM) practice in the public and private sector. Hum. Resour. Manag. 10(7):8-14, 21.
- Joint Learning Initiative (2004). Human Resources for Health: Overcoming the Crisis. Boston, MA: Harvard University, USA.
- Lehmann U, Dieleman M, Martineau T (2008). Staffing remote rural areas in middle- and low-income countries: a literature review of attraction and retention. BMC Health Serv. Res. 8:19.
- Marek T, O'Farrell C, Yamamoto C, Zable I (2005). Trends and Opportunities in Public-private Partnerships to Improve Health Service Delivery in Africa. Africa Region Human Development Working Paper Series, World Bank.
- Maseko FC, Nkunika HZ, Bowie C (2008). The impact of a relief scheme as an incentive in tackling human resources for health shortage in Malawi: a comparative case study of Chiradzulu and Mchinji district health offices. College of Medicine, Blantyre, Malawi.
- Mathauer I, Imhoff I (2006). Health worker motivation in Africa: the role of non-financial incentives and human resource management tools. Hum. Resour. Health 2:24.
- Mathias J (2008). To evaluate the impact of skilled health personnel incentives, provided by Ministry of Health and Dowa District Health Management Team, on facility based maternal morbidity and mortality in Dowa district. College of Medicine, Blantyre, Malawi.
- McCoy D, Bennett S, Witter S, Pond B, Baker B, Gow J, Chand S, Ensor T, McPake B (2008). Salaries and incomes of health workers in Sub-Saharan Africa. Lancet 371(9613):675-681.
- Ministry of Finance, Planning and Economic Development Uganda (2013). Health workers' shortage in Uganda: Where should the government focus its efforts? Budget Monitoring and Accountability Unit (BMAU), Briefing Paper (6/13).
- Ministry of Health Uganda (2008). Motivation and retention strategy for human resources for health. Ministry of Health.
- Ministry of Health Uganda (2013). Annual Health Sector Performance Report Financial Year 2012/2013.
- Ministry of Health Zambia (2007). The Zambia public expenditure tracking and quality of service delivery survey in the health sector. Lusaka, Zambia: Ministry of Health.

- Muula AS, Maseko FC (2006). How are health professionals earning their living in Malawi? BMC Health Serv. Res. 6:97.
- Ogbonna E, Whipp R (1999). Strategy, Culture and HRM: Evidence from the UK Food Relating Sector. Hum. Res. Manag. J. 9(4):75-90.
- Oribabor PE (2000). Human resource management: Strategic planning approach. Hum. Res. Manag. 9(4):21-27.
- Schrecker T, Labonte R (2004). Taming the brain drain: a challenge for public health systems in southern Africa. Int. J. Occup. Environ. Health 10(4):409-415.
- Siddique NA (2003). Human Resource Management in Bangladesh Civil Service: Constraints and contradictions. Int. J. Public Adm. 26(1):35-60.
- Storey J (1995). Development in management of human resources. Oxford: Blackwell.
- Strandberg C (2009). The role of human resource management in corporate social responsibility: issue brief and roadmap. Report For Industry Canada. Principal, Strandberg Consulting. 6325 Sperling Avenue, Burnaby, BC.
- Uganda National Development Plan (2013). Uganda National Development Plan; 2010/11-2014/15-April 2010.
- Witter S, Kusi A, Aikins M (2007). Working practices and incomes of health workers: evidence from an evaluation of a delivery fee exemption scheme in Ghana. Hum. Resour. Health 5:2.
- Wood S (1999). Human Resource Management and Performance. Int. J. Manag. Rev. 1(4):367-413.
- World Health Organization (WHO) (2006). The World Health Report 2006. Working Together for Health. Geneva, Switzerland.
- World Health Organization (WHO) (2010). Increasing access to health workers in remote and rural areas through improved retention: Global policy recommendations. World Health Organization. Geneva, Switzerland.