

**BRAIN DRAIN IN THE PUBLIC HEALTH SECTOR IN KENYA:  
A CASE OF KENYATTA NATIONAL HOSPITAL**

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## **DECLARATION**

I hereby declare that this research project is my original work and has not been presented to any other university or institution of higher learning for a degree, diploma or certificate award or anywhere else for academic purposes.

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## **SUPERVISOR'S APPROVAL**

This project has been submitted for examination with my approval as the university supervisor.

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## **DEDICATION**

I dedicate this project to my children; Keith and Heidi. They are the source of my strength. They are part of my reason for continued hard work and commitment to academic success. May this piece of research work always inspire them to rise to greater heights of academic prosperity.

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## **ABBREVIATIONS AND ACRONYMS**

AIDS	-	Acquired Immune Deficiency Syndrome
HIV	-	Human Immunodeficiency Virus
KNH	-	Kenyatta National Hospital
RoK	-	Republic of Kenya
WHO	-	World Health Organization
UK	-	United Kingdom
USA	-	United States of America
UNCTAD	-	United Nations Conference on Trade and Development

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## ABSTRACT

Kenya loses, on a daily basis, her best academicians, scientists, doctors, nurses, accountants, and other sought after professionals, through brain drain, into other richer countries. The question is: Why? The impact of the problem is detrimental to the development of the African continent. It also seems to be a continuous issue without any trend of ceasing. This study explores causes of brain drain in the public health sector in Kenya. In particular, this study aims at establishing the factors influencing brain drain at the Kenyatta National Hospital and ultimately pinpoint possible solutions to stem brain drain. It will also elaborate on some already identified possible solutions to the problem. Trained human resources are fundamental for well-functioning health systems, and the lack of health workers undermines public sector capacity to meet population health needs. Existing research on human capital migration in the public sector in Kenya has focused on documenting the number of healthcare professionals migrating to developed countries, other have focused on effects of brain drain. This study focused on causes of brain drain in the public health sector in Kenya. The objective of this study was to establish the factors that influence brain drain at the Kenyatta National Hospital and to recommend possible solutions to curb brain drain. This study documents the factors that contribute to brain drain among health professionals in Kenya. This is descriptive study, which is based on conceptual analysis, literature reviewing, and theory building. The approach was to review relevant literature using electronic search and what other authors have said about the subject, to collect data using an interview guide and to analyze it using content analysis approach. The results can then provide a policy framework to advice on how to stem brain at the Kenyatta National Hospital and the public health sector as a whole. The findings of this study that of most of the health professionals desire to migrate. This is due to two factors; home country conditions that push them to leave and the actions and conditions in developed countries that attract them. From the findings of the study, brain drain could pose a serious problem to the management of public health institutions in Kenya. There is therefore need for intensive consultations and consensus building between all stakeholders. In order to stem brain drain, concerted effort need to be put on worker motivation and retention, career planning and job satisfaction programmes. There also is need for the public health sector to keep records of all professionals; this will play a critical role in planning human resource requirement of the health sector in Kenya

**Key words:** Brain drain, public health sector, Kenyatta National Hospital, health professionals.

# CHAPTER ONE: INTRODUCTION

## 1.1 Background of the Study

Brain drain is the loss of intellectual and technical personnel through migration from one country to another. It normally implies the movement of highly trained professionals from poorer to richer countries in search of better opportunities. The term brain drain appears to have gained wide usage in the late 1960s when developing countries experienced mass migration of skilled personnel to developed countries. Perhaps the most notable of this is the use of H1-B visa in the 1990s by the USA to import skilled workers mostly from India for the then booming high technology sector. Professionals from Europe have moved to America and those from Africa to America and Europe.

Brain drain phenomenon is a serious issue in developing countries especially in Africa. Most countries continue to lose a sizeable number of professionals and intellectuals in various sectors of the economy. This continuous loss of skilled personnel is considered a contributing factor to slow growth in African countries. The high demand of African workers every part of the world is an indication that the quality of training accorded to health workers in African training institutions are high but measures for retaining these individuals has been the biggest challenge. The reason for this continuous outflow of workers from developing countries has been attributed to two factors; factors in home country often described as barriers to workforce retention or 'push' factors and factors that attract professionals to a foreign country or 'pull' factors.

Like most other African countries, Kenya is facing a human resource crisis in the public health sector. Health professionals, such as doctors and nurses, are emigrating to developed countries to seek better employment prospects. Statistical information from the World Health Organization (2003) shows wide global variations in health professional availability in developing countries, ranging for doctors from 2.3 to 664 per 100,000 populations against the recommended ratio of 1 doctor to 1000 populations. These large variations in doctor to populations' ratio compromise the quality of health for world's poor populations. Statistics from nursing council of Kenya indicate that on an annual basis average 840 nurses apply for verification of their certificates with an intention to migrate. Countries of destination are USA accounting for 59% of applications and UK at 27%. According to Clemens (2003) Kenya officially reports 7,830 certified medical doctors. However, 51% of them (3,975) are working abroad.

Studies on public health sector brain drain African countries have shown a direct relationship between low wages in public health sector and the decision to migrate (Kingma, 2006). Other factors include lack of employment opportunities, lack of career development opportunities and increase workload (Joint Learning Initiative, 2004), nursing shortage in developed countries and lower work load and (Stilwell et al., 2004) career advancement opportunities among other factors. Research in the areas of health sector brain drain in Kenya has been done by a few researchers. (Nwachukwu , 1997) found that brain drain leads to reduction in national income Macharia (2003) affects the local labour market, Kirigia, et al., (2006) loss of huge human capital resource, Machayo and Keraro (2013) to loss of mentors, loss of supervisors, loss of role models and loss of tax revenue.

Brain drain has denied Kenya the benefits of a well trained work force in the health sector. Shortage of health professionals has been a major impediment in the fight against disease such as malaria, HIV/AIDS, and infant mortality especially among the poor. In the current study, the researcher gathered information from Kenyatta National Hospital's health workers on the factors in and outside Kenya that contribute to workers move to developed countries. Whilst health professionals encompass a wide range of people with skills working in health, the focus of this study was on full time healthcare professionals at the Kenyatta National Hospital.

### **1.1.1 Brain Drain**

Brain drain deprives developing countries of their most highly educated people who would be natural leaders in terms of economic and social development. This makes these countries unable to come out of poverty, which is often worsened by violence and extremism, as well as passiveness and hopelessness. The achievement of many developing countries' Millennium Development Goals and particular national targets is threatened or hampered due to inadequate human resources and this situation is compounded by the loss of both essential and beneficial professionals such as scientists, medical doctors, engineers, academics, nurses, technicians, administrators and managers who emigrate to more economically developed countries (Dassin, 2005).

Brain drain has long been the subject of policy debate and development research. It has also received significant attention in the media. The migration of health workers is particularly visible, with large numbers of foreign health professionals working in developed countries while health crises grip African and other developing countries.

Nevertheless, despite a significant body of research, reliable data are elusive and effective solutions even more so. Adams (2003) observed that losses to sending countries from emigration of skilled emigrants, particularly in the cases of smaller and least developed countries, are clear. In recent years, some scholars such as Kirigia et al., (2006) have also pointed to "brain gain" effects, such as remittances, return migration of migrants with added skills, diaspora contributions to development, and the effect of the opportunity for overseas education and employment in increasing incentives for professional education in sending countries. It is generally agreed, however, that these positive effects are unlikely to be sufficient to compensate for negative effects in most developing countries (Adams 2003).

The most extensive policy debate on skilled migration has dealt with health workers. However, there is now a growing consensus that the principal responses to date have been ineffective. These include measures to prohibit migration of skilled workers or to pay incentives for return. Developed countries systematically encourage the immigration of skilled labour. According to Kingma (2006), professionals continue to be attracted by the higher salaries and generally better working conditions in the rich countries. In the health field, it is unlikely that brain drain issues can be addressed effectively without broad international cooperation to reduce inequality in health systems and health outcomes between countries. The shortage of health personnel in developed as well as developing countries needs to be met through an expansion of education and training capacity, both overall and in the most disadvantaged countries in particular. Global health budgets need to be provided with sustainable financing from both national and international sources, including new innovative financing mechanisms such as those being developed by UNICTAD.

The perspective on health sector brain drain needs to shift to the development of health systems rather than focusing only on the migration of health workers. The supply of health workers is just one of multiple factors affecting health systems equity. Promoting quality health systems both requires and attracts skilled health professionals. If that is accepted as the shared goal, both at national and international levels and by health institutions and professionals themselves, then distribution of personnel to meet the needs can be addressed not only by encouraging return of skilled professionals to their countries of origin, but also by more flexible forms of temporary assignment and collaboration across national lines.

### **1.1.2 Health Sector in Kenya**

Kenya is a signatory to the United Nations (UN) Millennium Declaration and has committed itself to reduce poverty, improve health and promote peace, human rights, gender equality and environmental sustainability. The country has established time-bound and quantifiable targets on health related millennium development goals (MDGs): Reducing the under-five mortality rate by two-thirds between 1990 and 2015, reducing the maternal mortality ratio by three-quarters between 1990 and 2015 and halting and beginning to reverse the spread of HIV/AIDS, malaria and other major diseases by 2015.

The country's health system is organized in a hierarchical pyramid. Village dispensaries comprise the largest – and lowest – level of the pyramid. District health centers and provincial hospitals are fewer and higher on the pyramid, and the Moi Teaching and Referral Hospital in Eldoret and Kenyatta National Hospital in the capital city, Nairobi, sits at the top. The Ministry of Health sets policies, develops

standards, and allocates resources for health care services; however, in accordance with the decentralization scheme, the district is the level at which most management takes place. The government reports that there are more than 5,000 health facilities in Kenya. The government oversees 41% of health centers, NGOs run 15%, and the private sector operates 43%. The government operates most hospitals, health centers, and dispensaries, while the private sector operates nursing homes and maternity facilities catering to higher income clientele.

Kenya faces a significant shortage of physicians, with only 4,500 in the entire country, according to the World Health Organization. Whereas the United States counts on 26 physicians per 10,000 people, Kenya has just one doctor per 10,000 residents, a ratio that is below average for the Africa region. More than 50% of Kenyan physicians practice in Nairobi, which, with an estimated 3 million people, represents a small fraction of the country's population. Only 1,000 physicians work in the public sector, which serves the majority of Kenyans. A corps of 37,000 nurses' supplements physician care, as do traditional midwives, pharmacists, and community health workers. The migration of trained health workers from the public sector to higher paying positions in the private sector, or away from Kenya altogether, has made retaining qualified health personnel a persistent challenge. Kenya has one of the highest net emigration rates for doctors in the world, with 51% leaving the country to work elsewhere.

The presence of so few health personnel in Kenya can make it difficult for the government to carry out adequate disease surveillance, maintain accurate statistics regarding disease outbreaks, and report relevant findings to neighboring countries and

international organizations. To improve its information gathering and to better track its progress in meeting the health-related Millennium Development Goals, Kenya has developed a Health Management Information System (HMIS) and is currently working with international partners to improve its capacity to provide timely and relevant data regarding the country's health situation to policymakers and other stakeholders.

### **1.1.3 Kenyatta National Hospital**

Kenyatta National Hospital was founded in 1901 with a bed capacity of 40 as the Native Civil hospital, it was renamed the King George VI in 1952. The Hospital was built to fulfill the role of being a National Referral and Teaching Hospital, as well as to provide medical research environment. KNH became a State Corporation in 1987 with a Board of Management and is at the apex of the referral system in the Health Sector in Kenya, this follows the KNH Board Order of 1987 contained in the legal Notice No.109 (Kenya Gazette Supplement No. 23 of 10th April 1987). According to the legal Notice the function of the hospital were stated as follows: 1) to receive patients on referral from other hospital or institution within or outside Kenya for specialized care, 2)to provide facilities for medical education for the University of Nairobi and for research either directly, or through other cooperating health institutions.3) to provide facilities for education and training in nursing and other health and allied professions, 4) to participate, as a national referral hospital in national health planning.

The hospital is run by a statutory board. There is, however, a management team for the purpose of proper execution of policies and effective management. The Director is

in charge of the day to day running of the hospital. Below the Directors are two deputy directors, The Deputy Director Clinical Services and Deputy Director Administrative services. There are managers who manage administrative services and Heads of Department who manage the various clinical and non clinical services. The hospital has a capacity of 2000 beds with annual outpatient attendance of 600,000 visits and annual inpatient attendance of 89,000. Currently, there are total of 4800 employees against 6000 the hospital is designed to have in order to operate effectively. In essence therefore, the hospital is not operating optimally. Such shortfall leads to poor quality service (KNH, 2013)

## **1.2 Research Problem**

In the Africa where the level of unemployment is high, human resources for health remain in short supply and even where available are poorly motivated and increasingly attracted into wider international labour market. The numbers of health professionals migrating from Africa to the brain drain has reached a peak in recent years in apparent response to huge demands emanating from the developed countries. These demands were occasioned by demographic changes, aging populations, and aggressive recruitment policies, better remuneration and flexible working hours (Davlo, 1999). Developing countries on the other hand are grappling with poor governance of health services, lack of technology and equipment, lack of sustainable funding for production of new health workers (Stilwel, 2005) and micro-economic policies that cap the absorption of health workers in the public sector and hinder efforts to retain skilled health workers through limiting salaries and worsening working conditions (Stilwel, 2004)

Public health sector in Kenya is the major provider of health services. Due to high poverty levels and burdens of diseases such as HIV/AIDS and malaria, the public health sector is the only available choice for majority of the population. Kenya has attempted to develop new standards to improve working conditions in the health sector through salary increases, introduced health reforms initiatives such as decentralization of health services, opportunities to engage in private practices and training as retention strategies (Machayo and Keraro, 2013). These initiatives have not yielded much; developed countries are still depriving Kenya of worth investment embodied in her human resources for health. If the current trend of migration is not curtailed, the chances of achieving the Millennium Development Goals (MDG) would remain bleak. Such continued loss of healthcare professionals will continue to contribute to further underdevelopment of Kenya by keeping the majority of the people in the vicious circle of ill health and poverty.

Previous studies on health sector brain drain in Kenya focused on the effects rather than the causes. Machayo and Keraro (2003) posits that drain has lead to loss of mentors, loss of supervisors and loss of role models, (Nwachukwu , 1997) reduction in national income, Macharia (2003) reduction on employable health staff and Kirigia, et al., (2006) loss of huge human capital resource. This study therefore shifted from the effects of brain drain to its causes. This study was achieved through a case study of Kenyatta National Hospital. Kenyatta National Hospital occupies an important place in public health sector; it employs the largest number of health professionals, is an active participant in policy formulation and is at the peak of national referral system. In addition, it is the centre for treatment of complicated medical conditions in Kenya and in the East and Central African Region. The outcome of the study has

therefore provided a picture of the status of public health sector in Kenya. This study sought to answer the question; what Factors influences brain drain of health professionals' at the Kenyatta National Hospital?

### **1.3 Research Objective**

The objective of this study was to establish the factors that influence brain drain at the Kenyatta National Hospital.

### **1.4 Value of the study**

The study is of practical relevance to all stakeholders in public health sector. It provides the government with useful insight that will guide policy formulation in human resource for health in the public health sector in Kenya. In terms of industry, it provides players with useful insights of how best to effectively manage human capital for health to stem brain drain.

It provides empowerment to the management of Kenyatta National Hospital with knowledge on various human resources issues to successfully reverse brain drain, the findings opens a door for development of strategies for eradicating brain drain not only in public health sector but in all sectors in the country. It is also an encouragement to the hospital and other public institutions to be responsive and receptive to employees' problems and also assist policy makers to understand the reasons why Kenyan and African workers leave their countries where the knowledge and expertise is so much required. Health sector is important for the economic growth and development of the country.

In theory, it contributes to the body of knowledge in the area of health sector brain drain. It is also useful to the health professionals in understanding their work environment and to make informed decision on whether to migrate or not while at the same time identifies further research gaps that other researchers may need to undertake in future.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Introduction**

This chapter presents theories related to brain drain as documented by various scholars. It gives a brief analysis of brain drain as a concept and reviews literature on brain drain in Kenya with a particular focus on the public health sector.

### **2.2 Theoretical Foundation**

Brain drain is said to occur when a country becomes short of skills as people with such expertise emigrate. Alternatively, it can be described as the loss by countries of essential and needed professionals via emigration to other countries. Skilled workers included in this class are scientists, doctors, engineers, academics, nurses, managers, and other professionals who have received a tertiary education (Clemens, 2009). Brain drain as a concept emerged in the 1960s triggered by the massive migration of British scholars to the United States. The early emigration of Kenyans as with most Africans was a product of colonialism. Brain drain is closely associated with migration. It is the migration of skilled and intellectuals normally from developing countries to developed countries. Various scholars have brought forward theories to explain the process of migration.

The first theory is the neoclassical migration theory. This theory originated from the works of Hicks (1932), Lewis (1954) and Harris and Todaro (1970). According to this theory, migration is driven by geographic differences in labour supply and demand and the resulting differentials in wages between labor-rich versus capital-rich countries. The central argument of the neoclassical approach thus

concentrates on wages. (Faist 2000; Dustmann et al, 2003; de Haas 2008; Massey et al.1998) observed migration patterns tend to be therefore hump-shaped: migration rates accelerate with the growth of country's wealth as more individuals or households are able to fund migration. Then, as the country continues to develop, the emigration rates diminish and the incentives to migrate change. Critics of this theory argue if what counted were wage differentials, then poorest in the world would want to move first, evidence from around world doesn't support this.

The second theory is the new economics of migration theory has come to challenge some of the assumptions of the neoclassical approach; it shifted the focus of migration research from individual independence to mutual interdependence (Stark 1991). As such, migrant decisions are not based purely on individual utility-maximizing calculations but are rather a household response to both income risk and to the failures of a variety of markets – labor market, credit market, or insurance market (Massey et al.1993). Hence, migration in the absence of meaningful wage differentials or the absence of migration in the presence of wage differentials does not imply irrationality but rather compels us to consider a set of other variables related to relative deprivation and risk-aversion and risk-minimization of household income (Stark 1991; Stark 2003). The New Economics of Migration Theory has been criticized for sending-side bias and for its limited applicability due to difficulties in isolating the effects of market imperfections and risks from other income and employment variables.

The third theory is the World System Migration Theory. This theory links the determinants of migration to structural change in world markets and views migration as a function of globalization, the increased interdependence of economies and the

emergence of new forms of production (Massey et al. 1993; Sassen 1988; Skeldon 1997; Silver 2003). The expansion of export manufacturing and export agriculture linked strongly to foreign direct investment flows from advanced economies to semi-developed or emerging economies has led to a disruption in traditional work structures and has mobilized new population segments into regional as well as long distance migration. Capital mobility is hence a crucial factor for the world system theorists. This theory deny that individuals truly have free choice in making migration decisions and present them in more deterministic forms, as pressured into movement as an outcome of broader structural processes (De Haas 2008).

The fourth is the Dual labor market theory, like world system theory, links migration to structural changes in the economy but explains migration dynamics with the demand side (Massey et al, 1993). Developed by Piore (1979), dual labor market theory posits a bifurcated occupational structure and a dual pattern of economic organization in advanced economies. Duality unfolds along the lines of two types of organization in the economy, namely capital-intensive where both skilled and unskilled labor is utilized, and labor intensive where unskilled labor prevails. The theory argues that migration is driven by conditions of labor demand rather than supply. The character of the economy in advanced countries creates a demand for low-skilled jobs which domestic workers refuse to take up due to, for example, status. As immigration becomes desirable and necessary to fill the jobs, policy choices in the form of active recruitment efforts follow the needs of the market.

The final theory is the network theory of migration. It does not look at the determinants which initiate migration but rather at what perpetuates migration in time

and space (Massey et al. 1993). Migrant networks which often evolve into institutional frameworks help to explain why migration continues even when wage differentials or recruitment policies cease to exist. The existence of a diaspora or networks is likely to influence the decisions of migrants when they choose their destinations (Vertovec 2002; Dustmann and Glitz 2005). The network theory also helps to explain the reasons why migration patterns are not evenly distributed across countries, but rather how they tend to form so-called migration regimes (Faist 2000). It suggests that migratory movements arise in response to prior existence of links between sending and receiving states, such as colonial ties, trade or investment flows (Castles and Miller 2009).

### **2.3 The Concept of Brain Drain**

The British Royal Society first coined the expression Brain drain to describe the outflow of scientists and technologists to the United States and Canada in the 1950s and early 1960s. The first studies analyzed this outflow and its political and social effects. These studies analyzed the impact of the high skilled migration on the social welfare of the countries involved in this flow of people. At the end of 1960s, several articles analyzed the consequences of brain drain on welfare. Sjaastad (1962), Weisbrad (1964): Positive Externalities of the Public Education, Bowman & Myers (1967), Bodenhofer (1967), Galtung (1967), Scientific Colonialism, Watanabe (1969): Brain Drain from Developing Countries to the Western Countries and Johnson (1969): How the Welfare of those Remaining at Home Changes in Presence of Brain Drain). Summarizing, the results of these studies are that the main motivations to migrate were political and social; the effects of these migrations are bad either for welfare or for the social structure of the sending countries, the solution suggested is to

create and fortify the role of the International Organizations and Institutions on the management of the migration flows.

During the 1970s the brain drain was characterized as a North-South, developing-developed country issue (Carrington & Detragiache 1999). The possibility that the welfare of those remaining in developing countries could be reduced by an outflow of educated manpower had been recognized in the literature as well. As in the 1960s, also in the 1970s there are several studies on the brain drain and its welfare impact. In particular, there are the works of Baldwin (1970), Scott (1970) (they analyzed the opportunity to apply the human-capital's approach to study the brain drain phenomenon). These authors concluded that welfare of non-migrants would fall only if the migrants' contribution to national output were greater than their income. For several reasons, the literature believes that the conditions for brain drain to be welfare-deteriorating are often verified.

In the mid-1980 with the birth of the so called New Growth Theory, researchers looked at brain drain phenomenon. Paul Romer (1986, 1987, 1990) and Robert Lucas (1988) concluded that immigration of skilled migrants stimulates the dynamics of economic growth. Finally, many authors tested how the brain drain is a key element in the international commerce because of its influence on some crucial production's factors. These debates persist in the 1990s thanks to the works of Rach (1991) (he stresses the necessity to reconcile the themes of the Commerce with the ones of Migrations), Gould (1994) (The immigrants' consumptions in their native countries and the consequences on the commerce) and Ishikawa (1996) (Scale's Economies of the productive factors and migration). Summarizing, the results of these studies are

that the main motivation to migrate was the more productivity and higher income of the skilled workers in the developed countries. The effects of these migrations are bad for the growth and for the welfare of the sending countries. In the long run increase the divergence between the developed and developing countries.

Finally, in the 1990s and early 2000s, some authors analyzed the circumstances where the Brain Drain becomes “Brain Gain”. Several theoretical papers examine the impact of migration prospects on human capital formation within a context of uncertainty. In a poor economy with an inadequate growth potential, the return of human capital is likely to be low and this would lead to a limited incentive to acquire education, which is the engine of growth. However, the world at large does value education at all hence, allowing migration to take place from this economy would increase the educated fraction of its population. Given that only a proportion of the educated residents would emigrate, the average level of education of the remaining population would increase (Beine et al., 2001.) Beine et al. (2001, 2003) and Docquier and Rapoport (2007). These findings let to the acknowledgement that international movement of educated people may have positive effects on the sending economy in terms of increased domestic enrolment and significant financial contributions through the remittances they send home.

The above literature on the brain drain has described and analyzed the pull and pushes factors leading in tandem to brain drain of highly-trained professionals and has concluded that; brain drain results in mostly or exclusively negative effects and harmful losses. The traditional brain drain literature has viewed the exodus of human capital as a “curse” for developing countries, leading to increased inequality at the

international level, with the rich countries getting richer at the expense of the poorer countries. The last century brought in the concept of ‘new brain drain’ or ‘new beneficial brain drain’ literature claiming that brain drain has a big impact on the number of skilled individuals in a sending country. Driven to achieve education and professionalism by the prospects of emigration, they form intellectual potential. As not all of them leave the country, a part of this extended capital stays and generates economic welfare and growth for their nation.

Emerging statistical and anecdotal evidence indicates that there are significant positive effects associated with the global skills flow. Benefits accompanying brain drain were analyzed in the works of Mountford (1997), Starl et al. (1997, 2004) Beine et al. (2001, 2003) and Docquier and Rapoport (2007). These findings led to the acknowledgement that international movement of educated people may have positive effects on the sending economy in terms of increased domestic enrolment and significant financial contributions through the remittances they send home. Some authors have recognized that brain drain brings exchange of knowledge, foreign direct investment and increased trade as a result of diaspora activity as well as skills know-how and work culture brought by return immigrants from their host countries (Chen and Boufford, 2006, Mills, et al. 2008).

Researchers have looked at Kenyan with regard to emigration experiences and outcomes. Siringi and Kimani (2005) observed that many Kenyans leave the country every year to study abroad but they never return after obtaining appropriate education. They seek jobs in their host countries. According to Kirui (2005), when highly skilled people leave the country it poses serious brain drain, robbing the country of essential

human capacity to help in socio-economic development. On the positive side, Nwachukwu (1997) examined the phenomenon of brain drain in Kenya, Ghana and Nigeria using a social opportunity policy and intervention model, her studies concluded that brain Kenya experienced a reduction of national income due to migration of talented professionals. Okoth (2003) examined the role of diaspora in development and saw enormous contribution of emigrants towards their national development through remittances.

### **2.3.1 Health Sector Brain Drain**

Brain drain is described by Lowell and Findlay (2001), as the emigration abroad of tertiary-educated persons at such levels and for such lengthy durations that their losses are not offset by their remittances home, by transfer of technology, or by investment or trade from the recipient country. This description however skirts the issue of permanent versus temporary migration and reinforces the fact that it is difficult to discern the true intentions of migrant professionals.

Migration and the resulting brain drain are a global phenomenon and universal problem. Especially in the health sector, there have been significant shifts of human capital from Europe to the United States, leaving a gap which is quickly filled by high-skilled immigrants from the Southern part of the world. According to the WHO (2006), Africa remains the sole continent still struggling with insufficient development in all fields. Education and the health sector continue to deteriorate and cannot keep up with the rising demand due to an annual population growth of about 3%; HIV/AIDS is spreading fast and inexorably, and the re-emergence of old communicable diseases such as tuberculosis and malaria, further weakening the

countries' systems and economies and increasing the demand for a functioning health system even more.

Although there are positives arising from global skills flow, we should not lose sight of the difficult situation in the health sector in developing countries like Kenya. When health professionals emigrate, there is a negative effect not only on treatment but also health promotion, disease prevention, and rehabilitation of those who remain behind, thus influencing their levels of health and productivity and general welfare. The problem of brain drain in Africa is huge. The shortage of health workers in a resource limited setting is a well established constraint to building sustainable, quality public health system and achieving improved health outcomes (WHO, 2006). The reason for this state of affairs is blamed on lack of sustainable funding for production of new health workers (Crisp, Gawanas and Sharp, 2008) and microeconomic policies that cap the absorption of workers into public health sector and hinder retention of workers through limiting salaries and worsening working conditions.

Most health professional education in Africa is provided and subsidized by governments, and professionals are produced for the health sector by publicly funded universities and colleges managed by the education sector. Unfortunately, studies of working health professionals across the African continent show extremely high levels of interest in emigration and a strong desire to leave, either temporarily or permanently (D. McDonald and J. Crush, 2002). Concerns about the long-term impact of the migration of health professionals from developing countries have recently led to a focus on the next generation, both in Africa (Dovlo and Nyonator, 1999). Many countries invest substantial financial resources in the training of physicians and

nurses. Clemens (2011) recently argued that the actual costs of health professional emigration are difficult to quantify and are often exaggerated. However, African governments clearly expect a return on their investment in the form of an increased pool of health human resources.

A number of push and pull factors, have been cited as influencing the decisions of health professionals to leave their countries of origin. Push factors refer to events in the country of origin that motivate professionals to leave whilst pull factors are the deliberate and/or unintended actions from recipient countries that attract health professionals to their health services Dovlo (1999), Martineau, Decker, et al. (2002), Meeus (2003), Padarath et al. (2003) and others have discussed the reasons underlying the brain drain in various papers. "Push" factors were used by Meeus (2003) and Dovlo (1999) in some studies on the brain-drain phenomenon to describe factors within source countries that compel professionals to emigrate whilst "pull" factors arise within recipient countries and attract intellectuals into their own systems. Padarath (2003), however, describe a system of push factors that exist in both source and recipient countries but which are mitigated in recipient countries by what they described as "stay" factors and in source countries by "stick" factors.

The push factors refer to the unfavourable conditions in Africa that drives people to leave. They include, among other factors, job scarcity, low wages, in Africa have been sharp and potentially troubling. He posed this question: how can public institutions retain professionals, researchers, and scientists, in the face of such sharp declines in average real wages? Dovlo (1999), Martineau, Decker, et al., (2002), Meeus(2003), Padarath (2003) and others have discussed the reasons underlying the brain drain in

various papers Pull factors are caused by increased demand for health professionals in developed countries and include attractive remuneration, new career and personal development prospects and active recruitment by those countries. The common use of a professional language such as English and similarities in professional training and systems arising from the colonial experience of African countries are also thought to enhance the pull factors

Numerous other factors contributing to the human resources for health crisis have been identified, including lack of sustained funding for production of new health workers (Stilwel, 2005) and macro-economic policies that cap the absorption of health workers into the public sector and hinder efforts to retain skilled health workers through limiting salaries and worsening working conditions (Stilwell, 2004). Migration of trained health workers to work in wealthier countries for higher salaries continues to plague resource-limited settings (United Nations: Millennium Development Declaration 2000). The primary cause of Brain Drain in Kenya is the difference among countries in economic and professional opportunities, hence the imperative to move from one area to another to improve their social and economic status.

## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Introduction**

This chapter presents the research methodology that was used in the study. It includes the research design, data collection method and data analysis method used in the study

### **3.2. Research Design**

This is qualitative research constituting a descriptive case study. It sought to establish the factors influencing brain drain at the Kenyatta National Hospital. It involves an in-depth, cross sectional examination of a single instance. According to Cooper and Schindler (2003), a study concerned with finding out who, what, when, where and how of a phenomenon is a descriptive study, which is the concern of the proposed study.

The case study was preferred since it facilitates intensive study of the concerned unit and provides an in-depth analysis of its behavior patterns. In addition, a case study method enriches generalized knowledge and makes it possible for a researcher to use one or more methods depending upon the prevailing circumstances. The objective of this study was a case study aimed at establishing the factors contributing to brain drain in at the Kenyatta National Hospital

### **3.2. Data Collection**

The source of the data for this research was primary. Data was collected through personal interview. An interview guide (see appendix) was used to collect data from respondents. With an interview guide, the respondent's feedback gave an insight to

his/her feelings, background, interests and decisions and gave as much information as possible without holding back.

Respondents for this study were senior officers (doctors, nurses, physiotherapists) at Kenyatta National Hospital (KNH) who the researcher believes are health professionals most affected by brain drain phenomenon. The departments covered in the study were; Obstetrics and Gynaecology, Paediatrics, Orthopaedics, Accident & Emergency, Medicine, Surgery and Critical Care Centre. Further, this group formed the senior management of KNH that play a key role in the management of health care workers in the hospital. It is the same group that assigns duties to staff in the hospital.

The target respondents therefore provided information on what factors contribute to brain drain of health professionals at Kenyatta National Hospital. Open ended questions were applied to avoid subjectivity that could arise by limiting the respondents to answer to questions

### **3.4. Data Analysis**

Data was checked for completeness, accuracy, errors in responses, omissions and other inconsistencies. The data was analyzed using content analysis since this study sought to solicit for data that is qualitative in nature. A comparison of data collected with theoretical approaches and documentaries cited in the literature review was done. Further, data obtained from various officers was compared against each other in order to get more relevant on the issues under study.

Data was analyzed using content analysis approach. Content analysis enabled the quantification and analysis of the presence, meaning and relationship of words and

concepts within the texts. In addition, it allowed inferences to be made about messages. Cooper and Schinder (2008) points out that content analysis measures the similarities or the 'what' aspects of the messages are present. He further points out that content analysis guards against selective perception of content and provides for rigorous application of reliability and validity criteria.

## **CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION**

### **4.1 Introduction**

This chapter presents the findings of the study and the analysis of data collected using the interview guides that were distributed to the senior officers (Doctors, Nurses and Physiotherapists). The senior officers were drawn from various departments at KNH. They are; Obstetrics and gynecology, Paediatrics, Orthopaedics, General and Specialized Surgery, medicine, Accident and Emergency, Critical Care Units, Rehabilitative Services and Dentistry.

Majority of respondents of this study expressed their desire to work in Developed countries. Their most preferred destination was USA, UK, and Australia. Their choice is determined by the language spoken in the particular country, economic development, security and future economic prospects. The minority preferred to work in an African country specifically due to good governance, improved infrastructure and good economic prospects.

### **4.2 Demographic Information**

Data on gender of the respondents revealed that majority (57%) were female while the rest (43%) were male. Age of respondents indicate that a (33.2%) were between the ages of 41-45 (16.7%) were between that ages of 25 to 30, (16.7%) were between 31 to 35, another (16.7%) were another (16.7%) were between the age of 46 to 50. A majority (66.7%) of the respondents had college education while (33.3%) had university education. An overwhelming majority (85.7) of the respondents indicated their desire to out migrate from Kenya. Their choice of destination countries showed a

preference for developed countries where (42.8) indicated that they wish to migrate to USA, (14.3%) had preference for Australia, another (14.3%) preferred UK, (14.3%) indicated preference for an African country- Botswana and country (14.3%) would work anywhere but not Kenya. The table below shows respondents demographic information

**Table 1: Demographic characteristics**

<b>Characteristic</b>	<b>Number</b>	<b>Percent (%)</b>
<b>Gender</b>		
Male	3	43
Female	4	57
<b>Age (years)</b>		
25-30	1	16.7
31-35	1	16.7
36-40	1	16.7
41-45	2	33.2
46-50	1	16.7
<b>Education</b>		
College	4	66.7
University	2	33.3
<b>Desire to migrate</b>		
Yes	6	85.7
No	1	14.3
<b>Destination country</b>		
USA	3	42.8
Australia	1	14.3
Any country apart from Kenya	1	14.3
Botswana	1	14.3
UK	1	14.3
Table 1		

Source: Research data

### **4.3 Push Factors of Brain Drain**

The major objective of this study was to establish the factors that influence brain drain at the Kenyatta National Hospital. The factors being assessed were home country factors that ‘push’ workers to foreign countries and destination country factors that

‘pull’ health professionals from developing countries. The finding of this study revealed that health professionals desire to migrate from Kenya not only to developed countries but also African countries particularly Botswana.

The push factors refer to the unfavourable conditions at the Kenyatta National Hospital that drive health professionals to employers in developed countries. These factors are both within and without the hospital. The results of this study provide a picture on the thoughts of health professionals as concerning their migrating from Kenya. Kenyatta National Hospital is at the apex of the national referral system. In practice, this should be the best place to work in but this study has revealed otherwise. Majority of health professionals interviewed expressed their desire to migrate. The results of this study are discussed here below.

#### **4.3.1 Remuneration**

Remuneration is the sum total of payments made to an individual for services rendered. These include wages, salaries, overtime pay, leave allowance and retirement schemes. According to the respondents, the most important factor determining their desire to migrate is level of remuneration.

The respondents indicated that their remuneration is low relative to what is paid to workers with similar qualification in other sectors. In addition, it was not commensurate with to the work load, their qualifications and their overall input in service delivery at the hospital. When compared with private health, the remuneration is way below them. Desire for higher remuneration is therefore, a motivating factor for migration.

### **4.3.2 Large Volume of Work**

Respondents indicated that, due to shortage of staff in the hospital, the work load is overbearing to staff. Statistics from the human resource indicate that the hospital capacity is for 6000 workers; only 4900 workers are currently employed. This shortage leads to straining of personnel. For example, the ratio of one nurse to number of patients is currently at one nurse for forty patients against the WHO recommended ration of one nurse to 5 patients. This leads to stress and loss of concentration and morale posing a danger to the patient and the service provider.

Owing to the cost of treatment in private health facilities, most of the Kenyan populations rely on public health facilities for their treatment. This situation is worsened by the recent decree by The Head of State to make maternity care free in all public hospitals. The number of expectant women visiting KNH has gone up without corresponding increase in the number of healthcare workers.

### **4.3.3 Lack of Career Growth and Advancement**

Lack of career growth and advancement opportunity, unfair promotions or favoritism, nepotism and tribalism were other reasons staff mentioned as prompting their desire to leave for better prospects in developed countries. They blame the management of the hospital for failing to manage the process of promotions, training and development fairly.

There were concerns over unfair allocation of training opportunities where a few staff are trained while the rest are left out. Respondents stated that concentrating knowledge in a few individuals is to them a sign of lack of confidence on their

abilities. They stated that despite training, certain individuals do not apply what is learnt in the work place.

#### **4.3.4 Lack of Tools and Equipment**

Respondents informed the researcher of lack of equipment for investigation of ailments, few if any tools, outdated equipment, shortage of beds, lack of supplies such as stationery and computers. This is made worse by lengthy procurement procedures that lead to delays.

Going by the recent allocation of 6% of the national budget to the health sector, this situation will not change soon. Due to increasing population and strained resources in the public health sector, health professionals are forced to use few tools to serve many patients. This situation leads to stress and lack of job satisfaction.

#### **4.3.5 Poor Leadership**

Respondents indicated that most of the supervisors at KNH lacked leadership skills. Appointment to positions of leadership is done without regard to supervisory training. They therefore lack the capacity to lead. This makes staff feel that the hospital do not care about or listen their complaints and suggestions. They have interpreted this as lack of concern, and unresponsiveness to workers plight.

Poor leadership led to absenteeism, lateness and arrogance among staff. Hardworking staff are left to step in for poor workers and this compromises service quality and leads to stress and burn out. Such dissatisfaction breeds desire to look for better opportunities elsewhere

### **4.3.6 Working Conditions**

Respondents spoke of poor hygiene in the wards; some roofs are leaking and water taps are not working. This exposes them to serious infections. Linen for the patients are torn and few. Such conditions frustrate workers and patients alike.

Interviewed staff indicated that due to lack of team work and negative attitudes from their juniors, productivity is low and delays are daily occurrences. There is lack of team work as staff work as individuals in an environment where team work is mandatory for effective performance. Factors outside the work environment were also found to influence the migration.

### **4.3.7 Bad Politics**

Respondents indicated that bad politics that splits the country into tribal lines is a factor that would push workers not only at the Kenyatta National Hospital but from the whole country. Due to bad politics, the hospital and the country at large cannot realize any meaningful progress.

Tribal based appointment prevents qualified staff from reaching their potential. Some express their dissatisfaction but the management does not listen to them. This forces them to look for opportunities elsewhere leading to brain drain.

### **4.3.8 Poor Infrastructure**

Respondents indicated that due to bad road network, they spend valuable time in the traffic jams. This is costly and time wasting. Unreliable public transport leads to stress when travelling to and from work. This is frustrating and costly to staff who already feel that their pay is insufficient to meet their needs and those of their families.

Poor roads lead to damage of their vehicles. They are forced to spend large sums of money in repairs, maintenance and replacement of vehicle body parts. These money, the feel could be used in productive activities that can boost their standards of living

#### **4.3.9 High Standards of Living**

This study found that respondents were very weary of the cost of living in the country. High house rents confines staff to certain estates. Cost of basic commodities is high, education, transport and communication are high.

Cost of living is a determinant to the kind of life people lead. Where the cost of living is high, remuneration must be raise to cushion citizens. This is not the case in Kenya. Constantly rising inflation is has made cost of living expensive. In comparison, developed countries provide education for free, transport is cheap and reliable and cost of foods is relatively affordable.

#### **4.3.10 Insecurity**

Respondents mentioned terrorism, carjacking, muggings as being rampant in Nairobi and other parts of the country. The uncertainty one experiences while travelling in Nairobi due to robberies is appalling. This is what makes them desire to migrate.

Respondents indicated that lack of reliable police force make them feel vulnerable to theft some from the police themselves. They look at the police not as a body to care for them but as one that want to take advantage of insecurity in the country for their own personal gain.

### **4.3.11 Corruption**

Respondents indicated that rampant corruption in the country has led to diversion of public resources to personal accounts. This has greatly reduced funding to the health sector. In addition, funds allocated to the sector are not utilized to improve service delivery because some end up in people's pockets.

In addition corrupt public officials including staff at the hospital give the medical profession a bad name. This affects staff when bad publicity changes the perception of the public towards health professionals. Staff in turn feel unappreciated, unloved and unrecognized.

### **4.4 Pull Factors of Brain Drain**

Pull factors of brain drain are the factors present in destination countries that attract health workers from Kenyatta National Hospital and the Kenyan public health sector at large to migrate. These are factors that act as attraction for workers from developing countries. It takes the form of work place conditions and conditions outside the hospital.

The findings of this study indicate that health workers migrate not only because of the problems at the home countries but also because of the actions of employers in developing countries as well as conditions outside the work place that attract workers from developing countries. These are discussed below;

#### **4.4.1 Availability of Good Equipment**

The respondents indicated that, as health workers, they view developed countries a good place to work in because of availability of good equipment in hospitals, something that is lacking in Kenya's health institutions as well as in most developing countries in Africa.

Availability of good and modern equipment will not only raise their morale but will widen their experiences and skills in the job. Acquisition of new skills and broadened knowledge in their professional areas make health professionals more marketable worldwide.

#### **4.3.2 Attractive Remuneration**

Good pay and attractive retirement packages. Pay packages in developing countries are higher than what is paid to them here. They stressed that the purpose of working was to get a good life which is not attainable in Kenya due to high cost of living.

Flexible working hours enables them to do many jobs and thus earn more income. Retirement packages are also higher in developing countries. This gives them security in their old age.

#### **4.4.3 Availability of Career Advancement Opportunities**

Respondents mentioned scholarships that are easily acquired in developed countries as an attractive component of foreign work places. The fact that they access to the best training in the world is another factor, the same training is of quality and can be taken online- at the comfort of one's home.

Flexible working hours and pay that is pegged on performance is another motivator especially for the hard working employees. Another one is research opportunities available in developed countries that would give them an avenue for professional development and global exposure.

#### **4.4.4 Better Working Conditions**

The respondents indicated that developed countries have made their work environment very conducive. This is through provision of tools and equipment of work. There is motivation to a doctor when all tools and equipment of work is available. They make them grow in skills and knowledge. Most developed countries provide day care for mothers where their young ones are looked after. This gives them time to concentrate in their demanding jobs.

Although the main determinants of migration are the conditions inside the work environment, respondents indicated that, conditions outside the work place are as important as those inside the work place. These are factors present in the external environment that according to respondents contribute to their dissatisfaction with working in Kenya. These factors are discussed below.

#### **4.4.5 Security**

Respondents indicated that security in developed countries is a major attraction to them. The assurance of going to work and arriving safely home is enough to make them migrate. Security of their children and property is also important to them.

Trusted police force and quick response in case of a problem is another attraction to health workers in foreign countries. Respondents indicated that due to presence of security personnel on patrol in estates and roads, the level of crime is low compared to what is experienced in Kenya and most developing countries in Africa.

#### **4.4.6 Government Support**

Respondents observed that the commitment of governments through the investment in health care in developed countries is exemplary making them see better prospects in career advancement facilitated by better experiences.

This investment is in terms of good training opportunities, opportunities for career advancement and availability of research funds gives them wide exposure boosting their careers. Possibility of international recognition is the main motivation to most of those wishing to migrate.

#### **4.4.7 Better Economy**

The respondents observed that decision to migrate is determined by the state of the country in which they wish to migrate to relative to that of Kenya. Good living standards; availability of affordable housing and food is an attractive component in developed countries.

This study indicated the desire of health professionals to live a good life at an affordable cost. This, they observed, is impossible in Kenya where the inflation rate continue to rise. Respondents expressed their desire to be able to save for their future..

## 4.5 Discussion

Brain drain is a serious impediment in Kenya's health development agenda. Those who migrate are some of the most highly experienced skilled and trained professionals in health, representing a major loss to the public health sector in Kenya. The causal factors are mostly related to working conditions and factors related to non working condition (conditions outside the hospital) both in Kenya and in migration destination countries. The strain on the health professional makes immigration an appealing alternative and policy makers must stem this trend.

The results of this study on the factors influencing brain drain at the Kenyatta National Hospital indicated that migration of health professionals is caused by both push and pulls factors. Our review of primary data collected through personal interviews suggests that the push factors often described as barriers to workforce retention include low remuneration relative to what is paid to workers in private and other sectors of the economy. This finding tends to affirm the findings of (Kingma, 2006, 2007; Dovlo, 2007), who together observed that wages was the major attraction of worker from poorer to richer countries, it also supports the neoclassical theory that argues wage difference between sending and receiving country is the main determinant of worker migration.

The researcher also identified poor working conditions, lack of professional development, large workload as other push factors of brain drain. This finding confirms the works of Dovlo and Martineau (2004), and Awases et al (2003). Other factors are poor governance, insecurity, bad politics, unfair recruitment and promotion practices, and stress due to large work load. Stilwel,et al., (2005) in his study of

Migration of Health Workers from Developing Countries made the same observation. In addition to the findings above, poor leadership, lack of tools and equipments of work, poor infrastructure, high standards of living, insecurity and corruption are some of the other factors influencing the decision of health professionals to migrate.

On the other hand, developed and often richer countries attract workers from Kenya's health sector because of, better remuneration, availability of equipment, attractive remuneration and corresponding flexible working hours enabling workers to pursue career advancement opportunity. These findings support the works of Meeus (2003) and Paradath (2003). Others are availability of research opportunities according workers growth opportunities and possible world wide exposure, good economy enabling them to save and invest for their future, government support for public health institutions, guaranteed security, and conducive working environment. Increased demand for health workers in developed countries aggravated by an ageing population is another factor.

Looking at the preferred country of migration destination, respondents indicated a desire to migrate to USA, UK, Australia and Botswana. Apart from the reasons given by the respondents, the researcher noted that, this trend of migration is influenced by the existence of historical ties. First, these countries are English speaking and secondly, respondents indicated that their choice of these countries were influenced by presence of their relatives in these countries. This finding support the Network Theory of Migration advocated Vertovec (2002); Dustman and Glitz (2005). According to this theory, the existence of a diaspora or network is likely to influence the decision of migrants when they choose their destination.

## **CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

### **5.1 Introduction**

This chapter presents the conclusions of the study in relation to the findings. The findings of this study have clearly revealed that brain drain continues to be a threat to the public health sector in Kenya. Concerted effort must be put in place to stem brain drain in the public sector if Kenya is to achieve millennium development goals.

### **5.2 Summary**

The objective of the study was to establish the factors that influence brain drain at the Kenyatta National Hospital. The study employed a descriptive research design. The target consisted of seven senior officers of the hospital. The researcher employed self-administered interview guides to gather data and information for the study.

Findings and observations revealed that; Brain drain is a serious impediment to Kenyatta National Hospital's vision of being "A world class patient-centered specialized care hospital". Factors related to working conditions and those in the external environment mainly associated with the political environment are the main causes of health professionals' brain drain. The findings of this study indicate that brain drain could pose a serious problem to the management of public health institutions now and for a long time in the future. Stemming brain drain requires input from various stakeholders in the health sector. These are; the government, the private sector, the nongovernmental organizations and the public at large.

### **5.3 Conclusions**

Health crisis in Africa has intensified with the advent of the HIV/AIDS epidemic and the ever growing populations. This has further expanded the demand for well-qualified health professionals. Creating a critical mass of retained health professionals to meet these huge tasks will be a tremendous challenge, and fairly drastic remedial measures need to be taken, in much the same way that developed countries have taken steps to recruit health professionals from poorer countries to meet their health demands.

Based on the findings, the heavy loss of health professionals poses the threat of collapsed health services and major risks to the lives of Kenya's poor. This calls for intensive consultation and consensus building between the developing and developed countries. A policy framework for curbing brain drain should be developed. There is also a need to explore policy options that encourage return or circular migration of health professionals from the destination countries back into Kenya. The Ministry of Health must be concerned about developing policies on how retain critical personnel. As a country, we need to increase the funding of public health sector to enable hospitals to buy necessary equipment and for improvement of workers' salaries.

### **5.4 Recommendations**

As observed by in the World Health organization in report of 2013, Brain drain in the public health sector is a serious a problem. Developed countries continue to deprive Kenya of millions of dollars worth of invaluable investments made in the production of health workers. This has lead to the growing double burden of communicable and non-communicable diseases leading to further underdevelopment of Kenya and

keeping a large proportion of the Kenyan population in the vicious circle of poverty and ill-health. This unacceptable situation should be urgently reversed through joint action by both developing and developed countries (WHO, 2006)

Remuneration levels are probably the most important factor in retention not only in the health sector but also in the whole public sector. The perceived unfairness of incentives and disparities between what is paid to other professionals and that of health professionals fuel migration. Like in developed countries, public health sector be paid additional duty hours allowance, which will increased incomes significantly. The management can also implement pay per performance as a measure to retain high performers. Another measure is to recruit more health professionals to reduce the work load.

Most of those migrating are highly qualified professionals. Developed countries often look for bright individuals who they entice with citizenship and good remuneration. Since it may be difficult to stop these highly qualified professionals from leaving, a number of locally designed health professionals such as clinical officers should be trained in advanced procedures and courses to equip them with necessary skills to perform critical duties. Another measure is the use of quotas or geographical criteria for selecting candidates for health professionals' training. Pure academic merit has been faulted for producing elitist professionals, because candidates coming from deprived communities with poor educational infrastructures are simply unable to compete with candidates from the elite urban schools. Professionals from such backgrounds and qualification are not attractive to international recruiters.

Encouraging citizens who have migrated to return back is another measure the country could consider. Facilitating temporary return to offer their skills in specialized services is another measure. This will enable them work for the country and to import the skills learnt in developed countries on treatment and management of diseases as well as to improve the management of health institutions in Kenya. A comprehensive data base of all health professionals who have migrated need to be set up to facilitate this exercise. The government should invest in comprehensive human resource management information systems that will provide sound data for policy formulation and decision-making.

There is need for improvement of the workplace environment through routine monitoring of quality of supervision, provision of tools and equipment of work, maintenance of high hygiene standards, fair and appropriate allocation of training opportunities, clear career paths and competitive recruitment practices. This will be realized if the government and all stakeholders in the health sector develop policy guideline for management of health sector in Kenya. Health care staff needs to be trained in management to be able to steer health institutions to make them transparent and accountable. Mentoring and in-service training by qualified personnel, allocation of care roles and referral patterns need to be clearly outlined to reduce workloads. Further focused studies should be done that will review staffing norms and standards, to set optimal staffing levels based on workloads and expected roles, making clear the deficits in facilities as a basis for planning.

Outside the workplace environment, the government is responsible for fighting corruption that stifles growth in the public health sector. Clear procurement

procedures devoid of corruption need to be set up. This could involve use of external experts to procure vital equipment for hospitals. Another measure is to fight insecurity through recruitment and retraining of the police force and acquisition of modern security equipment, creation of employment opportunities for the youth, allocation of more resources towards fighting terrorism and creation of citizen surveillance groups ('like the ten houses recently launched by the president). Change of political culture of tribalism, nepotism could be done through citizen empowerment. This will involve sensitization of the populace on the dangers of tribalism and other sectarian politics.

Health worker confidence in the stewardship of health resources and governance of services is a major influence in the morale of health professionals. Good health systems governance helps to resolve health worker issues by engaging a variety of political and technical stakeholders, including external development partners. Sharing information, building confidence and enhancing the credibility of the national policy decision making process should be a priority.

## **5.5 Limitations of the Study**

This study was carried out at the Kenyatta National Hospital only and therefore the causes of brain drain there cannot be replicated in other public health institutions in Kenya. The study faced both financial and time constraints. The duration for completion of the study was limited hence exhaustive and comprehensive research could not be carried out.

Lastly, this study focused on seven senior management staff while the organizations have a huge number of management staff in the middle and the lower levels. These

findings are therefore limited to the responses of senior management of Kenyatta National Hospital at the time of the study

## **5.6 Areas for Further Research**

This study has brought to the fore the various factors that influence brain drain in the health sector in Kenya. This research was based on all health professionals without regards to specific professionals and cadre of workers. There is therefore need for further research to monitor the causes of specific cadres of health professionals' brain drain, such as nurses, medical specialists, physiotherapists, radiologists and others.

There is need to also look at the levels of dissatisfaction of each push and factor of migration and to identify the determinants of health staff motivation, including their health-related quality of life and retention strategies.

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# APPENDICES

## Appendix 1: Interview Guide

### Introduction

This Interview guide is designed to gather information on the factors influencing Public health professional's brain for academic research work. Your response will be accorded strict confidentiality. Please respond to the questions honestly.

### SECTION A: Demographic information.

1. Gender:

Male  Female

2. Age:

18-24  25-30

31-35  36-40

41-45  46-50

50 and above

3. Department .....

Job Title .....

4. What is your highest education level you have attained?

(a) None.....

(b) Primary.....

(c) Secondary.....

(d) University .....

(e) College .....

(f) Other (specify).....

**SECTION B**

**A Push factors for brain drain**

4. In your opinion, do you think healthcare staff at the hospital, given a chance, would leave Kenya to work in another country?

- Yes                       No

If yes, which is the likely country/countries of destination?.....

.....

5. What factors in your opinion are present in the KNH workplace environment that would contribute to the desire of staff to work in another country?

(Get a brief explanation of each of the factors)

i.....

.....

ii.....

.....

iii.....

.....

iv.....

.....

v.....

.....

vi.....

.....

6. What factors in your opinion are present in Kenya but outside the work environment contribute to the desire of public health workers to migrate?

(Get a brief explanation in order of their relative importance)

i.....

.....

ii.....

.....

iii.....

.....

iv.....

.....

v.....

.....

vi.....

.....

**B. Pull factors for brain drain**

7. What in your opinion are workplace factors present in a foreign country that attracts staff from public health sector in Kenya?

8.

(Get a brief explanation in order of their relative importance)

i.....

.....

ii.....  
.....

iii.....  
.....

iv.....  
.....

v.....  
.....

vi.....  
.....

9. What in your opinion are the non-workplace factors present in a foreign country that that attracts healthcare staff from Kenya to migrate?

(Get a brief explanation of each factor)

i.....  
.....

ii.....  
.....

iii.....  
.....

iv.....  
.....

v.....  
.....

vi.....  
.....

10. What measure can be put in place to stem brain drain at KNH

(Get a brief explanation)

.....

.....

.....

.....

.....

.....

11. What measures can be put in place to stem brain drain in the public health sector?

.....

.....

.....

.....

***Thank you for your cooperation***

## Appendix II: Introduction Letter



**UNIVERSITY OF NAIROBI**  
**SCHOOL OF BUSINESS**  
**MBA PROGRAMME**

Telephone: 020-2059162  
Telegrams: "Varsity", Nairobi  
Telex: 22095 Varsity

P.O. Box 30197  
Nairobi, Kenya

DATE 6/10/2013

### TO WHOM IT MAY CONCERN

The bearer of this letter MAGDI HELLEN JEBICH

Registration No. DG1/GS646/2011

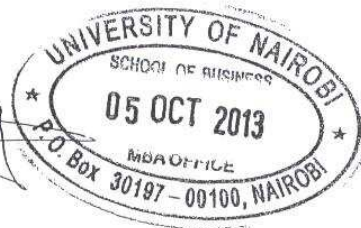
is a bona fide continuing student in the Master of Business Administration (MBA) degree program in this University.

He/she is required to submit as part of his/her coursework assessment a research project report on a management problem. We would like the students to do their projects on real problems affecting firms in Kenya. We would, therefore, appreciate your assistance to enable him/her collect data in your organization.

The results of the report will be used solely for academic purposes and a copy of the same will be availed to the interviewed organizations on request.

Thank you.

  
**PATRICK NYABUTO**  
**MBA ADMINISTRATOR**  
**SCHOOL OF BUSINESS**



## Appendix III: Request to Collect Data

Hellen Jebichiy Magoi  
P.O. Box 57609, 00200  
Nairobi  
10<sup>th</sup> October, 2013

Department of Ethics and Research  
Kenyatta National Hospital  
P.O. Box 20723, 00202  
Nairobi

Dear Sir,

**REF: AUTHORITY TO COLLECT ACADEMIC RESEARCH DATA**

---

I write to request for authority to collect research data for academic purposes. I am a second year student of Master of Business Administration at University of Nairobi. My topic of study is Brain Drain in the Public Health Sector in Kenya: A Case Study of Kenyatta National Hospital.

Attached is a proposal that has been approved by my supervisor.

I look forward to your urgent response.

Thank you

  
Hellen Magoi

P/No. 534824

## Appendix IV: Authority to Collect Data



Ref: KNH/UON-ERC/A/416

KENYATTA NATIONAL HOSPITAL  
Hospital Rd. along Ngong Rd.  
P.O. BOX 20723 Nairobi  
Tel: 726300-9  
Fax: 725272  
Telegrams: MEDSUP, Nairobi  
Email: [KNHplan@Ken.Healthnet.org](mailto:KNHplan@Ken.Healthnet.org)

14<sup>th</sup> October 2013

Hellen Jebichiy Magoi  
University of Nairobi  
NAIROBI

Dear Hellen,

**Research proposal: "Brain Drain in the Public Sector in Kenya: A Case of Kenyatta National Hospital"**

This is to inform you that the Kenyatta National Hospital Ethics and Research Committee has reviewed and approved your above revised research proposal for the period 14<sup>th</sup> October 2013 – 13<sup>th</sup> October 2014.

You will be required to request for renewal of the approval if you intend to continue with study beyond the deadline given.

On behalf of the committee, I wish you fruitful research and look forward to receiving a summary of research findings upon completion of the study.

This information will form part of the database that will be consulted in future when processing related research study so as to minimize chances of study duplication.

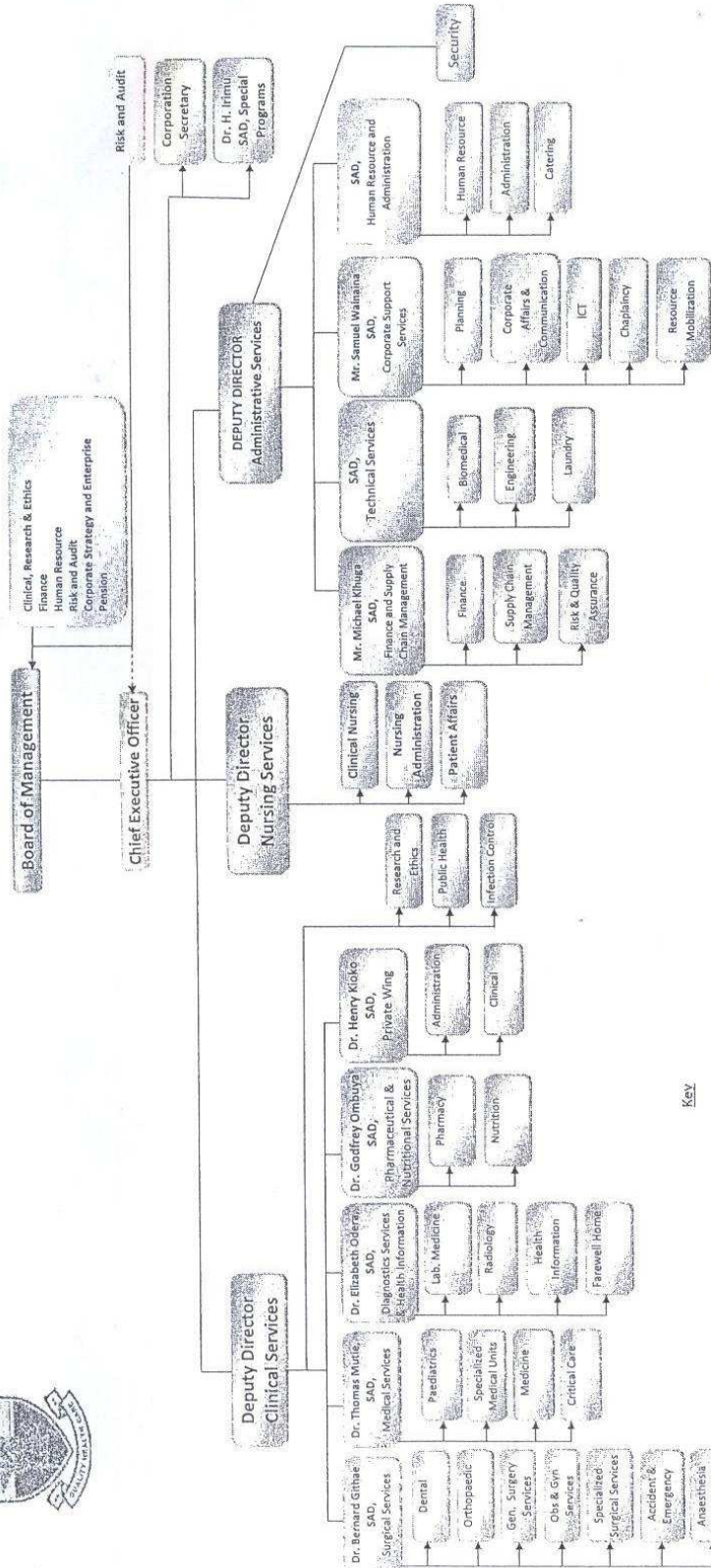
Yours sincerely

**PROF. A. N GUANTAI**  
**SECRETARY, KNH/UON-ERC**

c.c. THE Chairperson, KNH/UON-ERC  
The Deputy Director CS, KNH  
Supervisor: Dr. James Gathungu, University of Nairobi  
Reader: Dr. Mark Mudenyio, KNH

# Appendix V: KNH Organization Chart

## THE KNH DECENTRALIZED STRUCTURE



NB:

All the Senior Assistant Directors (SADs) will have Officers from Finance, Supply Chain Management, Human Resource and Administration. Each division will handle all issues relating to Staff Performance, Promotion, Training, Discipline, Welfare; Procurement, Finance, Quality Assurance, Corruption Prevention, Occupational Health and Safety. All letters from staff should therefore be addressed to the SADs for action.

**Key**

- Urology, Gastro-intestinal, Surgery
- Plastic Surgery, Thoracic & Cardiovascular Surgery, Neuro-Surgery, Paediatric Surgery, ENT, Ophthalmology, Burns Unit
- Oncology, Renal Unit, VCT, Dermatology, Heart Unit
- Physiotherapy, Occupational Therapy, Orthopaedic Technology
- Internal Medicine RIDD/ Comprehensive Care Centre, Cardiology, Patient Support Centre, Medical Social Work, Medicine
- Nursing Education, Nursing Standards
- Medical, Surgical
- Main and satellite Theatres, TSSU/CSSD
- Housing & Welfare, Transport Unit
- Information Comm., Technology, Telephone Services

Approved for circulation:

Richard Leresian Leslyampe  
Chief Executive Officer

Date: 17<sup>th</sup> October 2011

Vision: To be a World Class Referral Hospital in the Provision of Innovative and Specialized Healthcare

**BRAIN DRAIN IN THE PUBLIC HEALTH SECTOR IN KENYA:  
A CASE OF KENYATTA NATIONAL HOSPITAL**

**MAGOI HELLEN JEBICHIY**

**A MANAGEMENT RESEARCH PROJECT SUBMITTED IN  
PARTIAL FULFILLMENT FOR THE REQUIREMENTS FOR  
THE AWARD OF DEGREE OF MASTER OF BUSINESS  
ADMINISTRATION, (MBA) SCHOOL OF BUSINESS,  
UNIVERSITY OF NAIROBI**

**NOVEMBER, 2013**

## **DECLARATION**

I hereby declare that this research project is my original work and has not been presented to any other university or institution of higher learning for a degree, diploma or certificate award or anywhere else for academic purposes.

Signature..... Date .....

**MAGOI HELLEN JEBICHIY**

**REG.NO: D61/68646/2011**

## **SUPERVISOR'S APPROVAL**

This project has been submitted for examination with my approval as the university supervisor.

Signature..... Date .....

**DR. JAMES GATHUNGU**

**DEPARTMENT OF BUSINESS ADMINISTRATION**

**SCHOOL OF BUSINESS**

**UNIVERSITY OF NAIROBI**

## **DEDICATION**

I dedicate this project to my children; Keith and Heidi. They are the source of my strength. They are part of my reason for continued hard work and commitment to academic success. May this piece of research work always inspire them to rise to greater heights of academic prosperity.

## **ACKNOWLEDGEMENTS**

First and foremost, I thank the almighty God for his continued grace, guidance, protection and direction throughout my studies. I wish to pay tribute to my project supervisor, Dr. James Gathungu who provided the coaching and guidance that saw the successful completion of this project. Thanks to the Kenyatta National Hospital Ethics and Research Committee for authorizing collection of data from the hospital. I also most sincerely thank senior staff members at KNH for taking time of their busy schedules to provide the necessary information for this project. In the same vein, may I register gratitude to Mr. Douglas Owino of Kenyatta National Hospital who often times provided logistical support that contributed significantly to the success of this research project. In addition, my mom Sally Magoi who inspired me to climb the academic ladder in spite of her ample beginning and limited financial resources.

## **ABBREVIATIONS AND ACRONYMS**

AIDS	-	Acquired Immune Deficiency Syndrome
HIV	-	Human Immunodeficiency Virus
KNH	-	Kenyatta National Hospital
RoK	-	Republic of Kenya
WHO	-	World Health Organization
UK	-	United Kingdom
USA	-	United States of America
UNCTAD	-	United Nations Conference on Trade and Development

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## ABSTRACT

Kenya loses, on a daily basis, her best academicians, scientists, doctors, nurses, accountants, and other sought after professionals, through brain drain, into other richer countries. The question is: Why? The impact of the problem is detrimental to the development of the African continent. It also seems to be a continuous issue without any trend of ceasing. This study explores causes of brain drain in the public health sector in Kenya. In particular, this study aims at establishing the factors influencing brain drain at the Kenyatta National Hospital and ultimately pinpoint possible solutions to stem brain drain. It will also elaborate on some already identified possible solutions to the problem. Trained human resources are fundamental for well-functioning health systems, and the lack of health workers undermines public sector capacity to meet population health needs. Existing research on human capital migration in the public sector in Kenya has focused on documenting the number of healthcare professionals migrating to developed countries, other have focused on effects of brain drain. This study focused on causes of brain drain in the public health sector in Kenya. The objective of this study was to establish the factors that influence brain drain at the Kenyatta National Hospital and to recommend possible solutions to curb brain drain. This study documents the factors that contribute to brain drain among health professionals in Kenya. This is descriptive study, which is based on conceptual analysis, literature reviewing, and theory building. The approach was to review relevant literature using electronic search and what other authors have said about the subject, to collect data using an interview guide and to analyze it using content analysis approach. The results can then provide a policy framework to advice on how to stem brain at the Kenyatta National Hospital and the public health sector as a whole. The findings of this study that of most of the health professionals desire to migrate. This is due to two factors; home country conditions that push them to leave and the actions and conditions in developed countries that attract them. From the findings of the study, brain drain could pose a serious problem to the management of public health institutions in Kenya. There is therefore need for intensive consultations and consensus building between all stakeholders. In order to stem brain drain, concerted effort need to be put on worker motivation and retention, career planning and job satisfaction programmes. There also is need for the public health sector to keep records of all professionals; this will play a critical role in planning human resource requirement of the health sector in Kenya

**Key words:** Brain drain, public health sector, Kenyatta National Hospital, health professionals.

# CHAPTER ONE: INTRODUCTION

## 1.1 Background of the Study

Brain drain is the loss of intellectual and technical personnel through migration from one country to another. It normally implies the movement of highly trained professionals from poorer to richer countries in search of better opportunities. The term brain drain appears to have gained wide usage in the late 1960s when developing countries experienced mass migration of skilled personnel to developed countries. Perhaps the most notable of this is the use of H1-B visa in the 1990s by the USA to import skilled workers mostly from India for the then booming high technology sector. Professionals from Europe have moved to America and those from Africa to America and Europe.

Brain drain phenomenon is a serious issue in developing countries especially in Africa. Most countries continue to lose a sizeable number of professionals and intellectuals in various sectors of the economy. This continuous loss of skilled personnel is considered a contributing factor to slow growth in African countries. The high demand of African workers every part of the world is an indication that the quality of training accorded to health workers in African training institutions are high but measures for retaining these individuals has been the biggest challenge. The reason for this continuous outflow of workers from developing countries has been attributed to two factors; factors in home country often described as barriers to workforce retention or 'push' factors and factors that attract professionals to a foreign country or 'pull' factors.

Like most other African countries, Kenya is facing a human resource crisis in the public health sector. Health professionals, such as doctors and nurses, are emigrating to developed countries to seek better employment prospects. Statistical information from the World Health Organization (2003) shows wide global variations in health professional availability in developing countries, ranging for doctors from 2.3 to 664 per 100,000 populations against the recommended ratio of 1 doctor to 1000 populations. These large variations in doctor to populations' ratio compromise the quality of health for world's poor populations. Statistics from nursing council of Kenya indicate that on an annual basis average 840 nurses apply for verification of their certificates with an intention to migrate. Countries of destination are USA accounting for 59% of applications and UK at 27%. According to Clemens (2003) Kenya officially reports 7,830 certified medical doctors. However, 51% of them (3,975) are working abroad.

Studies on public health sector brain drain African countries have shown a direct relationship between low wages in public health sector and the decision to migrate (Kingma, 2006). Other factors include lack of employment opportunities, lack of career development opportunities and increase workload (Joint Learning Initiative, 2004), nursing shortage in developed countries and lower work load and (Stilwell et al., 2004) career advancement opportunities among other factors. Research in the areas of health sector brain drain in Kenya has been done by a few researchers. (Nwachukwu , 1997) found that brain drain leads to reduction in national income Macharia (2003) affects the local labour market, Kirigia, et al., (2006) loss of huge human capital resource, Machayo and Keraro (2013) to loss of mentors, loss of supervisors, loss of role models and loss of tax revenue.

Brain drain has denied Kenya the benefits of a well trained work force in the health sector. Shortage of health professionals has been a major impediment in the fight against disease such as malaria, HIV/AIDS, and infant mortality especially among the poor. In the current study, the researcher gathered information from Kenyatta National Hospital's health workers on the factors in and outside Kenya that contribute to workers move to developed countries. Whilst health professionals encompass a wide range of people with skills working in health, the focus of this study was on full time healthcare professionals at the Kenyatta National Hospital.

### **1.1.1 Brain Drain**

Brain drain deprives developing countries of their most highly educated people who would be natural leaders in terms of economic and social development. This makes these countries unable to come out of poverty, which is often worsened by violence and extremism, as well as passiveness and hopelessness. The achievement of many developing countries' Millennium Development Goals and particular national targets is threatened or hampered due to inadequate human resources and this situation is compounded by the loss of both essential and beneficial professionals such as scientists, medical doctors, engineers, academics, nurses, technicians, administrators and managers who emigrate to more economically developed countries (Dassin, 2005).

Brain drain has long been the subject of policy debate and development research. It has also received significant attention in the media. The migration of health workers is particularly visible, with large numbers of foreign health professionals working in developed countries while health crises grip African and other developing countries.

Nevertheless, despite a significant body of research, reliable data are elusive and effective solutions even more so. Adams (2003) observed that losses to sending countries from emigration of skilled emigrants, particularly in the cases of smaller and least developed countries, are clear. In recent years, some scholars such as Kirigia et al., (2006) have also pointed to "brain gain" effects, such as remittances, return migration of migrants with added skills, diaspora contributions to development, and the effect of the opportunity for overseas education and employment in increasing incentives for professional education in sending countries. It is generally agreed, however, that these positive effects are unlikely to be sufficient to compensate for negative effects in most developing countries (Adams 2003).

The most extensive policy debate on skilled migration has dealt with health workers. However, there is now a growing consensus that the principal responses to date have been ineffective. These include measures to prohibit migration of skilled workers or to pay incentives for return. Developed countries systematically encourage the immigration of skilled labour. According to Kingma (2006), professionals continue to be attracted by the higher salaries and generally better working conditions in the rich countries. In the health field, it is unlikely that brain drain issues can be addressed effectively without broad international cooperation to reduce inequality in health systems and health outcomes between countries. The shortage of health personnel in developed as well as developing countries needs to be met through an expansion of education and training capacity, both overall and in the most disadvantaged countries in particular. Global health budgets need to be provided with sustainable financing from both national and international sources, including new innovative financing mechanisms such as those being developed by UNICTAD.

The perspective on health sector brain drain needs to shift to the development of health systems rather than focusing only on the migration of health workers. The supply of health workers is just one of multiple factors affecting health systems equity. Promoting quality health systems both requires and attracts skilled health professionals. If that is accepted as the shared goal, both at national and international levels and by health institutions and professionals themselves, then distribution of personnel to meet the needs can be addressed not only by encouraging return of skilled professionals to their countries of origin, but also by more flexible forms of temporary assignment and collaboration across national lines.

### **1.1.2 Health Sector in Kenya**

Kenya is a signatory to the United Nations (UN) Millennium Declaration and has committed itself to reduce poverty, improve health and promote peace, human rights, gender equality and environmental sustainability. The country has established time-bound and quantifiable targets on health related millennium development goals (MDGs): Reducing the under-five mortality rate by two-thirds between 1990 and 2015, reducing the maternal mortality ratio by three-quarters between 1990 and 2015 and halting and beginning to reverse the spread of HIV/AIDS, malaria and other major diseases by 2015.

The country's health system is organized in a hierarchical pyramid. Village dispensaries comprise the largest – and lowest – level of the pyramid. District health centers and provincial hospitals are fewer and higher on the pyramid, and the Moi Teaching and Referral Hospital in Eldoret and Kenyatta National Hospital in the capital city, Nairobi, sits at the top. The Ministry of Health sets policies, develops

standards, and allocates resources for health care services; however, in accordance with the decentralization scheme, the district is the level at which most management takes place. The government reports that there are more than 5,000 health facilities in Kenya. The government oversees 41% of health centers, NGOs run 15%, and the private sector operates 43%. The government operates most hospitals, health centers, and dispensaries, while the private sector operates nursing homes and maternity facilities catering to higher income clientele.

Kenya faces a significant shortage of physicians, with only 4,500 in the entire country, according to the World Health Organization. Whereas the United States counts on 26 physicians per 10,000 people, Kenya has just one doctor per 10,000 residents, a ratio that is below average for the Africa region. More than 50% of Kenyan physicians practice in Nairobi, which, with an estimated 3 million people, represents a small fraction of the country's population. Only 1,000 physicians work in the public sector, which serves the majority of Kenyans. A corps of 37,000 nurses' supplements physician care, as do traditional midwives, pharmacists, and community health workers. The migration of trained health workers from the public sector to higher paying positions in the private sector, or away from Kenya altogether, has made retaining qualified health personnel a persistent challenge. Kenya has one of the highest net emigration rates for doctors in the world, with 51% leaving the country to work elsewhere.

The presence of so few health personnel in Kenya can make it difficult for the government to carry out adequate disease surveillance, maintain accurate statistics regarding disease outbreaks, and report relevant findings to neighboring countries and

international organizations. To improve its information gathering and to better track its progress in meeting the health-related Millennium Development Goals, Kenya has developed a Health Management Information System (HMIS) and is currently working with international partners to improve its capacity to provide timely and relevant data regarding the country's health situation to policymakers and other stakeholders.

### **1.1.3 Kenyatta National Hospital**

Kenyatta National Hospital was founded in 1901 with a bed capacity of 40 as the Native Civil hospital, it was renamed the King George VI in 1952. The Hospital was built to fulfill the role of being a National Referral and Teaching Hospital, as well as to provide medical research environment. KNH became a State Corporation in 1987 with a Board of Management and is at the apex of the referral system in the Health Sector in Kenya, this follows the KNH Board Order of 1987 contained in the legal Notice No.109 (Kenya Gazette Supplement No. 23 of 10th April 1987). According to the legal Notice the function of the hospital were stated as follows: 1) to receive patients on referral from other hospital or institution within or outside Kenya for specialized care, 2)to provide facilities for medical education for the University of Nairobi and for research either directly, or through other cooperating health institutions.3) to provide facilities for education and training in nursing and other health and allied professions, 4) to participate, as a national referral hospital in national health planning.

The hospital is run by a statutory board. There is, however, a management team for the purpose of proper execution of policies and effective management. The Director is

in charge of the day to day running of the hospital. Below the Directors are two deputy directors, The Deputy Director Clinical Services and Deputy Director Administrative services. There are managers who manage administrative services and Heads of Department who manage the various clinical and non clinical services. The hospital has a capacity of 2000 beds with annual outpatient attendance of 600,000 visits and annual inpatient attendance of 89,000. Currently, there are total of 4800 employees against 6000 the hospital is designed to have in order to operate effectively. In essence therefore, the hospital is not operating optimally. Such shortfall leads to poor quality service (KNH, 2013)

## **1.2 Research Problem**

In the Africa where the level of unemployment is high, human resources for health remain in short supply and even where available are poorly motivated and increasingly attracted into wider international labour market. The numbers of health professionals migrating from Africa to the brain drain has reached a peak in recent years in apparent response to huge demands emanating from the developed countries. These demands were occasioned by demographic changes, aging populations, and aggressive recruitment policies, better remuneration and flexible working hours (Davlo, 1999). Developing countries on the other hand are grappling with poor governance of health services, lack of technology and equipment, lack of sustainable funding for production of new health workers (Stilwel, 2005) and micro-economic policies that cap the absorption of health workers in the public sector and hinder efforts to retain skilled health workers through limiting salaries and worsening working conditions (Stilwel, 2004)

Public health sector in Kenya is the major provider of health services. Due to high poverty levels and burdens of diseases such as HIV/AIDS and malaria, the public health sector is the only available choice for majority of the population. Kenya has attempted to develop new standards to improve working conditions in the health sector through salary increases, introduced health reforms initiatives such as decentralization of health services, opportunities to engage in private practices and training as retention strategies (Machayo and Keraro, 2013). These initiatives have not yielded much; developed countries are still depriving Kenya of worth investment embodied in her human resources for health. If the current trend of migration is not curtailed, the chances of achieving the Millennium Development Goals (MDG) would remain bleak. Such continued loss of healthcare professionals will continue to contribute to further underdevelopment of Kenya by keeping the majority of the people in the vicious circle of ill health and poverty.

Previous studies on health sector brain drain in Kenya focused on the effects rather than the causes. Machayo and Keraro (2003) posits that drain has lead to loss of mentors, loss of supervisors and loss of role models, (Nwachukwu , 1997) reduction in national income, Macharia (2003) reduction on employable health staff and Kirigia, et al., (2006) loss of huge human capital resource. This study therefore shifted from the effects of brain drain to its causes. This study was achieved through a case study of Kenyatta National Hospital. Kenyatta National Hospital occupies an important place in public health sector; it employs the largest number of health professionals, is an active participant in policy formulation and is at the peak of national referral system. In addition, it is the centre for treatment of complicated medical conditions in Kenya and in the East and Central African Region. The outcome of the study has

therefore provided a picture of the status of public health sector in Kenya. This study sought to answer the question; what Factors influences brain drain of health professionals' at the Kenyatta National Hospital?

### **1.3 Research Objective**

The objective of this study was to establish the factors that influence brain drain at the Kenyatta National Hospital.

### **1.4 Value of the study**

The study is of practical relevance to all stakeholders in public health sector. It provides the government with useful insight that will guide policy formulation in human resource for health in the public health sector in Kenya. In terms of industry, it provides players with useful insights of how best to effectively manage human capital for health to stem brain drain.

It provides empowerment to the management of Kenyatta National Hospital with knowledge on various human resources issues to successfully reverse brain drain, the findings opens a door for development of strategies for eradicating brain drain not only in public health sector but in all sectors in the country. It is also an encouragement to the hospital and other public institutions to be responsive and receptive to employees' problems and also assist policy makers to understand the reasons why Kenyan and African workers leave their countries where the knowledge and expertise is so much required. Health sector is important for the economic growth and development of the country.

In theory, it contributes to the body of knowledge in the area of health sector brain drain. It is also useful to the health professionals in understanding their work environment and to make informed decision on whether to migrate or not while at the same time identifies further research gaps that other researchers may need to undertake in future.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Introduction**

This chapter presents theories related to brain drain as documented by various scholars. It gives a brief analysis of brain drain as a concept and reviews literature on brain drain in Kenya with a particular focus on the public health sector.

### **2.2 Theoretical Foundation**

Brain drain is said to occur when a country becomes short of skills as people with such expertise emigrate. Alternatively, it can be described as the loss by countries of essential and needed professionals via emigration to other countries. Skilled workers included in this class are scientists, doctors, engineers, academics, nurses, managers, and other professionals who have received a tertiary education (Clemens, 2009). Brain drain as a concept emerged in the 1960s triggered by the massive migration of British scholars to the United States. The early emigration of Kenyans as with most Africans was a product of colonialism. Brain drain is closely associated with migration. It is the migration of skilled and intellectuals normally from developing countries to developed countries. Various scholars have brought forward theories to explain the process of migration.

The first theory is the neoclassical migration theory. This theory originated from the works of Hicks (1932), Lewis (1954) and Harris and Todaro (1970). According to this theory, migration is driven by geographic differences in labour supply and demand and the resulting differentials in wages between labor-rich versus capital-rich countries. The central argument of the neoclassical approach thus

concentrates on wages. (Faist 2000; Dustmann et al, 2003; de Haas 2008; Massey et al.1998) observed migration patterns tend to be therefore hump-shaped: migration rates accelerate with the growth of country's wealth as more individuals or households are able to fund migration. Then, as the country continues to develop, the emigration rates diminish and the incentives to migrate change. Critics of this theory argue if what counted were wage differentials, then poorest in the world would want to move first, evidence from around world doesn't support this.

The second theory is the new economics of migration theory has come to challenge some of the assumptions of the neoclassical approach; it shifted the focus of migration research from individual independence to mutual interdependence (Stark 1991). As such, migrant decisions are not based purely on individual utility-maximizing calculations but are rather a household response to both income risk and to the failures of a variety of markets – labor market, credit market, or insurance market (Massey et al.1993). Hence, migration in the absence of meaningful wage differentials or the absence of migration in the presence of wage differentials does not imply irrationality but rather compels us to consider a set of other variables related to relative deprivation and risk-aversion and risk-minimization of household income (Stark 1991; Stark 2003). The New Economics of Migration Theory has been criticized for sending-side bias and for its limited applicability due to difficulties in isolating the effects of market imperfections and risks from other income and employment variables.

The third theory is the World System Migration Theory. This theory links the determinants of migration to structural change in world markets and views migration as a function of globalization, the increased interdependence of economies and the

emergence of new forms of production (Massey et al. 1993; Sassen 1988; Skeldon 1997; Silver 2003). The expansion of export manufacturing and export agriculture linked strongly to foreign direct investment flows from advanced economies to semi-developed or emerging economies has led to a disruption in traditional work structures and has mobilized new population segments into regional as well as long distance migration. Capital mobility is hence a crucial factor for the world system theorists. This theory deny that individuals truly have free choice in making migration decisions and present them in more deterministic forms, as pressured into movement as an outcome of broader structural processes (De Haas 2008).

The fourth is the Dual labor market theory, like world system theory, links migration to structural changes in the economy but explains migration dynamics with the demand side (Massey et al, 1993). Developed by Piore (1979), dual labor market theory posits a bifurcated occupational structure and a dual pattern of economic organization in advanced economies. Duality unfolds along the lines of two types of organization in the economy, namely capital-intensive where both skilled and unskilled labor is utilized, and labor intensive where unskilled labor prevails. The theory argues that migration is driven by conditions of labor demand rather than supply. The character of the economy in advanced countries creates a demand for low-skilled jobs which domestic workers refuse to take up due to, for example, status. As immigration becomes desirable and necessary to fill the jobs, policy choices in the form of active recruitment efforts follow the needs of the market.

The final theory is the network theory of migration. It does not look at the determinants which initiate migration but rather at what perpetuates migration in time

and space (Massey et al. 1993). Migrant networks which often evolve into institutional frameworks help to explain why migration continues even when wage differentials or recruitment policies cease to exist. The existence of a diaspora or networks is likely to influence the decisions of migrants when they choose their destinations (Vertovec 2002; Dustmann and Glitz 2005). The network theory also helps to explain the reasons why migration patterns are not evenly distributed across countries, but rather how they tend to form so-called migration regimes (Faist 2000). It suggests that migratory movements arise in response to prior existence of links between sending and receiving states, such as colonial ties, trade or investment flows (Castles and Miller 2009).

### **2.3 The Concept of Brain Drain**

The British Royal Society first coined the expression Brain drain to describe the outflow of scientists and technologists to the United States and Canada in the 1950s and early 1960s. The first studies analyzed this outflow and its political and social effects. These studies analyzed the impact of the high skilled migration on the social welfare of the countries involved in this flow of people. At the end of 1960s, several articles analyzed the consequences of brain drain on welfare. Sjaastad (1962), Weisbrad (1964): Positive Externalities of the Public Education, Bowman & Myers (1967), Bodenhofer (1967), Galtung (1967), Scientific Colonialism, Watanabe (1969): Brain Drain from Developing Countries to the Western Countries and Johnson (1969): How the Welfare of those Remaining at Home Changes in Presence of Brain Drain). Summarizing, the results of these studies are that the main motivations to migrate were political and social; the effects of these migrations are bad either for welfare or for the social structure of the sending countries, the solution suggested is to

create and fortify the role of the International Organizations and Institutions on the management of the migration flows.

During the 1970s the brain drain was characterized as a North-South, developing-developed country issue (Carrington & Detragiache 1999). The possibility that the welfare of those remaining in developing countries could be reduced by an outflow of educated manpower had been recognized in the literature as well. As in the 1960s, also in the 1970s there are several studies on the brain drain and its welfare impact. In particular, there are the works of Baldwin (1970), Scott (1970) (they analyzed the opportunity to apply the human-capital's approach to study the brain drain phenomenon). These authors concluded that welfare of non-migrants would fall only if the migrants' contribution to national output were greater than their income. For several reasons, the literature believes that the conditions for brain drain to be welfare-deteriorating are often verified.

In the mid-1980 with the birth of the so called New Growth Theory, researchers looked at brain drain phenomenon. Paul Romer (1986, 1987, 1990) and Robert Lucas (1988) concluded that immigration of skilled migrants stimulates the dynamics of economic growth. Finally, many authors tested how the brain drain is a key element in the international commerce because of its influence on some crucial production's factors. These debates persist in the 1990s thanks to the works of Rach (1991) (he stresses the necessity to reconcile the themes of the Commerce with the ones of Migrations), Gould (1994) (The immigrants' consumptions in their native countries and the consequences on the commerce) and Ishikawa (1996) (Scale's Economies of the productive factors and migration). Summarizing, the results of these studies are

that the main motivation to migrate was the more productivity and higher income of the skilled workers in the developed countries. The effects of these migrations are bad for the growth and for the welfare of the sending countries. In the long run increase the divergence between the developed and developing countries.

Finally, in the 1990s and early 2000s, some authors analyzed the circumstances where the Brain Drain becomes “Brain Gain”. Several theoretical papers examine the impact of migration prospects on human capital formation within a context of uncertainty. In a poor economy with an inadequate growth potential, the return of human capital is likely to be low and this would lead to a limited incentive to acquire education, which is the engine of growth. However, the world at large does value education at all hence, allowing migration to take place from this economy would increase the educated fraction of its population. Given that only a proportion of the educated residents would emigrate, the average level of education of the remaining population would increase (Beine et al., 2001.) Beine et al. (2001, 2003) and Docquier and Rapoport (2007). These findings let to the acknowledgement that international movement of educated people may have positive effects on the sending economy in terms of increased domestic enrolment and significant financial contributions through the remittances they send home.

The above literature on the brain drain has described and analyzed the pull and pushes factors leading in tandem to brain drain of highly-trained professionals and has concluded that; brain drain results in mostly or exclusively negative effects and harmful losses. The traditional brain drain literature has viewed the exodus of human capital as a “curse” for developing countries, leading to increased inequality at the

international level, with the rich countries getting richer at the expense of the poorer countries. The last century brought in the concept of 'new brain drain' or 'new beneficial brain drain' literature claiming that brain drain has a big impact on the number of skilled individuals in a sending country. Driven to achieve education and professionalism by the prospects of emigration, they form intellectual potential. As not all of them leave the country, a part of this extended capital stays and generates economic welfare and growth for their nation.

Emerging statistical and anecdotal evidence indicates that there are significant positive effects associated with the global skills flow. Benefits accompanying brain drain were analyzed in the works of Mountford (1997), Starl et al. (1997, 2004) Beine et al. (2001, 2003) and Docquier and Rapoport (2007). These findings led to the acknowledgement that international movement of educated people may have positive effects on the sending economy in terms of increased domestic enrolment and significant financial contributions through the remittances they send home. Some authors have recognized that brain drain brings exchange of knowledge, foreign direct investment and increased trade as a result of diaspora activity as well as skills know-how and work culture brought by return immigrants from their host countries (Chen and Boufford, 2006, Mills, et al. 2008).

Researchers have looked at Kenyan with regard to emigration experiences and outcomes. Siringi and Kimani (2005) observed that many Kenyans leave the country every year to study abroad but they never return after obtaining appropriate education. They seek jobs in their host countries. According to Kirui (2005), when highly skilled people leave the country it poses serious brain drain, robbing the country of essential

human capacity to help in socio-economic development. On the positive side, Nwachukwu (1997) examined the phenomenon of brain drain in Kenya, Ghana and Nigeria using a social opportunity policy and intervention model, her studies concluded that brain Kenya experienced a reduction of national income due to migration of talented professionals. Okoth (2003) examined the role of diaspora in development and saw enormous contribution of emigrants towards their national development through remittances.

### **2.3.1 Health Sector Brain Drain**

Brain drain is described by Lowell and Findlay (2001), as the emigration abroad of tertiary-educated persons at such levels and for such lengthy durations that their losses are not offset by their remittances home, by transfer of technology, or by investment or trade from the recipient country. This description however skirts the issue of permanent versus temporary migration and reinforces the fact that it is difficult to discern the true intentions of migrant professionals.

Migration and the resulting brain drain are a global phenomenon and universal problem. Especially in the health sector, there have been significant shifts of human capital from Europe to the United States, leaving a gap which is quickly filled by high-skilled immigrants from the Southern part of the world. According to the WHO (2006), Africa remains the sole continent still struggling with insufficient development in all fields. Education and the health sector continue to deteriorate and cannot keep up with the rising demand due to an annual population growth of about 3%; HIV/AIDS is spreading fast and inexorably, and the re-emergence of old communicable diseases such as tuberculosis and malaria, further weakening the

countries' systems and economies and increasing the demand for a functioning health system even more.

Although there are positives arising from global skills flow, we should not lose sight of the difficult situation in the health sector in developing countries like Kenya. When health professionals emigrate, there is a negative effect not only on treatment but also health promotion, disease prevention, and rehabilitation of those who remain behind, thus influencing their levels of health and productivity and general welfare. The problem of brain drain in Africa is huge. The shortage of health workers in a resource limited setting is a well established constraint to building sustainable, quality public health system and achieving improved health outcomes (WHO, 2006). The reason for this state of affairs is blamed on lack of sustainable funding for production of new health workers (Crisp, Gawanas and Sharp, 2008) and microeconomic policies that cap the absorption of workers into public health sector and hinder retention of workers through limiting salaries and worsening working conditions.

Most health professional education in Africa is provided and subsidized by governments, and professionals are produced for the health sector by publicly funded universities and colleges managed by the education sector. Unfortunately, studies of working health professionals across the African continent show extremely high levels of interest in emigration and a strong desire to leave, either temporarily or permanently (D. McDonald and J. Crush, 2002). Concerns about the long-term impact of the migration of health professionals from developing countries have recently led to a focus on the next generation, both in Africa (Dovlo and Nyonator, 1999). Many countries invest substantial financial resources in the training of physicians and

nurses. Clemens (2011) recently argued that the actual costs of health professional emigration are difficult to quantify and are often exaggerated. However, African governments clearly expect a return on their investment in the form of an increased pool of health human resources.

A number of push and pull factors, have been cited as influencing the decisions of health professionals to leave their countries of origin. Push factors refer to events in the country of origin that motivate professionals to leave whilst pull factors are the deliberate and/or unintended actions from recipient countries that attract health professionals to their health services Dovlo (1999), Martineau, Decker, et al. (2002), Meeus (2003), Padarath et al. (2003) and others have discussed the reasons underlying the brain drain in various papers. "Push" factors were used by Meeus (2003) and Dovlo (1999) in some studies on the brain-drain phenomenon to describe factors within source countries that compel professionals to emigrate whilst "pull" factors arise within recipient countries and attract intellectuals into their own systems. Padarath (2003), however, describe a system of push factors that exist in both source and recipient countries but which are mitigated in recipient countries by what they described as "stay" factors and in source countries by "stick" factors.

The push factors refer to the unfavourable conditions in Africa that drives people to leave. They include, among other factors, job scarcity, low wages, in Africa have been sharp and potentially troubling. He posed this question: how can public institutions retain professionals, researchers, and scientists, in the face of such sharp declines in average real wages? Dovlo (1999), Martineau, Decker, et al., (2002), Meeus(2003), Padarath (2003) and others have discussed the reasons underlying the brain drain in

various papers Pull factors are caused by increased demand for health professionals in developed countries and include attractive remuneration, new career and personal development prospects and active recruitment by those countries. The common use of a professional language such as English and similarities in professional training and systems arising from the colonial experience of African countries are also thought to enhance the pull factors

Numerous other factors contributing to the human resources for health crisis have been identified, including lack of sustained funding for production of new health workers (Stilwel, 2005) and macro-economic policies that cap the absorption of health workers into the public sector and hinder efforts to retain skilled health workers through limiting salaries and worsening working conditions (Stilwell, 2004). Migration of trained health workers to work in wealthier countries for higher salaries continues to plague resource-limited settings (United Nations: Millennium Development Declaration 2000). The primary cause of Brain Drain in Kenya is the difference among countries in economic and professional opportunities, hence the imperative to move from one area to another to improve their social and economic status.

## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Introduction**

This chapter presents the research methodology that was used in the study. It includes the research design, data collection method and data analysis method used in the study

### **3.2. Research Design**

This is qualitative research constituting a descriptive case study. It sought to establish the factors influencing brain drain at the Kenyatta National Hospital. It involves an in-depth, cross sectional examination of a single instance. According to Cooper and Schindler (2003), a study concerned with finding out who, what, when, where and how of a phenomenon is a descriptive study, which is the concern of the proposed study.

The case study was preferred since it facilitates intensive study of the concerned unit and provides an in-depth analysis of its behavior patterns. In addition, a case study method enriches generalized knowledge and makes it possible for a researcher to use one or more methods depending upon the prevailing circumstances. The objective of this study was a case study aimed at establishing the factors contributing to brain drain in at the Kenyatta National Hospital

### **3.2. Data Collection**

The source of the data for this research was primary. Data was collected through personal interview. An interview guide (see appendix) was used to collect data from respondents. With an interview guide, the respondent's feedback gave an insight to

his/her feelings, background, interests and decisions and gave as much information as possible without holding back.

Respondents for this study were senior officers (doctors, nurses, physiotherapists) at Kenyatta National Hospital (KNH) who the researcher believes are health professionals most affected by brain drain phenomenon. The departments covered in the study were; Obstetrics and Gynaecology, Paediatrics, Orthopaedics, Accident & Emergency, Medicine, Surgery and Critical Care Centre. Further, this group formed the senior management of KNH that play a key role in the management of health care workers in the hospital. It is the same group that assigns duties to staff in the hospital.

The target respondents therefore provided information on what factors contribute to brain drain of health professionals at Kenyatta National Hospital. Open ended questions were applied to avoid subjectivity that could arise by limiting the respondents to answer to questions

### **3.4. Data Analysis**

Data was checked for completeness, accuracy, errors in responses, omissions and other inconsistencies. The data was analyzed using content analysis since this study sought to solicit for data that is qualitative in nature. A comparison of data collected with theoretical approaches and documentaries cited in the literature review was done. Further, data obtained from various officers was compared against each other in order to get more relevant on the issues under study.

Data was analyzed using content analysis approach. Content analysis enabled the quantification and analysis of the presence, meaning and relationship of words and

concepts within the texts. In addition, it allowed inferences to be made about messages. Cooper and Schinder (2008) points out that content analysis measures the similarities or the 'what' aspects of the messages are present. He further points out that content analysis guards against selective perception of content and provides for rigorous application of reliability and validity criteria.

## **CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION**

### **4.1 Introduction**

This chapter presents the findings of the study and the analysis of data collected using the interview guides that were distributed to the senior officers (Doctors, Nurses and Physiotherapists). The senior officers were drawn from various departments at KNH. They are; Obstetrics and gynecology, Paediatrics, Orthopaedics, General and Specialized Surgery, medicine, Accident and Emergency, Critical Care Units, Rehabilitative Services and Dentistry.

Majority of respondents of this study expressed their desire to work in Developed countries. Their most preferred destination was USA, UK, and Australia. Their choice is determined by the language spoken in the particular country, economic development, security and future economic prospects. The minority preferred to work in an African country specifically due to good governance, improved infrastructure and good economic prospects.

### **4.2 Demographic Information**

Data on gender of the respondents revealed that majority (57%) were female while the rest (43%) were male. Age of respondents indicate that a (33.2%) were between the ages of 41-45 (16.7%) were between that ages of 25 to 30, (16.7%) were between 31 to 35, another (16.7%) were another (16.7%) were between the age of 46 to 50. A majority (66.7%) of the respondents had college education while (33.3%) had university education. An overwhelming majority (85.7) of the respondents indicated their desire to out migrate from Kenya. Their choice of destination countries showed a

preference for developed countries where (42.8) indicated that they wish to migrate to USA, (14.3%) had preference for Australia, another (14.3%) preferred UK, (14.3%) indicated preference for an African country- Botswana and country (14.3%) would work anywhere but not Kenya. The table below shows respondents demographic information

**Table 1: Demographic characteristics**

<b>Characteristic</b>	<b>Number</b>	<b>Percent (%)</b>
<b>Gender</b>		
Male	3	43
Female	4	57
<b>Age (years)</b>		
25-30	1	16.7
31-35	1	16.7
36-40	1	16.7
41-45	2	33.2
46-50	1	16.7
<b>Education</b>		
College	4	66.7
University	2	33.3
<b>Desire to migrate</b>		
Yes	6	85.7
No	1	14.3
<b>Destination country</b>		
USA	3	42.8
Australia	1	14.3
Any country apart from Kenya	1	14.3
Botswana	1	14.3
UK	1	14.3
Table 1		

Source: Research data

### **4.3 Push Factors of Brain Drain**

The major objective of this study was to establish the factors that influence brain drain at the Kenyatta National Hospital. The factors being assessed were home country factors that ‘push’ workers to foreign countries and destination country factors that

‘pull’ health professionals from developing countries. The finding of this study revealed that health professionals desire to migrate from Kenya not only to developed countries but also African countries particularly Botswana.

The push factors refer to the unfavourable conditions at the Kenyatta National Hospital that drive health professionals to employers in developed countries. These factors are both within and without the hospital. The results of this study provide a picture on the thoughts of health professionals as concerning their migrating from Kenya. Kenyatta National Hospital is at the apex of the national referral system. In practice, this should be the best place to work in but this study has revealed otherwise. Majority of health professionals interviewed expressed their desire to migrate. The results of this study are discussed here below.

#### **4.3.1 Remuneration**

Remuneration is the sum total of payments made to an individual for services rendered. These include wages, salaries, overtime pay, leave allowance and retirement schemes. According to the respondents, the most important factor determining their desire to migrate is level of remuneration.

The respondents indicated that their remuneration is low relative to what is paid to workers with similar qualification in other sectors. In addition, it was not commensurate with to the work load, their qualifications and their overall input in service delivery at the hospital. When compared with private health, the remuneration is way below them. Desire for higher remuneration is therefore, a motivating factor for migration.

### **4.3.2 Large Volume of Work**

Respondents indicated that, due to shortage of staff in the hospital, the work load is overbearing to staff. Statistics from the human resource indicate that the hospital capacity is for 6000 workers; only 4900 workers are currently employed. This shortage leads to straining of personnel. For example, the ratio of one nurse to number of patients is currently at one nurse for forty patients against the WHO recommended ration of one nurse to 5 patients. This leads to stress and loss of concentration and morale posing a danger to the patient and the service provider.

Owing to the cost of treatment in private health facilities, most of the Kenyan populations rely on public health facilities for their treatment. This situation is worsened by the recent decree by The Head of State to make maternity care free in all public hospitals. The number of expectant women visiting KNH has gone up without corresponding increase in the number of healthcare workers.

### **4.3.3 Lack of Career Growth and Advancement**

Lack of career growth and advancement opportunity, unfair promotions or favoritism, nepotism and tribalism were other reasons staff mentioned as prompting their desire to leave for better prospects in developed countries. They blame the management of the hospital for failing to manage the process of promotions, training and development fairly.

There were concerns over unfair allocation of training opportunities where a few staff are trained while the rest are left out. Respondents stated that concentrating knowledge in a few individuals is to them a sign of lack of confidence on their

abilities. They stated that despite training, certain individuals do not apply what is learnt in the work place.

#### **4.3.4 Lack of Tools and Equipment**

Respondents informed the researcher of lack of equipment for investigation of ailments, few if any tools, outdated equipment, shortage of beds, lack of supplies such as stationery and computers. This is made worse by lengthy procurement procedures that lead to delays.

Going by the recent allocation of 6% of the national budget to the health sector, this situation will not change soon. Due to increasing population and strained resources in the public health sector, health professionals are forced to use few tools to serve many patients. This situation leads to stress and lack of job satisfaction.

#### **4.3.5 Poor Leadership**

Respondents indicated that most of the supervisors at KNH lacked leadership skills. Appointment to positions of leadership is done without regard to supervisory training. They therefore lack the capacity to lead. This makes staff feel that the hospital do not care about or listen their complaints and suggestions. They have interpreted this as lack of concern, and unresponsiveness to workers plight.

Poor leadership led to absenteeism, lateness and arrogance among staff. Hardworking staff are left to step in for poor workers and this compromises service quality and leads to stress and burn out. Such dissatisfaction breeds desire to look for better opportunities elsewhere

### **4.3.6 Working Conditions**

Respondents spoke of poor hygiene in the wards; some roofs are leaking and water taps are not working. This exposes them to serious infections. Linen for the patients are torn and few. Such conditions frustrate workers and patients alike.

Interviewed staff indicated that due to lack of team work and negative attitudes from their juniors, productivity is low and delays are daily occurrences. There is lack of team work as staff work as individuals in an environment where team work is mandatory for effective performance. Factors outside the work environment were also found to influence the migration.

### **4.3.7 Bad Politics**

Respondents indicated that bad politics that splits the country into tribal lines is a factor that would push workers not only at the Kenyatta National Hospital but from the whole country. Due to bad politics, the hospital and the country at large cannot realize any meaningful progress.

Tribal based appointment prevents qualified staff from reaching their potential. Some express their dissatisfaction but the management does not listen to them. This forces them to look for opportunities elsewhere leading to brain drain.

### **4.3.8 Poor Infrastructure**

Respondents indicated that due to bad road network, they spend valuable time in the traffic jams. This is costly and time wasting. Unreliable public transport leads to stress when travelling to and from work. This is frustrating and costly to staff who already feel that their pay is insufficient to meet their needs and those of their families.

Poor roads lead to damage of their vehicles. They are forced to spend large sums of money in repairs, maintenance and replacement of vehicle body parts. These money, the feel could be used in productive activities that can boost their standards of living

#### **4.3.9 High Standards of Living**

This study found that respondents were very weary of the cost of living in the country. High house rents confines staff to certain estates. Cost of basic commodities is high, education, transport and communication are high.

Cost of living is a determinant to the kind of life people lead. Where the cost of living is high, remuneration must be raise to cushion citizens. This is not the case in Kenya. Constantly rising inflation is has made cost of living expensive. In comparison, developed countries provide education for free, transport is cheap and reliable and cost of foods is relatively affordable.

#### **4.3.10 Insecurity**

Respondents mentioned terrorism, carjacking, muggings as being rampant in Nairobi and other parts of the country. The uncertainty one experiences while travelling in Nairobi due to robberies is appalling. This is what makes them desire to migrate.

Respondents indicated that lack of reliable police force make them feel vulnerable to theft some from the police themselves. They look at the police not as a body to care for them but as one that want to take advantage of insecurity in the country for their own personal gain.

### **4.3.11 Corruption**

Respondents indicated that rampant corruption in the country has led to diversion of public resources to personal accounts. This has greatly reduced funding to the health sector. In addition, funds allocated to the sector are not utilized to improve service delivery because some end up in people's pockets.

In addition corrupt public officials including staff at the hospital give the medical profession a bad name. This affects staff when bad publicity changes the perception of the public towards health professionals. Staff in turn feel unappreciated, unloved and unrecognized.

### **4.4 Pull Factors of Brain Drain**

Pull factors of brain drain are the factors present in destination countries that attract health workers from Kenyatta National Hospital and the Kenyan public health sector at large to migrate. These are factors that act as attraction for workers from developing countries. It takes the form of work place conditions and conditions outside the hospital.

The findings of this study indicate that health workers migrate not only because of the problems at the home countries but also because of the actions of employers in developing countries as well as conditions outside the work place that attract workers from developing countries. These are discussed below;

#### **4.4.1 Availability of Good Equipment**

The respondents indicated that, as health workers, they view developed countries a good place to work in because of availability of good equipment in hospitals, something that is lacking in Kenya's health institutions as well as in most developing countries in Africa.

Availability of good and modern equipment will not only raise their morale but will widen their experiences and skills in the job. Acquisition of new skills and broadened knowledge in their professional areas make health professionals more marketable worldwide.

#### **4.3.2 Attractive Remuneration**

Good pay and attractive retirement packages. Pay packages in developing countries are higher than what is paid to them here. They stressed that the purpose of working was to get a good life which is not attainable in Kenya due to high cost of living.

Flexible working hours enables them to do many jobs and thus earn more income. Retirement packages are also higher in developing countries. This gives them security in their old age.

#### **4.4.3 Availability of Career Advancement Opportunities**

Respondents mentioned scholarships that are easily acquired in developed countries as an attractive component of foreign work places. The fact that they access to the best training in the world is another factor, the same training is of quality and can be taken online- at the comfort of one's home.

Flexible working hours and pay that is pegged on performance is another motivator especially for the hard working employees. Another one is research opportunities available in developed countries that would give them an avenue for professional development and global exposure.

#### **4.4.4 Better Working Conditions**

The respondents indicated that developed countries have made their work environment very conducive. This is through provision of tools and equipment of work. There is motivation to a doctor when all tools and equipment of work is available. They make them grow in skills and knowledge. Most developed countries provide day care for mothers where their young ones are looked after. This gives them time to concentrate in their demanding jobs.

Although the main determinants of migration are the conditions inside the work environment, respondents indicated that, conditions outside the work place are as important as those inside the work place. These are factors present in the external environment that according to respondents contribute to their dissatisfaction with working in Kenya. These factors are discussed below.

#### **4.4.5 Security**

Respondents indicated that security in developed countries is a major attraction to them. The assurance of going to work and arriving safely home is enough to make them migrate. Security of their children and property is also important to them.

Trusted police force and quick response in case of a problem is another attraction to health workers in foreign countries. Respondents indicated that due to presence of security personnel on patrol in estates and roads, the level of crime is low compared to what is experienced in Kenya and most developing countries in Africa.

#### **4.4.6 Government Support**

Respondents observed that the commitment of governments through the investment in health care in developed countries is exemplary making them see better prospects in career advancement facilitated by better experiences.

This investment is in terms of good training opportunities, opportunities for career advancement and availability of research funds gives them wide exposure boosting their careers. Possibility of international recognition is the main motivation to most of those wishing to migrate.

#### **4.4.7 Better Economy**

The respondents observed that decision to migrate is determined by the state of the country in which they wish to migrate to relative to that of Kenya. Good living standards; availability of affordable housing and food is an attractive component in developed countries.

This study indicated the desire of health professionals to live a good life at an affordable cost. This, they observed, is impossible in Kenya where the inflation rate continue to rise. Respondents expressed their desire to be able to save for their future..

## 4.5 Discussion

Brain drain is a serious impediment in Kenya's health development agenda. Those who migrate are some of the most highly experienced skilled and trained professionals in health, representing a major loss to the public health sector in Kenya. The causal factors are mostly related to working conditions and factors related to non working condition (conditions outside the hospital) both in Kenya and in migration destination countries. The strain on the health professional makes immigration an appealing alternative and policy makers must stem this trend.

The results of this study on the factors influencing brain drain at the Kenyatta National Hospital indicated that migration of health professionals is caused by both push and pulls factors. Our review of primary data collected through personal interviews suggests that the push factors often described as barriers to workforce retention include low remuneration relative to what is paid to workers in private and other sectors of the economy. This finding tends to affirm the findings of (Kingma, 2006, 2007; Dovlo, 2007), who together observed that wages was the major attraction of worker from poorer to richer countries, it also supports the neoclassical theory that argues wage difference between sending and receiving country is the main determinant of worker migration.

The researcher also identified poor working conditions, lack of professional development, large workload as other push factors of brain drain. This finding confirms the works of Dovlo and Martineau (2004), and Awases et al (2003). Other factors are poor governance, insecurity, bad politics, unfair recruitment and promotion practices, and stress due to large work load. Stilwel,et al., (2005) in his study of

Migration of Health Workers from Developing Countries made the same observation. In addition to the findings above, poor leadership, lack of tools and equipments of work, poor infrastructure, high standards of living, insecurity and corruption are some of the other factors influencing the decision of health professionals to migrate.

On the other hand, developed and often richer countries attract workers from Kenya's health sector because of, better remuneration, availability of equipment, attractive remuneration and corresponding flexible working hours enabling workers to pursue career advancement opportunity. These findings support the works of Meeus (2003) and Paradath (2003). Others are availability of research opportunities according workers growth opportunities and possible world wide exposure, good economy enabling them to save and invest for their future, government support for public health institutions, guaranteed security, and conducive working environment. Increased demand for health workers in developed countries aggravated by an ageing population is another factor.

Looking at the preferred country of migration destination, respondents indicated a desire to migrate to USA, UK, Australia and Botswana. Apart from the reasons given by the respondents, the researcher noted that, this trend of migration is influenced by the existence of historical ties. First, these countries are English speaking and secondly, respondents indicated that their choice of these countries were influenced by presence of their relatives in these countries. This finding support the Network Theory of Migration advocated Vertovec (2002); Dustman and Glitz (2005). According to this theory, the existence of a diaspora or network is likely to influence the decision of migrants when they choose their destination.

## **CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

### **5.1 Introduction**

This chapter presents the conclusions of the study in relation to the findings. The findings of this study have clearly revealed that brain drain continues to be a threat to the public health sector in Kenya. Concerted effort must be put in place to stem brain drain in the public sector if Kenya is to achieve millennium development goals.

### **5.2 Summary**

The objective of the study was to establish the factors that influence brain drain at the Kenyatta National Hospital. The study employed a descriptive research design. The target consisted of seven senior officers of the hospital. The researcher employed self-administered interview guides to gather data and information for the study.

Findings and observations revealed that; Brain drain is a serious impediment to Kenyatta National Hospital's vision of being "A world class patient-centered specialized care hospital". Factors related to working conditions and those in the external environment mainly associated with the political environment are the main causes of health professionals' brain drain. The findings of this study indicate that brain drain could pose a serious problem to the management of public health institutions now and for a long time in the future. Stemming brain drain requires input from various stakeholders in the health sector. These are; the government, the private sector, the nongovernmental organizations and the public at large.

### **5.3 Conclusions**

Health crisis in Africa has intensified with the advent of the HIV/AIDS epidemic and the ever growing populations. This has further expanded the demand for well-qualified health professionals. Creating a critical mass of retained health professionals to meet these huge tasks will be a tremendous challenge, and fairly drastic remedial measures need to be taken, in much the same way that developed countries have taken steps to recruit health professionals from poorer countries to meet their health demands.

Based on the findings, the heavy loss of health professionals poses the threat of collapsed health services and major risks to the lives of Kenya's poor. This calls for intensive consultation and consensus building between the developing and developed countries. A policy framework for curbing brain drain should be developed. There is also a need to explore policy options that encourage return or circular migration of health professionals from the destination countries back into Kenya. The Ministry of Health must be concerned about developing policies on how retain critical personnel. As a country, we need to increase the funding of public health sector to enable hospitals to buy necessary equipment and for improvement of workers' salaries.

### **5.4 Recommendations**

As observed by in the World Health organization in report of 2013, Brain drain in the public health sector is a serious a problem. Developed countries continue to deprive Kenya of millions of dollars worth of invaluable investments made in the production of health workers. This has lead to the growing double burden of communicable and non-communicable diseases leading to further underdevelopment of Kenya and

keeping a large proportion of the Kenyan population in the vicious circle of poverty and ill-health. This unacceptable situation should be urgently reversed through joint action by both developing and developed countries (WHO, 2006)

Remuneration levels are probably the most important factor in retention not only in the health sector but also in the whole public sector. The perceived unfairness of incentives and disparities between what is paid to other professionals and that of health professionals fuel migration. Like in developed countries, public health sector be paid additional duty hours allowance, which will increased incomes significantly. The management can also implement pay per performance as a measure to retain high performers. Another measure is to recruit more health professionals to reduce the work load.

Most of those migrating are highly qualified professionals. Developed countries often look for bright individuals who they entice with citizenship and good remuneration. Since it may be difficult to stop these highly qualified professionals from leaving, a number of locally designed health professionals such as clinical officers should be trained in advanced procedures and courses to equip them with necessary skills to perform critical duties. Another measure is the use of quotas or geographical criteria for selecting candidates for health professionals' training. Pure academic merit has been faulted for producing elitist professionals, because candidates coming from deprived communities with poor educational infrastructures are simply unable to compete with candidates from the elite urban schools. Professionals from such backgrounds and qualification are not attractive to international recruiters.

Encouraging citizens who have migrated to return back is another measure the country could consider. Facilitating temporary return to offer their skills in specialized services is another measure. This will enable them work for the country and to import the skills learnt in developed countries on treatment and management of diseases as well as to improve the management of health institutions in Kenya. A comprehensive data base of all health professionals who have migrated need to be set up to facilitate this exercise. The government should invest in comprehensive human resource management information systems that will provide sound data for policy formulation and decision-making.

There is need for improvement of the workplace environment through routine monitoring of quality of supervision, provision of tools and equipment of work, maintenance of high hygiene standards, fair and appropriate allocation of training opportunities, clear career paths and competitive recruitment practices. This will be realized if the government and all stakeholders in the health sector develop policy guideline for management of health sector in Kenya. Health care staff needs to be trained in management to be able to steer health institutions to make them transparent and accountable. Mentoring and in-service training by qualified personnel, allocation of care roles and referral patterns need to be clearly outlined to reduce workloads. Further focused studies should be done that will review staffing norms and standards, to set optimal staffing levels based on workloads and expected roles, making clear the deficits in facilities as a basis for planning.

Outside the workplace environment, the government is responsible for fighting corruption that stifles growth in the public health sector. Clear procurement

procedures devoid of corruption need to be set up. This could involve use of external experts to procure vital equipment for hospitals. Another measure is to fight insecurity through recruitment and retraining of the police force and acquisition of modern security equipment, creation of employment opportunities for the youth, allocation of more resources towards fighting terrorism and creation of citizen surveillance groups ('like the ten houses recently launched by the president). Change of political culture of tribalism, nepotism could be done through citizen empowerment. This will involve sensitization of the populace on the dangers of tribalism and other sectarian politics.

Health worker confidence in the stewardship of health resources and governance of services is a major influence in the morale of health professionals. Good health systems governance helps to resolve health worker issues by engaging a variety of political and technical stakeholders, including external development partners. Sharing information, building confidence and enhancing the credibility of the national policy decision making process should be a priority.

## **5.5 Limitations of the Study**

This study was carried out at the Kenyatta National Hospital only and therefore the causes of brain drain there cannot be replicated in other public health institutions in Kenya. The study faced both financial and time constraints. The duration for completion of the study was limited hence exhaustive and comprehensive research could not be carried out.

Lastly, this study focused on seven senior management staff while the organizations have a huge number of management staff in the middle and the lower levels. These

findings are therefore limited to the responses of senior management of Kenyatta National Hospital at the time of the study

## **5.6 Areas for Further Research**

This study has brought to the fore the various factors that influence brain drain in the health sector in Kenya. This research was based on all health professionals without regards to specific professionals and cadre of workers. There is therefore need for further research to monitor the causes of specific cadres of health professionals' brain drain, such as nurses, medical specialists, physiotherapists, radiologists and others.

There is need to also look at the levels of dissatisfaction of each push and factor of migration and to identify the determinants of health staff motivation, including their health-related quality of life and retention strategies.

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# APPENDICES

## Appendix 1: Interview Guide

### Introduction

This Interview guide is designed to gather information on the factors influencing Public health professional's brain for academic research work. Your response will be accorded strict confidentiality. Please respond to the questions honestly.

### SECTION A: Demographic information.

1. Gender:

Male                       Female

2. Age:

18-24                       25-30

31-35                       36-40

41-45                       46-50

50 and above

3. Department .....

Job Title .....

4. What is your highest education level you have attained?

(a) None.....

(b) Primary.....

(c) Secondary.....

(d) University .....

(e) College .....

(f) Other (specify).....

## SECTION B

### A Push factors for brain drain

4. In your opinion, do you think healthcare staff at the hospital, given a chance, would leave Kenya to work in another country?

Yes                       No

If yes, which is the likely country/countries of destination?.....

.....

5. What factors in your opinion are present in the KNH workplace environment that would contribute to the desire of staff to work in another country?

(Get a brief explanation of each of the factors)

i.....

.....

ii.....

.....

iii.....

.....

iv.....

.....

v.....

.....

vi.....

.....

6. What factors in your opinion are present in Kenya but outside the work environment contribute to the desire of public health workers to migrate?

(Get a brief explanation in order of their relative importance)

i.....

.....

ii.....

.....

iii.....

.....

iv.....

.....

v.....

.....

vi.....

.....

**B. Pull factors for brain drain**

7. What in your opinion are workplace factors present in a foreign country that attracts staff from public health sector in Kenya?

8.

(Get a brief explanation in order of their relative importance)

i.....

.....

ii.....  
.....

iii.....  
.....

iv.....  
.....

v.....  
.....

vi.....  
.....

9. What in your opinion are the non-workplace factors present in a foreign country that that attracts healthcare staff from Kenya to migrate?

(Get a brief explanation of each factor)

i.....  
.....

ii.....  
.....

iii.....  
.....

iv.....  
.....

v.....  
.....

vi.....  
.....

10. What measure can be put in place to stem brain drain at KNH

(Get a brief explanation)

.....

.....

.....

.....

.....

.....

11. What measures can be put in place to stem brain drain in the public health sector?

.....

.....

.....

.....

***Thank you for your cooperation***

## Appendix II: Introduction Letter



**UNIVERSITY OF NAIROBI**  
**SCHOOL OF BUSINESS**  
**MBA PROGRAMME**

Telephone: 020-2059162  
Telegrams: "Varsity", Nairobi  
Telex: 22095 Varsity

P.O. Box 30197  
Nairobi, Kenya

DATE 6/10/2013

### TO WHOM IT MAY CONCERN

The bearer of this letter MAGDI HELLEN JEBICH

Registration No. DG1/GS646/2011

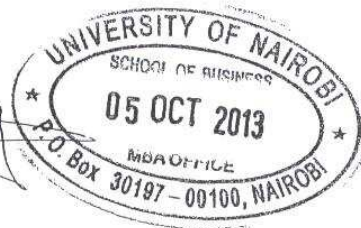
is a bona fide continuing student in the Master of Business Administration (MBA) degree program in this University.

He/she is required to submit as part of his/her coursework assessment a research project report on a management problem. We would like the students to do their projects on real problems affecting firms in Kenya. We would, therefore, appreciate your assistance to enable him/her collect data in your organization.

The results of the report will be used solely for academic purposes and a copy of the same will be availed to the interviewed organizations on request.

Thank you.

  
**PATRICK NYABUTO**  
**MBA ADMINISTRATOR**  
**SCHOOL OF BUSINESS**



## Appendix III: Request to Collect Data

Hellen Jebichiy Magoi  
P.O. Box 57609, 00200  
Nairobi  
10<sup>th</sup> October, 2013

Department of Ethics and Research  
Kenyatta National Hospital  
P.O. Box 20723, 00202  
Nairobi

Dear Sir,

**REF: AUTHORITY TO COLLECT ACADEMIC RESEARCH DATA**

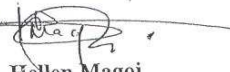
---

I write to request for authority to collect research data for academic purposes. I am a second year student of Master of Business Administration at University of Nairobi. My topic of study is Brain Drain in the Public Health Sector in Kenya: A Case Study of Kenyatta National Hospital.

Attached is a proposal that has been approved by my supervisor.

I look forward to your urgent response.

Thank you

  
Hellen Magoi  
P/No. 534824

## Appendix IV: Authority to Collect Data



Ref: KNH/UON-ERC/A/416

KENYATTA NATIONAL HOSPITAL  
Hospital Rd. along Ngong Rd.  
P.O. BOX 20723 Nairobi  
Tel: 726300-9  
Fax: 725272  
Telegrams: MEDSUP, Nairobi  
Email: [KNHplan@Ken.Healthnet.org](mailto:KNHplan@Ken.Healthnet.org)

14<sup>th</sup> October 2013

Hellen Jebichiy Magoi  
University of Nairobi  
NAIROBI

Dear Hellen,

**Research proposal: "Brain Drain in the Public Sector in Kenya: A Case of Kenyatta National Hospital"**

This is to inform you that the Kenyatta National Hospital Ethics and Research Committee has reviewed and approved your above revised research proposal for the period 14<sup>th</sup> October 2013 – 13<sup>th</sup> October 2014.

You will be required to request for renewal of the approval if you intend to continue with study beyond the deadline given.

On behalf of the committee, I wish you fruitful research and look forward to receiving a summary of research findings upon completion of the study.

This information will form part of the database that will be consulted in future when processing related research study so as to minimize chances of study duplication.

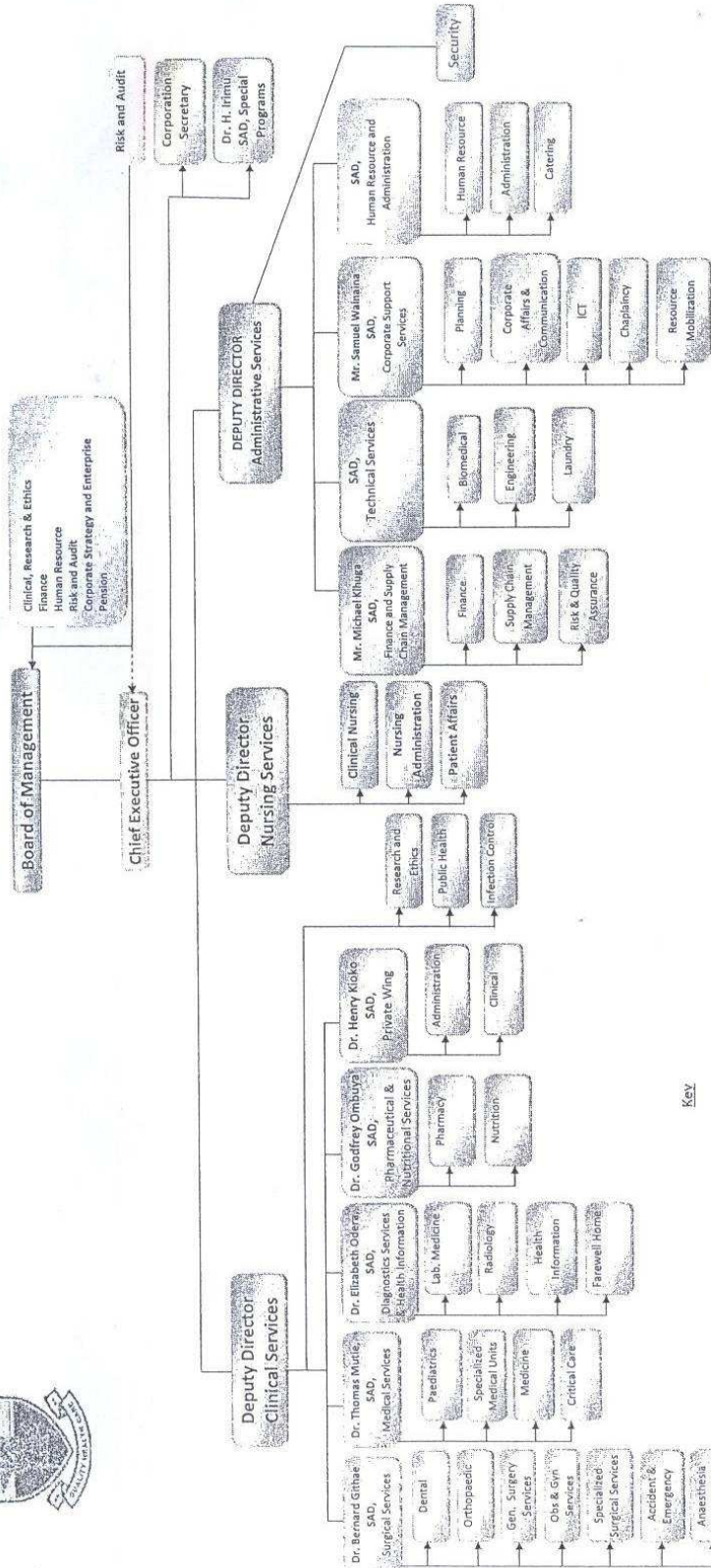
Yours sincerely

**PROF. A. N GUANTAI**  
**SECRETARY, KNH/UON-ERC**

c.c. THE Chairperson, KNH/UON-ERC  
The Deputy Director CS, KNH  
Supervisor: Dr. James Gathungu, University of Nairobi  
Reader: Dr. Mark Mudenyio, KNH

# Appendix V: KNH Organization Chart

## THE KNH DECENTRALIZED STRUCTURE



NB:

All the Senior Assistant Directors (SADs) will have Officers from Finance, Supply Chain Management, Human Resource and Administration. Each division will handle all issues relating to Staff Performance, Promotion, Training, Discipline, Welfare; Procurement, Finance, Quality Assurance, Corruption Prevention, Occupational Health and Safety. All letters from staff should therefore be addressed to the SADs for action.

- Key**
- Urology, Gastro-intestinal, Surgery
  - Plastic Surgery, Thoracic & Cardiovascular Surgery, Neuro-Surgery, Paediatric Surgery, ENT, Ophthalmology, Burns Unit
  - Oncology, Renal Unit, VCT, Dermatology, Heart Unit
  - Physiotherapy, Occupational Therapy, Orthopaedic Technology
  - Internal Medicine RIDD/ Comprehensive Care Centre, Cardiology, Patient Support Centre, Medical Social Work, Medicine
  - Nursing Education, Nursing Standards
  - Medical, Surgical
  - Main and satellite Theatres, TSSU/CSSD
  - Housing & Welfare, Transport Unit
  - Information Comm., Technology, Telephone Services
- General Surgery  
Specialized Surgical Services  
Specialized Medical Units  
Rehabilitative Services  
Medicine  
Nursing Administration  
Clinical Nursing  
Theatres  
Administration  
ICT

Approved for circulation:  
  
 Richard Leresian Leslyampe  
 Chief Executive Officer

Date: 17<sup>th</sup> October 2011

Vision: To be a World Class Referral Hospital in the Provision of Innovative and Specialized Healthcare

**BRAIN DRAIN IN THE PUBLIC HEALTH SECTOR IN KENYA:  
A CASE OF KENYATTA NATIONAL HOSPITAL**

**MAGOI HELLEN JEBICHIY**

**A MANAGEMENT RESEARCH PROJECT SUBMITTED IN  
PARTIAL FULFILLMENT FOR THE REQUIREMENTS FOR  
THE AWARD OF DEGREE OF MASTER OF BUSINESS  
ADMINISTRATION, (MBA) SCHOOL OF BUSINESS,  
UNIVERSITY OF NAIROBI**

**NOVEMBER, 2013**

## **DECLARATION**

I hereby declare that this research project is my original work and has not been presented to any other university or institution of higher learning for a degree, diploma or certificate award or anywhere else for academic purposes.

Signature..... Date .....

**MAGOI HELLEN JEBICHIY**

**REG.NO: D61/68646/2011**

## **SUPERVISOR'S APPROVAL**

This project has been submitted for examination with my approval as the university supervisor.

Signature..... Date .....

**DR. JAMES GATHUNGU**

**DEPARTMENT OF BUSINESS ADMINISTRATION**

**SCHOOL OF BUSINESS**

**UNIVERSITY OF NAIROBI**

## **DEDICATION**

I dedicate this project to my children; Keith and Heidi. They are the source of my strength. They are part of my reason for continued hard work and commitment to academic success. May this piece of research work always inspire them to rise to greater heights of academic prosperity.

## **ACKNOWLEDGEMENTS**

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## **ABBREVIATIONS AND ACRONYMS**

AIDS	-	Acquired Immune Deficiency Syndrome
HIV	-	Human Immunodeficiency Virus
KNH	-	Kenyatta National Hospital
RoK	-	Republic of Kenya
WHO	-	World Health Organization
UK	-	United Kingdom
USA	-	United States of America
UNCTAD	-	United Nations Conference on Trade and Development

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## ABSTRACT

Kenya loses, on a daily basis, her best academicians, scientists, doctors, nurses, accountants, and other sought after professionals, through brain drain, into other richer countries. The question is: Why? The impact of the problem is detrimental to the development of the African continent. It also seems to be a continuous issue without any trend of ceasing. This study explores causes of brain drain in the public health sector in Kenya. In particular, this study aims at establishing the factors influencing brain drain at the Kenyatta National Hospital and ultimately pinpoint possible solutions to stem brain drain. It will also elaborate on some already identified possible solutions to the problem. Trained human resources are fundamental for well-functioning health systems, and the lack of health workers undermines public sector capacity to meet population health needs. Existing research on human capital migration in the public sector in Kenya has focused on documenting the number of healthcare professionals migrating to developed countries, other have focused on effects of brain drain. This study focused on causes of brain drain in the public health sector in Kenya. The objective of this study was to establish the factors that influence brain drain at the Kenyatta National Hospital and to recommend possible solutions to curb brain drain. This study documents the factors that contribute to brain drain among health professionals in Kenya. This is descriptive study, which is based on conceptual analysis, literature reviewing, and theory building. The approach was to review relevant literature using electronic search and what other authors have said about the subject, to collect data using an interview guide and to analyze it using content analysis approach. The results can then provide a policy framework to advice on how to stem brain at the Kenyatta National Hospital and the public health sector as a whole. The findings of this study that of most of the health professionals desire to migrate. This is due to two factors; home country conditions that push them to leave and the actions and conditions in developed countries that attract them. From the findings of the study, brain drain could pose a serious problem to the management of public health institutions in Kenya. There is therefore need for intensive consultations and consensus building between all stakeholders. In order to stem brain drain, concerted effort need to be put on worker motivation and retention, career planning and job satisfaction programmes. There also is need for the public health sector to keep records of all professionals; this will play a critical role in planning human resource requirement of the health sector in Kenya

**Key words:** Brain drain, public health sector, Kenyatta National Hospital, health professionals.

# CHAPTER ONE: INTRODUCTION

## 1.1 Background of the Study

Brain drain is the loss of intellectual and technical personnel through migration from one country to another. It normally implies the movement of highly trained professionals from poorer to richer countries in search of better opportunities. The term brain drain appears to have gained wide usage in the late 1960s when developing countries experienced mass migration of skilled personnel to developed countries. Perhaps the most notable of this is the use of H1-B visa in the 1990s by the USA to import skilled workers mostly from India for the then booming high technology sector. Professionals from Europe have moved to America and those from Africa to America and Europe.

Brain drain phenomenon is a serious issue in developing countries especially in Africa. Most countries continue to lose a sizeable number of professionals and intellectuals in various sectors of the economy. This continuous loss of skilled personnel is considered a contributing factor to slow growth in African countries. The high demand of African workers every part of the world is an indication that the quality of training accorded to health workers in African training institutions are high but measures for retaining these individuals has been the biggest challenge. The reason for this continuous outflow of workers from developing countries has been attributed to two factors; factors in home country often described as barriers to workforce retention or 'push' factors and factors that attract professionals to a foreign country or 'pull' factors.

Like most other African countries, Kenya is facing a human resource crisis in the public health sector. Health professionals, such as doctors and nurses, are emigrating to developed countries to seek better employment prospects. Statistical information from the World Health Organization (2003) shows wide global variations in health professional availability in developing countries, ranging for doctors from 2.3 to 664 per 100,000 populations against the recommended ratio of 1 doctor to 1000 populations. These large variations in doctor to populations' ratio compromise the quality of health for world's poor populations. Statistics from nursing council of Kenya indicate that on an annual basis average 840 nurses apply for verification of their certificates with an intention to migrate. Countries of destination are USA accounting for 59% of applications and UK at 27%. According to Clemens (2003) Kenya officially reports 7,830 certified medical doctors. However, 51% of them (3,975) are working abroad.

Studies on public health sector brain drain African countries have shown a direct relationship between low wages in public health sector and the decision to migrate (Kingma, 2006). Other factors include lack of employment opportunities, lack of career development opportunities and increase workload (Joint Learning Initiative, 2004), nursing shortage in developed countries and lower work load and (Stilwell et al., 2004) career advancement opportunities among other factors. Research in the areas of health sector brain drain in Kenya has been done by a few researchers. (Nwachukwu , 1997) found that brain drain leads to reduction in national income Macharia (2003) affects the local labour market, Kirigia, et al., (2006) loss of huge human capital resource, Machayo and Keraro (2013) to loss of mentors, loss of supervisors, loss of role models and loss of tax revenue.

Brain drain has denied Kenya the benefits of a well trained work force in the health sector. Shortage of health professionals has been a major impediment in the fight against disease such as malaria, HIV/AIDS, and infant mortality especially among the poor. In the current study, the researcher gathered information from Kenyatta National Hospital's health workers on the factors in and outside Kenya that contribute to workers move to developed countries. Whilst health professionals encompass a wide range of people with skills working in health, the focus of this study was on full time healthcare professionals at the Kenyatta National Hospital.

### **1.1.1 Brain Drain**

Brain drain deprives developing countries of their most highly educated people who would be natural leaders in terms of economic and social development. This makes these countries unable to come out of poverty, which is often worsened by violence and extremism, as well as passiveness and hopelessness. The achievement of many developing countries' Millennium Development Goals and particular national targets is threatened or hampered due to inadequate human resources and this situation is compounded by the loss of both essential and beneficial professionals such as scientists, medical doctors, engineers, academics, nurses, technicians, administrators and managers who emigrate to more economically developed countries (Dassin, 2005).

Brain drain has long been the subject of policy debate and development research. It has also received significant attention in the media. The migration of health workers is particularly visible, with large numbers of foreign health professionals working in developed countries while health crises grip African and other developing countries.

Nevertheless, despite a significant body of research, reliable data are elusive and effective solutions even more so. Adams (2003) observed that losses to sending countries from emigration of skilled emigrants, particularly in the cases of smaller and least developed countries, are clear. In recent years, some scholars such as Kirigia et al., (2006) have also pointed to "brain gain" effects, such as remittances, return migration of migrants with added skills, diaspora contributions to development, and the effect of the opportunity for overseas education and employment in increasing incentives for professional education in sending countries. It is generally agreed, however, that these positive effects are unlikely to be sufficient to compensate for negative effects in most developing countries (Adams 2003).

The most extensive policy debate on skilled migration has dealt with health workers. However, there is now a growing consensus that the principal responses to date have been ineffective. These include measures to prohibit migration of skilled workers or to pay incentives for return. Developed countries systematically encourage the immigration of skilled labour. According to Kingma (2006), professionals continue to be attracted by the higher salaries and generally better working conditions in the rich countries. In the health field, it is unlikely that brain drain issues can be addressed effectively without broad international cooperation to reduce inequality in health systems and health outcomes between countries. The shortage of health personnel in developed as well as developing countries needs to be met through an expansion of education and training capacity, both overall and in the most disadvantaged countries in particular. Global health budgets need to be provided with sustainable financing from both national and international sources, including new innovative financing mechanisms such as those being developed by UNICTAD.

The perspective on health sector brain drain needs to shift to the development of health systems rather than focusing only on the migration of health workers. The supply of health workers is just one of multiple factors affecting health systems equity. Promoting quality health systems both requires and attracts skilled health professionals. If that is accepted as the shared goal, both at national and international levels and by health institutions and professionals themselves, then distribution of personnel to meet the needs can be addressed not only by encouraging return of skilled professionals to their countries of origin, but also by more flexible forms of temporary assignment and collaboration across national lines.

### **1.1.2 Health Sector in Kenya**

Kenya is a signatory to the United Nations (UN) Millennium Declaration and has committed itself to reduce poverty, improve health and promote peace, human rights, gender equality and environmental sustainability. The country has established time-bound and quantifiable targets on health related millennium development goals (MDGs): Reducing the under-five mortality rate by two-thirds between 1990 and 2015, reducing the maternal mortality ratio by three-quarters between 1990 and 2015 and halting and beginning to reverse the spread of HIV/AIDS, malaria and other major diseases by 2015.

The country's health system is organized in a hierarchical pyramid. Village dispensaries comprise the largest – and lowest – level of the pyramid. District health centers and provincial hospitals are fewer and higher on the pyramid, and the Moi Teaching and Referral Hospital in Eldoret and Kenyatta National Hospital in the capital city, Nairobi, sits at the top. The Ministry of Health sets policies, develops

standards, and allocates resources for health care services; however, in accordance with the decentralization scheme, the district is the level at which most management takes place. The government reports that there are more than 5,000 health facilities in Kenya. The government oversees 41% of health centers, NGOs run 15%, and the private sector operates 43%. The government operates most hospitals, health centers, and dispensaries, while the private sector operates nursing homes and maternity facilities catering to higher income clientele.

Kenya faces a significant shortage of physicians, with only 4,500 in the entire country, according to the World Health Organization. Whereas the United States counts on 26 physicians per 10,000 people, Kenya has just one doctor per 10,000 residents, a ratio that is below average for the Africa region. More than 50% of Kenyan physicians practice in Nairobi, which, with an estimated 3 million people, represents a small fraction of the country's population. Only 1,000 physicians work in the public sector, which serves the majority of Kenyans. A corps of 37,000 nurses' supplements physician care, as do traditional midwives, pharmacists, and community health workers. The migration of trained health workers from the public sector to higher paying positions in the private sector, or away from Kenya altogether, has made retaining qualified health personnel a persistent challenge. Kenya has one of the highest net emigration rates for doctors in the world, with 51% leaving the country to work elsewhere.

The presence of so few health personnel in Kenya can make it difficult for the government to carry out adequate disease surveillance, maintain accurate statistics regarding disease outbreaks, and report relevant findings to neighboring countries and

international organizations. To improve its information gathering and to better track its progress in meeting the health-related Millennium Development Goals, Kenya has developed a Health Management Information System (HMIS) and is currently working with international partners to improve its capacity to provide timely and relevant data regarding the country's health situation to policymakers and other stakeholders.

### **1.1.3 Kenyatta National Hospital**

Kenyatta National Hospital was founded in 1901 with a bed capacity of 40 as the Native Civil hospital, it was renamed the King George VI in 1952. The Hospital was built to fulfill the role of being a National Referral and Teaching Hospital, as well as to provide medical research environment. KNH became a State Corporation in 1987 with a Board of Management and is at the apex of the referral system in the Health Sector in Kenya, this follows the KNH Board Order of 1987 contained in the legal Notice No.109 (Kenya Gazette Supplement No. 23 of 10th April 1987). According to the legal Notice the function of the hospital were stated as follows: 1) to receive patients on referral from other hospital or institution within or outside Kenya for specialized care, 2)to provide facilities for medical education for the University of Nairobi and for research either directly, or through other cooperating health institutions.3) to provide facilities for education and training in nursing and other health and allied professions, 4) to participate, as a national referral hospital in national health planning.

The hospital is run by a statutory board. There is, however, a management team for the purpose of proper execution of policies and effective management. The Director is

in charge of the day to day running of the hospital. Below the Directors are two deputy directors, The Deputy Director Clinical Services and Deputy Director Administrative services. There are managers who manage administrative services and Heads of Department who manage the various clinical and non clinical services. The hospital has a capacity of 2000 beds with annual outpatient attendance of 600,000 visits and annual inpatient attendance of 89,000. Currently, there are total of 4800 employees against 6000 the hospital is designed to have in order to operate effectively. In essence therefore, the hospital is not operating optimally. Such shortfall leads to poor quality service (KNH, 2013)

## **1.2 Research Problem**

In the Africa where the level of unemployment is high, human resources for health remain in short supply and even where available are poorly motivated and increasingly attracted into wider international labour market. The numbers of health professionals migrating from Africa to the brain drain has reached a peak in recent years in apparent response to huge demands emanating from the developed countries. These demands were occasioned by demographic changes, aging populations, and aggressive recruitment policies, better remuneration and flexible working hours (Davlo, 1999). Developing countries on the other hand are grappling with poor governance of health services, lack of technology and equipment, lack of sustainable funding for production of new health workers (Stilwel, 2005) and micro-economic policies that cap the absorption of health workers in the public sector and hinder efforts to retain skilled health workers through limiting salaries and worsening working conditions (Stilwel, 2004)

Public health sector in Kenya is the major provider of health services. Due to high poverty levels and burdens of diseases such as HIV/AIDS and malaria, the public health sector is the only available choice for majority of the population. Kenya has attempted to develop new standards to improve working conditions in the health sector through salary increases, introduced health reforms initiatives such as decentralization of health services, opportunities to engage in private practices and training as retention strategies (Machayo and Keraro, 2013). These initiatives have not yielded much; developed countries are still depriving Kenya of worth investment embodied in her human resources for health. If the current trend of migration is not curtailed, the chances of achieving the Millennium Development Goals (MDG) would remain bleak. Such continued loss of healthcare professionals will continue to contribute to further underdevelopment of Kenya by keeping the majority of the people in the vicious circle of ill health and poverty.

Previous studies on health sector brain drain in Kenya focused on the effects rather than the causes. Machayo and Keraro (2003) posits that drain has lead to loss of mentors, loss of supervisors and loss of role models, (Nwachukwu , 1997) reduction in national income, Macharia (2003) reduction on employable health staff and Kirigia, et al., (2006) loss of huge human capital resource. This study therefore shifted from the effects of brain drain to its causes. This study was achieved through a case study of Kenyatta National Hospital. Kenyatta National Hospital occupies an important place in public health sector; it employs the largest number of health professionals, is an active participant in policy formulation and is at the peak of national referral system. In addition, it is the centre for treatment of complicated medical conditions in Kenya and in the East and Central African Region. The outcome of the study has

therefore provided a picture of the status of public health sector in Kenya. This study sought to answer the question; what Factors influences brain drain of health professionals' at the Kenyatta National Hospital?

### **1.3 Research Objective**

The objective of this study was to establish the factors that influence brain drain at the Kenyatta National Hospital.

### **1.4 Value of the study**

The study is of practical relevance to all stakeholders in public health sector. It provides the government with useful insight that will guide policy formulation in human resource for health in the public health sector in Kenya. In terms of industry, it provides players with useful insights of how best to effectively manage human capital for health to stem brain drain.

It provides empowerment to the management of Kenyatta National Hospital with knowledge on various human resources issues to successfully reverse brain drain, the findings opens a door for development of strategies for eradicating brain drain not only in public health sector but in all sectors in the country. It is also an encouragement to the hospital and other public institutions to be responsive and receptive to employees' problems and also assist policy makers to understand the reasons why Kenyan and African workers leave their countries where the knowledge and expertise is so much required. Health sector is important for the economic growth and development of the country.

In theory, it contributes to the body of knowledge in the area of health sector brain drain. It is also useful to the health professionals in understanding their work environment and to make informed decision on whether to migrate or not while at the same time identifies further research gaps that other researchers may need to undertake in future.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Introduction**

This chapter presents theories related to brain drain as documented by various scholars. It gives a brief analysis of brain drain as a concept and reviews literature on brain drain in Kenya with a particular focus on the public health sector.

### **2.2 Theoretical Foundation**

Brain drain is said to occur when a country becomes short of skills as people with such expertise emigrate. Alternatively, it can be described as the loss by countries of essential and needed professionals via emigration to other countries. Skilled workers included in this class are scientists, doctors, engineers, academics, nurses, managers, and other professionals who have received a tertiary education (Clemens, 2009). Brain drain as a concept emerged in the 1960s triggered by the massive migration of British scholars to the United States. The early emigration of Kenyans as with most Africans was a product of colonialism. Brain drain is closely associated with migration. It is the migration of skilled and intellectuals normally from developing countries to developed countries. Various scholars have brought forward theories to explain the process of migration.

The first theory is the neoclassical migration theory. This theory originated from the works of Hicks (1932), Lewis (1954) and Harris and Todaro (1970). According to this theory, migration is driven by geographic differences in labour supply and demand and the resulting differentials in wages between labor-rich versus capital-rich countries. The central argument of the neoclassical approach thus

concentrates on wages. (Faist 2000; Dustmann et al, 2003; de Haas 2008; Massey et al.1998) observed migration patterns tend to be therefore hump-shaped: migration rates accelerate with the growth of country's wealth as more individuals or households are able to fund migration. Then, as the country continues to develop, the emigration rates diminish and the incentives to migrate change. Critics of this theory argue if what counted were wage differentials, then poorest in the world would want to move first, evidence from around world doesn't support this.

The second theory is the new economics of migration theory has come to challenge some of the assumptions of the neoclassical approach; it shifted the focus of migration research from individual independence to mutual interdependence (Stark 1991). As such, migrant decisions are not based purely on individual utility-maximizing calculations but are rather a household response to both income risk and to the failures of a variety of markets – labor market, credit market, or insurance market (Massey et al.1993). Hence, migration in the absence of meaningful wage differentials or the absence of migration in the presence of wage differentials does not imply irrationality but rather compels us to consider a set of other variables related to relative deprivation and risk-aversion and risk-minimization of household income (Stark 1991; Stark 2003). The New Economics of Migration Theory has been criticized for sending-side bias and for its limited applicability due to difficulties in isolating the effects of market imperfections and risks from other income and employment variables.

The third theory is the World System Migration Theory. This theory links the determinants of migration to structural change in world markets and views migration as a function of globalization, the increased interdependence of economies and the

emergence of new forms of production (Massey et al. 1993; Sassen 1988; Skeldon 1997; Silver 2003). The expansion of export manufacturing and export agriculture linked strongly to foreign direct investment flows from advanced economies to semi-developed or emerging economies has led to a disruption in traditional work structures and has mobilized new population segments into regional as well as long distance migration. Capital mobility is hence a crucial factor for the world system theorists. This theory deny that individuals truly have free choice in making migration decisions and present them in more deterministic forms, as pressured into movement as an outcome of broader structural processes (De Haas 2008).

The fourth is the Dual labor market theory, like world system theory, links migration to structural changes in the economy but explains migration dynamics with the demand side (Massey et al, 1993). Developed by Piore (1979), dual labor market theory posits a bifurcated occupational structure and a dual pattern of economic organization in advanced economies. Duality unfolds along the lines of two types of organization in the economy, namely capital-intensive where both skilled and unskilled labor is utilized, and labor intensive where unskilled labor prevails. The theory argues that migration is driven by conditions of labor demand rather than supply. The character of the economy in advanced countries creates a demand for low-skilled jobs which domestic workers refuse to take up due to, for example, status. As immigration becomes desirable and necessary to fill the jobs, policy choices in the form of active recruitment efforts follow the needs of the market.

The final theory is the network theory of migration. It does not look at the determinants which initiate migration but rather at what perpetuates migration in time

and space (Massey et al. 1993). Migrant networks which often evolve into institutional frameworks help to explain why migration continues even when wage differentials or recruitment policies cease to exist. The existence of a diaspora or networks is likely to influence the decisions of migrants when they choose their destinations (Vertovec 2002; Dustmann and Glitz 2005). The network theory also helps to explain the reasons why migration patterns are not evenly distributed across countries, but rather how they tend to form so-called migration regimes (Faist 2000). It suggests that migratory movements arise in response to prior existence of links between sending and receiving states, such as colonial ties, trade or investment flows (Castles and Miller 2009).

### **2.3 The Concept of Brain Drain**

The British Royal Society first coined the expression Brain drain to describe the outflow of scientists and technologists to the United States and Canada in the 1950s and early 1960s. The first studies analyzed this outflow and its political and social effects. These studies analyzed the impact of the high skilled migration on the social welfare of the countries involved in this flow of people. At the end of 1960s, several articles analyzed the consequences of brain drain on welfare. Sjaastad (1962), Weisbrad (1964): Positive Externalities of the Public Education, Bowman & Myers (1967), Bodenhofer (1967), Galtung (1967), Scientific Colonialism, Watanabe (1969): Brain Drain from Developing Countries to the Western Countries and Johnson (1969): How the Welfare of those Remaining at Home Changes in Presence of Brain Drain). Summarizing, the results of these studies are that the main motivations to migrate were political and social; the effects of these migrations are bad either for welfare or for the social structure of the sending countries, the solution suggested is to

create and fortify the role of the International Organizations and Institutions on the management of the migration flows.

During the 1970s the brain drain was characterized as a North-South, developing-developed country issue (Carrington & Detragiache 1999). The possibility that the welfare of those remaining in developing countries could be reduced by an outflow of educated manpower had been recognized in the literature as well. As in the 1960s, also in the 1970s there are several studies on the brain drain and its welfare impact. In particular, there are the works of Baldwin (1970), Scott (1970) (they analyzed the opportunity to apply the human-capital's approach to study the brain drain phenomenon). These authors concluded that welfare of non-migrants would fall only if the migrants' contribution to national output were greater than their income. For several reasons, the literature believes that the conditions for brain drain to be welfare-deteriorating are often verified.

In the mid-1980 with the birth of the so called New Growth Theory, researchers looked at brain drain phenomenon. Paul Romer (1986, 1987, 1990) and Robert Lucas (1988) concluded that immigration of skilled migrants stimulates the dynamics of economic growth. Finally, many authors tested how the brain drain is a key element in the international commerce because of its influence on some crucial production's factors. These debates persist in the 1990s thanks to the works of Rach (1991) (he stresses the necessity to reconcile the themes of the Commerce with the ones of Migrations), Gould (1994) (The immigrants' consumptions in their native countries and the consequences on the commerce) and Ishikawa (1996) (Scale's Economies of the productive factors and migration). Summarizing, the results of these studies are

that the main motivation to migrate was the more productivity and higher income of the skilled workers in the developed countries. The effects of these migrations are bad for the growth and for the welfare of the sending countries. In the long run increase the divergence between the developed and developing countries.

Finally, in the 1990s and early 2000s, some authors analyzed the circumstances where the Brain Drain becomes “Brain Gain”. Several theoretical papers examine the impact of migration prospects on human capital formation within a context of uncertainty. In a poor economy with an inadequate growth potential, the return of human capital is likely to be low and this would lead to a limited incentive to acquire education, which is the engine of growth. However, the world at large does value education at all hence, allowing migration to take place from this economy would increase the educated fraction of its population. Given that only a proportion of the educated residents would emigrate, the average level of education of the remaining population would increase (Beine et al., 2001.) Beine et al. (2001, 2003) and Docquier and Rapoport (2007). These findings let to the acknowledgement that international movement of educated people may have positive effects on the sending economy in terms of increased domestic enrolment and significant financial contributions through the remittances they send home.

The above literature on the brain drain has described and analyzed the pull and pushes factors leading in tandem to brain drain of highly-trained professionals and has concluded that; brain drain results in mostly or exclusively negative effects and harmful losses. The traditional brain drain literature has viewed the exodus of human capital as a “curse” for developing countries, leading to increased inequality at the

international level, with the rich countries getting richer at the expense of the poorer countries. The last century brought in the concept of 'new brain drain' or 'new beneficial brain drain' literature claiming that brain drain has a big impact on the number of skilled individuals in a sending country. Driven to achieve education and professionalism by the prospects of emigration, they form intellectual potential. As not all of them leave the country, a part of this extended capital stays and generates economic welfare and growth for their nation.

Emerging statistical and anecdotal evidence indicates that there are significant positive effects associated with the global skills flow. Benefits accompanying brain drain were analyzed in the works of Mountford (1997), Starl et al. (1997, 2004) Beine et al. (2001, 2003) and Docquier and Rapoport (2007). These findings led to the acknowledgement that international movement of educated people may have positive effects on the sending economy in terms of increased domestic enrolment and significant financial contributions through the remittances they send home. Some authors have recognized that brain drain brings exchange of knowledge, foreign direct investment and increased trade as a result of diaspora activity as well as skills know-how and work culture brought by return immigrants from their host countries (Chen and Boufford, 2006, Mills, et al. 2008).

Researchers have looked at Kenyan with regard to emigration experiences and outcomes. Siringi and Kimani (2005) observed that many Kenyans leave the country every year to study abroad but they never return after obtaining appropriate education. They seek jobs in their host countries. According to Kirui (2005), when highly skilled people leave the country it poses serious brain drain, robbing the country of essential

human capacity to help in socio-economic development. On the positive side, Nwachukwu (1997) examined the phenomenon of brain drain in Kenya, Ghana and Nigeria using a social opportunity policy and intervention model, her studies concluded that brain Kenya experienced a reduction of national income due to migration of talented professionals. Okoth (2003) examined the role of diaspora in development and saw enormous contribution of emigrants towards their national development through remittances.

### **2.3.1 Health Sector Brain Drain**

Brain drain is described by Lowell and Findlay (2001), as the emigration abroad of tertiary-educated persons at such levels and for such lengthy durations that their losses are not offset by their remittances home, by transfer of technology, or by investment or trade from the recipient country. This description however skirts the issue of permanent versus temporary migration and reinforces the fact that it is difficult to discern the true intentions of migrant professionals.

Migration and the resulting brain drain are a global phenomenon and universal problem. Especially in the health sector, there have been significant shifts of human capital from Europe to the United States, leaving a gap which is quickly filled by high-skilled immigrants from the Southern part of the world. According to the WHO (2006), Africa remains the sole continent still struggling with insufficient development in all fields. Education and the health sector continue to deteriorate and cannot keep up with the rising demand due to an annual population growth of about 3%; HIV/AIDS is spreading fast and inexorably, and the re-emergence of old communicable diseases such as tuberculosis and malaria, further weakening the

countries' systems and economies and increasing the demand for a functioning health system even more.

Although there are positives arising from global skills flow, we should not lose sight of the difficult situation in the health sector in developing countries like Kenya. When health professionals emigrate, there is a negative effect not only on treatment but also health promotion, disease prevention, and rehabilitation of those who remain behind, thus influencing their levels of health and productivity and general welfare. The problem of brain drain in Africa is huge. The shortage of health workers in a resource limited setting is a well established constraint to building sustainable, quality public health system and achieving improved health outcomes (WHO, 2006). The reason for this state of affairs is blamed on lack of sustainable funding for production of new health workers (Crisp, Gawanas and Sharp, 2008) and microeconomic policies that cap the absorption of workers into public health sector and hinder retention of workers through limiting salaries and worsening working conditions.

Most health professional education in Africa is provided and subsidized by governments, and professionals are produced for the health sector by publicly funded universities and colleges managed by the education sector. Unfortunately, studies of working health professionals across the African continent show extremely high levels of interest in emigration and a strong desire to leave, either temporarily or permanently (D. McDonald and J. Crush, 2002). Concerns about the long-term impact of the migration of health professionals from developing countries have recently led to a focus on the next generation, both in Africa (Dovlo and Nyongator, 1999). Many countries invest substantial financial resources in the training of physicians and

nurses. Clemens (2011) recently argued that the actual costs of health professional emigration are difficult to quantify and are often exaggerated. However, African governments clearly expect a return on their investment in the form of an increased pool of health human resources.

A number of push and pull factors, have been cited as influencing the decisions of health professionals to leave their countries of origin. Push factors refer to events in the country of origin that motivate professionals to leave whilst pull factors are the deliberate and/or unintended actions from recipient countries that attract health professionals to their health services Dovlo (1999), Martineau, Decker, et al. (2002), Meeus (2003), Padarath et al. (2003) and others have discussed the reasons underlying the brain drain in various papers. "Push" factors were used by Meeus (2003) and Dovlo (1999) in some studies on the brain-drain phenomenon to describe factors within source countries that compel professionals to emigrate whilst "pull" factors arise within recipient countries and attract intellectuals into their own systems. Padarath (2003), however, describe a system of push factors that exist in both source and recipient countries but which are mitigated in recipient countries by what they described as "stay" factors and in source countries by "stick" factors.

The push factors refer to the unfavourable conditions in Africa that drives people to leave. They include, among other factors, job scarcity, low wages, in Africa have been sharp and potentially troubling. He posed this question: how can public institutions retain professionals, researchers, and scientists, in the face of such sharp declines in average real wages? Dovlo (1999), Martineau, Decker, et al., (2002), Meeus(2003), Padarath (2003) and others have discussed the reasons underlying the brain drain in

various papers Pull factors are caused by increased demand for health professionals in developed countries and include attractive remuneration, new career and personal development prospects and active recruitment by those countries. The common use of a professional language such as English and similarities in professional training and systems arising from the colonial experience of African countries are also thought to enhance the pull factors

Numerous other factors contributing to the human resources for health crisis have been identified, including lack of sustained funding for production of new health workers (Stilwel, 2005) and macro-economic policies that cap the absorption of health workers into the public sector and hinder efforts to retain skilled health workers through limiting salaries and worsening working conditions (Stilwell, 2004). Migration of trained health workers to work in wealthier countries for higher salaries continues to plague resource-limited settings (United Nations: Millennium Development Declaration 2000). The primary cause of Brain Drain in Kenya is the difference among countries in economic and professional opportunities, hence the imperative to move from one area to another to improve their social and economic status.

## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Introduction**

This chapter presents the research methodology that was used in the study. It includes the research design, data collection method and data analysis method used in the study

### **3.2. Research Design**

This is qualitative research constituting a descriptive case study. It sought to establish the factors influencing brain drain at the Kenyatta National Hospital. It involves an in-depth, cross sectional examination of a single instance. According to Cooper and Schindler (2003), a study concerned with finding out who, what, when, where and how of a phenomenon is a descriptive study, which is the concern of the proposed study.

The case study was preferred since it facilitates intensive study of the concerned unit and provides an in-depth analysis of its behavior patterns. In addition, a case study method enriches generalized knowledge and makes it possible for a researcher to use one or more methods depending upon the prevailing circumstances. The objective of this study was a case study aimed at establishing the factors contributing to brain drain in at the Kenyatta National Hospital

### **3.2. Data Collection**

The source of the data for this research was primary. Data was collected through personal interview. An interview guide (see appendix) was used to collect data from respondents. With an interview guide, the respondent's feedback gave an insight to

his/her feelings, background, interests and decisions and gave as much information as possible without holding back.

Respondents for this study were senior officers (doctors, nurses, physiotherapists) at Kenyatta National Hospital (KNH) who the researcher believes are health professionals most affected by brain drain phenomenon. The departments covered in the study were; Obstetrics and Gynaecology, Paediatrics, Orthopaedics, Accident & Emergency, Medicine, Surgery and Critical Care Centre. Further, this group formed the senior management of KNH that play a key role in the management of health care workers in the hospital. It is the same group that assigns duties to staff in the hospital.

The target respondents therefore provided information on what factors contribute to brain drain of health professionals at Kenyatta National Hospital. Open ended questions were applied to avoid subjectivity that could arise by limiting the respondents to answer to questions

### **3.4. Data Analysis**

Data was checked for completeness, accuracy, errors in responses, omissions and other inconsistencies. The data was analyzed using content analysis since this study sought to solicit for data that is qualitative in nature. A comparison of data collected with theoretical approaches and documentaries cited in the literature review was done. Further, data obtained from various officers was compared against each other in order to get more relevant on the issues under study.

Data was analyzed using content analysis approach. Content analysis enabled the quantification and analysis of the presence, meaning and relationship of words and

concepts within the texts. In addition, it allowed inferences to be made about messages. Cooper and Schinder (2008) points out that content analysis measures the similarities or the 'what' aspects of the messages are present. He further points out that content analysis guards against selective perception of content and provides for rigorous application of reliability and validity criteria.

## **CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION**

### **4.1 Introduction**

This chapter presents the findings of the study and the analysis of data collected using the interview guides that were distributed to the senior officers (Doctors, Nurses and Physiotherapists). The senior officers were drawn from various departments at KNH. They are; Obstetrics and gynecology, Paediatrics, Orthopaedics, General and Specialized Surgery, medicine, Accident and Emergency, Critical Care Units, Rehabilitative Services and Dentistry.

Majority of respondents of this study expressed their desire to work in Developed countries. Their most preferred destination was USA, UK, and Australia. Their choice is determined by the language spoken in the particular country, economic development, security and future economic prospects. The minority preferred to work in an African country specifically due to good governance, improved infrastructure and good economic prospects.

### **4.2 Demographic Information**

Data on gender of the respondents revealed that majority (57%) were female while the rest (43%) were male. Age of respondents indicate that a (33.2%) were between the ages of 41-45 (16.7%) were between that ages of 25 to 30, (16.7%) were between 31 to 35, another (16.7%) were another (16.7%) were between the age of 46 to 50. A majority (66.7%) of the respondents had college education while (33.3%) had university education. An overwhelming majority (85.7) of the respondents indicated their desire to out migrate from Kenya. Their choice of destination countries showed a

preference for developed countries where (42.8) indicated that they wish to migrate to USA, (14.3%) had preference for Australia, another (14.3%) preferred UK, (14.3%) indicated preference for an African country- Botswana and country (14.3%) would work anywhere but not Kenya. The table below shows respondents demographic information

**Table 1: Demographic characteristics**

<b>Characteristic</b>	<b>Number</b>	<b>Percent (%)</b>
<b>Gender</b>		
Male	3	43
Female	4	57
<b>Age (years)</b>		
25-30	1	16.7
31-35	1	16.7
36-40	1	16.7
41-45	2	33.2
46-50	1	16.7
<b>Education</b>		
College	4	66.7
University	2	33.3
<b>Desire to migrate</b>		
Yes	6	85.7
No	1	14.3
<b>Destination country</b>		
USA	3	42.8
Australia	1	14.3
Any country apart from Kenya	1	14.3
Botswana	1	14.3
UK	1	14.3
Table 1		

Source: Research data

### **4.3 Push Factors of Brain Drain**

The major objective of this study was to establish the factors that influence brain drain at the Kenyatta National Hospital. The factors being assessed were home country factors that ‘push’ workers to foreign countries and destination country factors that

‘pull’ health professionals from developing countries. The finding of this study revealed that health professionals desire to migrate from Kenya not only to developed countries but also African countries particularly Botswana.

The push factors refer to the unfavourable conditions at the Kenyatta National Hospital that drive health professionals to employers in developed countries. These factors are both within and without the hospital. The results of this study provide a picture on the thoughts of health professionals as concerning their migrating from Kenya. Kenyatta National Hospital is at the apex of the national referral system. In practice, this should be the best place to work in but this study has revealed otherwise. Majority of health professionals interviewed expressed their desire to migrate. The results of this study are discussed here below.

#### **4.3.1 Remuneration**

Remuneration is the sum total of payments made to an individual for services rendered. These include wages, salaries, overtime pay, leave allowance and retirement schemes. According to the respondents, the most important factor determining their desire to migrate is level of remuneration.

The respondents indicated that their remuneration is low relative to what is paid to workers with similar qualification in other sectors. In addition, it was not commensurate with to the work load, their qualifications and their overall input in service delivery at the hospital. When compared with private health, the remuneration is way below them. Desire for higher remuneration is therefore, a motivating factor for migration.

### **4.3.2 Large Volume of Work**

Respondents indicated that, due to shortage of staff in the hospital, the work load is overbearing to staff. Statistics from the human resource indicate that the hospital capacity is for 6000 workers; only 4900 workers are currently employed. This shortage leads to straining of personnel. For example, the ratio of one nurse to number of patients is currently at one nurse for forty patients against the WHO recommended ration of one nurse to 5 patients. This leads to stress and loss of concentration and morale posing a danger to the patient and the service provider.

Owing to the cost of treatment in private health facilities, most of the Kenyan populations rely on public health facilities for their treatment. This situation is worsened by the recent decree by The Head of State to make maternity care free in all public hospitals. The number of expectant women visiting KNH has gone up without corresponding increase in the number of healthcare workers.

### **4.3.3 Lack of Career Growth and Advancement**

Lack of career growth and advancement opportunity, unfair promotions or favoritism, nepotism and tribalism were other reasons staff mentioned as prompting their desire to leave for better prospects in developed countries. They blame the management of the hospital for failing to manage the process of promotions, training and development fairly.

There were concerns over unfair allocation of training opportunities where a few staff are trained while the rest are left out. Respondents stated that concentrating knowledge in a few individuals is to them a sign of lack of confidence on their

abilities. They stated that despite training, certain individuals do not apply what is learnt in the work place.

#### **4.3.4 Lack of Tools and Equipment**

Respondents informed the researcher of lack of equipment for investigation of ailments, few if any tools, outdated equipment, shortage of beds, lack of supplies such as stationery and computers. This is made worse by lengthy procurement procedures that lead to delays.

Going by the recent allocation of 6% of the national budget to the health sector, this situation will not change soon. Due to increasing population and strained resources in the public health sector, health professionals are forced to use few tools to serve many patients. This situation leads to stress and lack of job satisfaction.

#### **4.3.5 Poor Leadership**

Respondents indicated that most of the supervisors at KNH lacked leadership skills. Appointment to positions of leadership is done without regard to supervisory training. They therefore lack the capacity to lead. This makes staff feel that the hospital do not care about or listen their complaints and suggestions. They have interpreted this as lack of concern, and unresponsiveness to workers plight.

Poor leadership led to absenteeism, lateness and arrogance among staff. Hardworking staff are left to step in for poor workers and this compromises service quality and leads to stress and burn out. Such dissatisfaction breeds desire to look for better opportunities elsewhere

### **4.3.6 Working Conditions**

Respondents spoke of poor hygiene in the wards; some roofs are leaking and water taps are not working. This exposes them to serious infections. Linen for the patients are torn and few. Such conditions frustrate workers and patients alike.

Interviewed staff indicated that due to lack of team work and negative attitudes from their juniors, productivity is low and delays are daily occurrences. There is lack of team work as staff work as individuals in an environment where team work is mandatory for effective performance. Factors outside the work environment were also found to influence the migration.

### **4.3.7 Bad Politics**

Respondents indicated that bad politics that splits the country into tribal lines is a factor that would push workers not only at the Kenyatta National Hospital but from the whole country. Due to bad politics, the hospital and the country at large cannot realize any meaningful progress.

Tribal based appointment prevents qualified staff from reaching their potential. Some express their dissatisfaction but the management does not listen to them. This forces them to look for opportunities elsewhere leading to brain drain.

### **4.3.8 Poor Infrastructure**

Respondents indicated that due to bad road network, they spend valuable time in the traffic jams. This is costly and time wasting. Unreliable public transport leads to stress when travelling to and from work. This is frustrating and costly to staff who already feel that their pay is insufficient to meet their needs and those of their families.

Poor roads lead to damage of their vehicles. They are forced to spend large sums of money in repairs, maintenance and replacement of vehicle body parts. These money, the feel could be used in productive activities that can boost their standards of living

#### **4.3.9 High Standards of Living**

This study found that respondents were very weary of the cost of living in the country. High house rents confines staff to certain estates. Cost of basic commodities is high, education, transport and communication are high.

Cost of living is a determinant to the kind of life people lead. Where the cost of living is high, remuneration must be raise to cushion citizens. This is not the case in Kenya. Constantly rising inflation is has made cost of living expensive. In comparison, developed countries provide education for free, transport is cheap and reliable and cost of foods is relatively affordable.

#### **4.3.10 Insecurity**

Respondents mentioned terrorism, carjacking, muggings as being rampant in Nairobi and other parts of the country. The uncertainty one experiences while travelling in Nairobi due to robberies is appalling. This is what makes them desire to migrate.

Respondents indicated that lack of reliable police force make them feel vulnerable to theft some from the police themselves. They look at the police not as a body to care for them but as one that want to take advantage of insecurity in the country for their own personal gain.

### **4.3.11 Corruption**

Respondents indicated that rampant corruption in the country has led to diversion of public resources to personal accounts. This has greatly reduced funding to the health sector. In addition, funds allocated to the sector are not utilized to improve service delivery because some end up in people's pockets.

In addition corrupt public officials including staff at the hospital give the medical profession a bad name. This affects staff when bad publicity changes the perception of the public towards health professionals. Staff in turn feel unappreciated, unloved and unrecognized.

### **4.4 Pull Factors of Brain Drain**

Pull factors of brain drain are the factors present in destination countries that attract health workers from Kenyatta National Hospital and the Kenyan public health sector at large to migrate. These are factors that act as attraction for workers from developing countries. It takes the form of work place conditions and conditions outside the hospital.

The findings of this study indicate that health workers migrate not only because of the problems at the home countries but also because of the actions of employers in developing countries as well as conditions outside the work place that attract workers from developing countries. These are discussed below;

#### **4.4.1 Availability of Good Equipment**

The respondents indicated that, as health workers, they view developed countries a good place to work in because of availability of good equipment in hospitals, something that is lacking in Kenya's health institutions as well as in most developing countries in Africa.

Availability of good and modern equipment will not only raise their morale but will widen their experiences and skills in the job. Acquisition of new skills and broadened knowledge in their professional areas make health professionals more marketable worldwide.

#### **4.3.2 Attractive Remuneration**

Good pay and attractive retirement packages. Pay packages in developing countries are higher than what is paid to them here. They stressed that the purpose of working was to get a good life which is not attainable in Kenya due to high cost of living.

Flexible working hours enables them to do many jobs and thus earn more income. Retirement packages are also higher in developing countries. This gives them security in their old age.

#### **4.4.3 Availability of Career Advancement Opportunities**

Respondents mentioned scholarships that are easily acquired in developed countries as an attractive component of foreign work places. The fact that they access to the best training in the world is another factor, the same training is of quality and can be taken online- at the comfort of one's home.

Flexible working hours and pay that is pegged on performance is another motivator especially for the hard working employees. Another one is research opportunities available in developed countries that would give them an avenue for professional development and global exposure.

#### **4.4.4 Better Working Conditions**

The respondents indicated that developed countries have made their work environment very conducive. This is through provision of tools and equipment of work. There is motivation to a doctor when all tools and equipment of work is available. They make them grow in skills and knowledge. Most developed countries provide day care for mothers where their young ones are looked after. This gives them time to concentrate in their demanding jobs.

Although the main determinants of migration are the conditions inside the work environment, respondents indicated that, conditions outside the work place are as important as those inside the work place. These are factors present in the external environment that according to respondents contribute to their dissatisfaction with working in Kenya. These factors are discussed below.

#### **4.4.5 Security**

Respondents indicated that security in developed countries is a major attraction to them. The assurance of going to work and arriving safely home is enough to make them migrate. Security of their children and property is also important to them.

Trusted police force and quick response in case of a problem is another attraction to health workers in foreign countries. Respondents indicated that due to presence of security personnel on patrol in estates and roads, the level of crime is low compared to what is experienced in Kenya and most developing countries in Africa.

#### **4.4.6 Government Support**

Respondents observed that the commitment of governments through the investment in health care in developed countries is exemplary making them see better prospects in career advancement facilitated by better experiences.

This investment is in terms of good training opportunities, opportunities for career advancement and availability of research funds gives them wide exposure boosting their careers. Possibility of international recognition is the main motivation to most of those wishing to migrate.

#### **4.4.7 Better Economy**

The respondents observed that decision to migrate is determined by the state of the country in which they wish to migrate to relative to that of Kenya. Good living standards; availability of affordable housing and food is an attractive component in developed countries.

This study indicated the desire of health professionals to live a good life at an affordable cost. This, they observed, is impossible in Kenya where the inflation rate continue to rise. Respondents expressed their desire to be able to save for their future..

## 4.5 Discussion

Brain drain is a serious impediment in Kenya's health development agenda. Those who migrate are some of the most highly experienced skilled and trained professionals in health, representing a major loss to the public health sector in Kenya. The causal factors are mostly related to working conditions and factors related to non working condition (conditions outside the hospital) both in Kenya and in migration destination countries. The strain on the health professional makes immigration an appealing alternative and policy makers must stem this trend.

The results of this study on the factors influencing brain drain at the Kenyatta National Hospital indicated that migration of health professionals is caused by both push and pulls factors. Our review of primary data collected through personal interviews suggests that the push factors often described as barriers to workforce retention include low remuneration relative to what is paid to workers in private and other sectors of the economy. This finding tends to affirm the findings of (Kingma, 2006, 2007; Dovlo, 2007), who together observed that wages was the major attraction of worker from poorer to richer countries, it also supports the neoclassical theory that argues wage difference between sending and receiving country is the main determinant of worker migration.

The researcher also identified poor working conditions, lack of professional development, large workload as other push factors of brain drain. This finding confirms the works of Dovlo and Martineau (2004), and Awases et al (2003). Other factors are poor governance, insecurity, bad politics, unfair recruitment and promotion practices, and stress due to large work load. Stilwel,et al., (2005) in his study of

Migration of Health Workers from Developing Countries made the same observation. In addition to the findings above, poor leadership, lack of tools and equipments of work, poor infrastructure, high standards of living, insecurity and corruption are some of the other factors influencing the decision of health professionals to migrate.

On the other hand, developed and often richer countries attract workers from Kenya's health sector because of, better remuneration, availability of equipment, attractive remuneration and corresponding flexible working hours enabling workers to pursue career advancement opportunity. These findings support the works of Meeus (2003) and Paradath (2003). Others are availability of research opportunities according workers growth opportunities and possible world wide exposure, good economy enabling them to save and invest for their future, government support for public health institutions, guaranteed security, and conducive working environment. Increased demand for health workers in developed countries aggravated by an ageing population is another factor.

Looking at the preferred country of migration destination, respondents indicated a desire to migrate to USA, UK, Australia and Botswana. Apart from the reasons given by the respondents, the researcher noted that, this trend of migration is influenced by the existence of historical ties. First, these countries are English speaking and secondly, respondents indicated that their choice of these countries were influenced by presence of their relatives in these countries. This finding support the Network Theory of Migration advocated Vertovec (2002); Dustman and Glitz (2005). According to this theory, the existence of a diaspora or network is likely to influence the decision of migrants when they choose their destination.

## **CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

### **5.1 Introduction**

This chapter presents the conclusions of the study in relation to the findings. The findings of this study have clearly revealed that brain drain continues to be a threat to the public health sector in Kenya. Concerted effort must be put in place to stem brain drain in the public sector if Kenya is to achieve millennium development goals.

### **5.2 Summary**

The objective of the study was to establish the factors that influence brain drain at the Kenyatta National Hospital. The study employed a descriptive research design. The target consisted of seven senior officers of the hospital. The researcher employed self-administered interview guides to gather data and information for the study.

Findings and observations revealed that; Brain drain is a serious impediment to Kenyatta National Hospital's vision of being "A world class patient-centered specialized care hospital". Factors related to working conditions and those in the external environment mainly associated with the political environment are the main causes of health professionals' brain drain. The findings of this study indicate that brain drain could pose a serious problem to the management of public health institutions now and for a long time in the future. Stemming brain drain requires input from various stakeholders in the health sector. These are; the government, the private sector, the nongovernmental organizations and the public at large.

### **5.3 Conclusions**

Health crisis in Africa has intensified with the advent of the HIV/AIDS epidemic and the ever growing populations. This has further expanded the demand for well-qualified health professionals. Creating a critical mass of retained health professionals to meet these huge tasks will be a tremendous challenge, and fairly drastic remedial measures need to be taken, in much the same way that developed countries have taken steps to recruit health professionals from poorer countries to meet their health demands.

Based on the findings, the heavy loss of health professionals poses the threat of collapsed health services and major risks to the lives of Kenya's poor. This calls for intensive consultation and consensus building between the developing and developed countries. A policy framework for curbing brain drain should be developed. There is also a need to explore policy options that encourage return or circular migration of health professionals from the destination countries back into Kenya. The Ministry of Health must be concerned about developing policies on how retain critical personnel. As a country, we need to increase the funding of public health sector to enable hospitals to buy necessary equipment and for improvement of workers' salaries.

### **5.4 Recommendations**

As observed by in the World Health organization in report of 2013, Brain drain in the public health sector is a serious a problem. Developed countries continue to deprive Kenya of millions of dollars worth of invaluable investments made in the production of health workers. This has lead to the growing double burden of communicable and non-communicable diseases leading to further underdevelopment of Kenya and

keeping a large proportion of the Kenyan population in the vicious circle of poverty and ill-health. This unacceptable situation should be urgently reversed through joint action by both developing and developed countries (WHO, 2006)

Remuneration levels are probably the most important factor in retention not only in the health sector but also in the whole public sector. The perceived unfairness of incentives and disparities between what is paid to other professionals and that of health professionals fuel migration. Like in developed countries, public health sector be paid additional duty hours allowance, which will increased incomes significantly. The management can also implement pay per performance as a measure to retain high performers. Another measure is to recruit more health professionals to reduce the work load.

Most of those migrating are highly qualified professionals. Developed countries often look for bright individuals who they entice with citizenship and good remuneration. Since it may be difficult to stop these highly qualified professionals from leaving, a number of locally designed health professionals such as clinical officers should be trained in advanced procedures and courses to equip them with necessary skills to perform critical duties. Another measure is the use of quotas or geographical criteria for selecting candidates for health professionals' training. Pure academic merit has been faulted for producing elitist professionals, because candidates coming from deprived communities with poor educational infrastructures are simply unable to compete with candidates from the elite urban schools. Professionals from such backgrounds and qualification are not attractive to international recruiters.

Encouraging citizens who have migrated to return back is another measure the country could consider. Facilitating temporary return to offer their skills in specialized services is another measure. This will enable them work for the country and to import the skills learnt in developed countries on treatment and management of diseases as well as to improve the management of health institutions in Kenya. A comprehensive data base of all health professionals who have migrated need to be set up to facilitate this exercise. The government should invest in comprehensive human resource management information systems that will provide sound data for policy formulation and decision-making.

There is need for improvement of the workplace environment through routine monitoring of quality of supervision, provision of tools and equipment of work, maintenance of high hygiene standards, fair and appropriate allocation of training opportunities, clear career paths and competitive recruitment practices. This will be realized if the government and all stakeholders in the health sector develop policy guideline for management of health sector in Kenya. Health care staff needs to be trained in management to be able to steer health institutions to make them transparent and accountable. Mentoring and in-service training by qualified personnel, allocation of care roles and referral patterns need to be clearly outlined to reduce workloads. Further focused studies should be done that will review staffing norms and standards, to set optimal staffing levels based on workloads and expected roles, making clear the deficits in facilities as a basis for planning.

Outside the workplace environment, the government is responsible for fighting corruption that stifles growth in the public health sector. Clear procurement

procedures devoid of corruption need to be set up. This could involve use of external experts to procure vital equipment for hospitals. Another measure is to fight insecurity through recruitment and retraining of the police force and acquisition of modern security equipment, creation of employment opportunities for the youth, allocation of more resources towards fighting terrorism and creation of citizen surveillance groups ('like the ten houses recently launched by the president). Change of political culture of tribalism, nepotism could be done through citizen empowerment. This will involve sensitization of the populace on the dangers of tribalism and other sectarian politics.

Health worker confidence in the stewardship of health resources and governance of services is a major influence in the morale of health professionals. Good health systems governance helps to resolve health worker issues by engaging a variety of political and technical stakeholders, including external development partners. Sharing information, building confidence and enhancing the credibility of the national policy decision making process should be a priority.

## **5.5 Limitations of the Study**

This study was carried out at the Kenyatta National Hospital only and therefore the causes of brain drain there cannot be replicated in other public health institutions in Kenya. The study faced both financial and time constraints. The duration for completion of the study was limited hence exhaustive and comprehensive research could not be carried out.

Lastly, this study focused on seven senior management staff while the organizations have a huge number of management staff in the middle and the lower levels. These

findings are therefore limited to the responses of senior management of Kenyatta National Hospital at the time of the study

## **5.6 Areas for Further Research**

This study has brought to the fore the various factors that influence brain drain in the health sector in Kenya. This research was based on all health professionals without regards to specific professionals and cadre of workers. There is therefore need for further research to monitor the causes of specific cadres of health professionals' brain drain, such as nurses, medical specialists, physiotherapists, radiologists and others.

There is need to also look at the levels of dissatisfaction of each push and factor of migration and to identify the determinants of health staff motivation, including their health-related quality of life and retention strategies.

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# APPENDICES

## Appendix 1: Interview Guide

### Introduction

This Interview guide is designed to gather information on the factors influencing Public health professional's brain for academic research work. Your response will be accorded strict confidentiality. Please respond to the questions honestly.

### SECTION A: Demographic information.

1. Gender:

Male  Female

2. Age:

18-24  25-30

31-35  36-40

41-45  46-50

50 and above

3. Department .....

Job Title .....

4. What is your highest education level you have attained?

(a) None.....

(b) Primary.....

(c) Secondary.....

(d) University .....

(e) College .....

(f) Other (specify).....

**SECTION B**

**A Push factors for brain drain**

4. In your opinion, do you think healthcare staff at the hospital, given a chance, would leave Kenya to work in another country?

- Yes                       No

If yes, which is the likely country/countries of destination?.....

.....

5. What factors in your opinion are present in the KNH workplace environment that would contribute to the desire of staff to work in another country?

(Get a brief explanation of each of the factors)

i.....

.....

ii.....

.....

iii.....

.....

iv.....

.....

v.....

.....

vi.....

.....

6. What factors in your opinion are present in Kenya but outside the work environment contribute to the desire of public health workers to migrate?

(Get a brief explanation in order of their relative importance)

i.....

.....

ii.....

.....

iii.....

.....

iv.....

.....

v.....

.....

vi.....

.....

**B. Pull factors for brain drain**

7. What in your opinion are workplace factors present in a foreign country that attracts staff from public health sector in Kenya?

8.

(Get a brief explanation in order of their relative importance)

i.....

.....

ii.....  
.....

iii.....  
.....

iv.....  
.....

v.....  
.....

vi.....  
.....

9. What in your opinion are the non-workplace factors present in a foreign country that that attracts healthcare staff from Kenya to migrate?

(Get a brief explanation of each factor)

i.....  
.....

ii.....  
.....

iii.....  
.....

iv.....  
.....

v.....  
.....

vi.....  
.....

10. What measure can be put in place to stem brain drain at KNH

(Get a brief explanation)

.....

.....

.....

.....

.....

.....

11. What measures can be put in place to stem brain drain in the public health sector?

.....

.....

.....

.....

*Thank you for your cooperation*

## Appendix II: Introduction Letter



**UNIVERSITY OF NAIROBI**  
**SCHOOL OF BUSINESS**  
**MBA PROGRAMME**

Telephone: 020-2059162  
Telegrams: "Varsity", Nairobi  
Telex: 22095 Varsity

P.O. Box 30197  
Nairobi, Kenya

DATE 6/10/2013

### TO WHOM IT MAY CONCERN

The bearer of this letter MAGDI HELLEN JEBICH

Registration No. DG1/GS646/2011

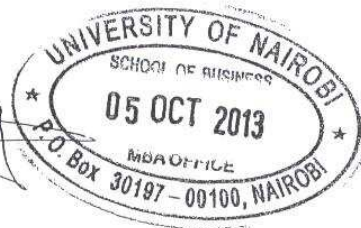
is a bona fide continuing student in the Master of Business Administration (MBA) degree program in this University.

He/she is required to submit as part of his/her coursework assessment a research project report on a management problem. We would like the students to do their projects on real problems affecting firms in Kenya. We would, therefore, appreciate your assistance to enable him/her collect data in your organization.

The results of the report will be used solely for academic purposes and a copy of the same will be availed to the interviewed organizations on request.

Thank you.

  
**PATRICK NYABUTO**  
**MBA ADMINISTRATOR**  
**SCHOOL OF BUSINESS**



## Appendix III: Request to Collect Data

Hellen Jebichiy Magoi  
P.O. Box 57609, 00200  
Nairobi  
10<sup>th</sup> October, 2013

Department of Ethics and Research  
Kenyatta National Hospital  
P.O. Box 20723, 00202  
Nairobi

Dear Sir,

**REF: AUTHORITY TO COLLECT ACADEMIC RESEARCH DATA**

---

I write to request for authority to collect research data for academic purposes. I am a second year student of Master of Business Administration at University of Nairobi. My topic of study is Brain Drain in the Public Health Sector in Kenya: A Case Study of Kenyatta National Hospital.

Attached is a proposal that has been approved by my supervisor.

I look forward to your urgent response.

Thank you

  
Hellen Magoi

P/No. 534824

## Appendix IV: Authority to Collect Data



Ref: KNH/UON-ERC/A/416

KENYATTA NATIONAL HOSPITAL  
Hospital Rd. along Ngong Rd.  
P.O. BOX 20723 Nairobi  
Tel: 726300-9  
Fax: 725272  
Telegrams: MEDSUP, Nairobi  
Email: [KNHplan@Ken.Healthnet.org](mailto:KNHplan@Ken.Healthnet.org)

14<sup>th</sup> October 2013

Hellen Jebichiy Magoi  
University of Nairobi  
NAIROBI

Dear Hellen,

**Research proposal: "Brain Drain in the Public Sector in Kenya: A Case of Kenyatta National Hospital"**

This is to inform you that the Kenyatta National Hospital Ethics and Research Committee has reviewed and approved your above revised research proposal for the period 14<sup>th</sup> October 2013 – 13<sup>th</sup> October 2014.

You will be required to request for renewal of the approval if you intend to continue with study beyond the deadline given.

On behalf of the committee, I wish you fruitful research and look forward to receiving a summary of research findings upon completion of the study.

This information will form part of the database that will be consulted in future when processing related research study so as to minimize chances of study duplication.

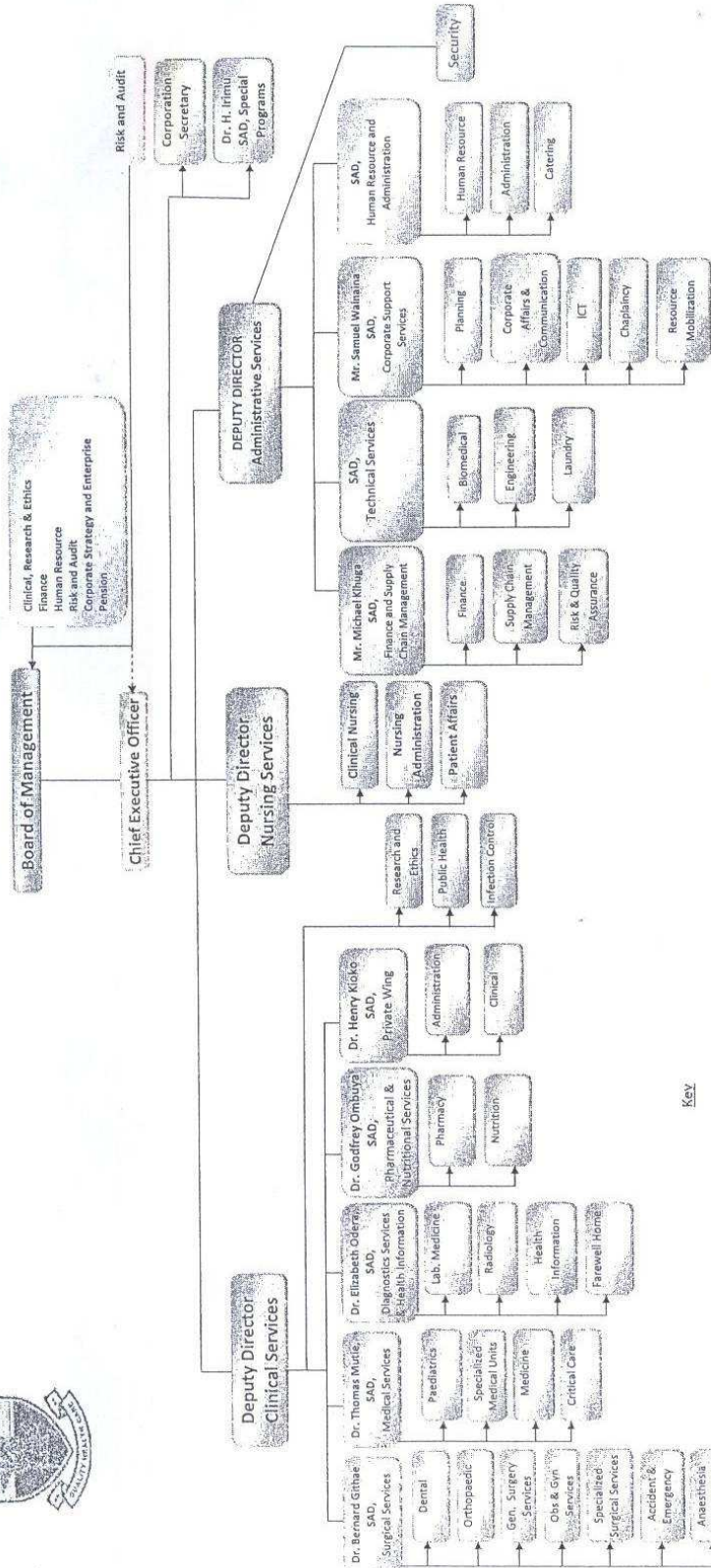
Yours sincerely

**PROF. A. N GUANTAI**  
**SECRETARY, KNH/UON-ERC**

c.c. THE Chairperson, KNH/UON-ERC  
The Deputy Director CS, KNH  
Supervisor: Dr. James Gathungu, University of Nairobi  
Reader: Dr. Mark Mudenyio, KNH

# Appendix V: KNH Organization Chart

## THE KNH DECENTRALIZED STRUCTURE



NB:

All the Senior Assistant Directors (SADs) will have Officers from Finance, Supply Chain Management, Human Resource and Administration. Each division will handle all issues relating to Staff Performance, Promotion, Training, Discipline, Welfare; Procurement, Finance, Quality Assurance, Corruption Prevention, Occupational Health and Safety. All letters from staff should therefore be addressed to the SADs for action.

**Key**

- Urology, Gastro-intestinal, Surgery
- Plastic Surgery, Thoracic & Cardiovascular Surgery, Neuro-Surgery, Paediatric Surgery, ENT, Ophthalmology, Burns Unit
- Oncology, Renal Unit, VCT, Dermatology, Heart Unit
- Physiotherapy, Occupational Therapy, Orthopaedic Technology
- Internal Medicine RIDD/ Comprehensive Care Centre, Cardiology, Patient Support Centre, Medical Social Work, Medicine
- Nursing Education, Nursing Standards
- Medical, Surgical
- Main and satellite Theatres, TSSU/CSSD
- Housing & Welfare, Transport Unit
- Information Comm., Technology, Telephone Services

Approved for circulation:

Richard Leresian Leslyampe  
Chief Executive Officer

Date: 17<sup>th</sup> October 2011

Vision: To be a World Class Referral Hospital in the Provision of Innovative and Specialized Healthcare