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Internal Brain Drain in Mozambique's National Health Service: medical doctors' and managers' perceptions of factors that influence intentions to stay or leave the public health sector in Maputo city, Mozambique (2000-2010).

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ACRONYMS

ACCD - Agency for Development Cooperation
ADB - African Development Bank
AECID - Spanish Agency for international development cooperation and for humanitarian assistance
ARK - Absolute Return for Kids
CCS -Sciences for Improving Lives
CIDA - Canadian International Development Agency
DANIDA- Danish International Development Agency
DFID – Department for international Development
EC- European Commission
EGPAF – Elisabeth Glaser Pediatric AIDS Foundation
EWB – Engineers Without Borders
FDA - French development Agency
FICA – Federal Insurance Contributions
FHI – Family Health International
GFATM _ - Global Fund to Fight Aids, Tuberculosis and Malaria
GTZ/ BMZ – German Technical Cooperation/German Federal Ministry for Economic Cooperation and Development
HAI- Health Alliance international
HRM - Human Resources Managers

ICAP – International Center for AIDS Care and Treatment Programmes

JICA– Japan International Cooperation Agency
MSF - Medicines Sans Frontieres
NORAD- Norwegian Agency for Development Cooperation

NGOs - Non Governmental Organizations

NHS - National Health Service

NPHHR - National Plan for Health Human Resources

MDs - Medical Doctors

MoH - Ministry of Health
PSI – Population Services international
SDC – Swiss Agency for Development and Cooperation
UNICEF – The United Nations Children's Fund
UNAIDS – The Joint United Nations Programme on HIV and AIDS
UNFPA - United Nations Population Fund
UNDP – United Nations Development Programme
USAID -United States Agency International Development-
WB - World Bank
WFP-World Food Programme
WHO-World Health Organization
WV - World Vision

ABSTRACT

Background: There is a shortage of 4.3 million health workers, including medical doctors, in the world, which has a negative impact on health systems, particularly in low and middle income countries. One reason for health worker shortages is 'brain drain', or health professionals leaving the health sector. **Objectives:** (1) To document the distribution of medical doctors between the National Health System (NHS), NGOs and the Private Sector over the period 2000-2010; (2) To explore the perceptions of medical doctors (MDs) and human resources managers (HRMs) regarding factors that influence MD internal brain drain in Maputo city, Mozambique, more specifically, the movement of doctors from the Mozambican NHS to NGOs and the private sector within Mozambique. **Study design and Methods:** An exploratory, primarily qualitative case study design was used to analyze the existing documents, and explore perceptions, opinions and expectations of MDs and HRMs within the NHS and in large NGOs employing MDs. MDs who graduated between 2000 – 2010 were asked about factors causing MDs to stay in or leave the NHS in Maputo. Data was collected using desk review, 20 semi-structured individual interviews with MDs, and 6 key informant interviews with HRM in and outside the NHS. Qualitative thematic analysis was used to analyze the recordings and the transcripts of the interviews. **Ethics:** Ethical clearance was received from the Central Hospital of Maputo and from UWC's Senate Research Committee. The study considered ethical principles of voluntary participation, protection of anonymity of participants and confidentiality of information. **Results:** The study was unable to determine numbers and career paths of MDs graduated between 2000-2010 as information about the distribution of MDs in Mozambique is fragmented and incomplete. Both MDs and HRMs reported that the major reasons contributing to internal brain drain include financial issues, working conditions, and management issues. These were also the main recommendations for action made by all respondents to improve MD retention. On the other hand, factors contributing to MDs staying in the NHS include social commitment, career development, and retirement pension. While both MDs in and outside the NHS reported social commitment as an important reason to stay in the NHS, no HRM reported social commitment as a reason for staying in the NHS. **Conclusion:** Respondents' views on the main factors that influence a decision to leave the NHS are

compatible with the main factors that might contribute to the retention of MDs in the NHS. However, despite a significant proportion of MDs and HRMs in both work settings indicating that financial issues are the main reason for leaving the NHS, they agree that salary and financial incentives alone will not solve the problem of internal brain drain in Maputo. One of the contributions of this thesis is to highlight some of the many gaps in the human resource information system/base that might have implications on strategies to attract and retain MDs in the NHS.

DECLARATION

I declare that this mini-thesis is my own work and that all sources used or quoted have been indicated and acknowledged by means of complete references; and that this work has not been submitted before for any other degree at any other university.

Signed by

Adelaide Humberto Mbebe

Adelaide Humberto Mbebe

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CHAPTER I: DESCRIPTION OF THE STUDY

1.1. Introduction

This chapter introduces the study, the formulation of the problem, the purpose, as well as the objectives. As the researcher is part of the Human Resources Department in the Ministry of Health, this study focuses on the field of Human Resources for Health. This study was motivated by the difficulties faced by Mozambique's National Health Service (NHS) in attracting and retaining medical doctors (MDs). It explores the perceptions of physicians and managers regarding reasons for staying in or leaving the NHS among doctors who graduated between 2000 and 2010

1.2. Formulation of the Problem

1.2.1. Problem Background

Mozambique is located in southeastern Africa and has a total population of about 22.3 million. The illiteracy rate is 56.2%, (INE, 2007) and the main causes of death are communicable diseases (GoM, 2010 and MICS 2008). The capital of Maputo is the largest city of Mozambique with a population of 1,094,315 according to the 2007 Census. It has several hospitals, health centers and private clinics. About 48.2% of all medical doctors employed by the NHS are concentrated in Maputo city (MoH, 2010) while only about 5% of the population of Mozambique lives in Maputo. In addition to this overconcentration of doctors in the capital city as compared to the rest of the country, the number of MDs who request unlimited[1] and registered[2] work leave is higher in Maputo city than the rest of provinces in the country. Requests for work leave appear to be the first step for leaving the NHS.

[1] Unlimited work leave - when workers ask for this kind of leave, they can return to National Health System after requesting the Ministry of Health for their reintegration after one year.

[2] Registered work leave - workers can return to National Health System after 06 months at minimum, up to a maximum of two years.

Mozambique is a developing country with a serious brain drain problem since the country gained independence in 1975, when a significant number of qualified health professionals had to return to their home country of Portugal (MoH, 2008). The NHS of Mozambique has a shortage of many cadres of health workers, including medical doctors. Available data show that the ratio of medical doctors is 0,038 per 1,000 people and the ratio of nurses and midwives is 0,063 per 1,000 people (MoH, 2010). The table below shows the ratio of different categories of health workers in the region. The comparative numbers show that Mozambique's ratios are among the worst in the region and far below the WHO recommendation of 2.3 per 1,000 people minimum staff of clinical health workers such as nurses, midwives and MDs for countries to attain 80 % coverage of deliveries (WHO, 2006).

Table 1: Comparative Data for HHR Indicators, 2004

Countries	MDs / 100,000 Population	Nurses / 100,000 Population	Birth attendants /100,000 Population	Pharmacy Staff / 100,000 population
Mozambique	3	21	12	3
Malawi	2	59	-	-
Zambia	12	174	27	10
Zimbabwe	16	72	-	7
Botswana	40	265	-	19
South Africa	77	408	-	28

Source: WHO, Annual Report 2006.

Besides the problem of absolute shortages of health workers, the NHS also has unequal distribution, with fewer medical professionals working in peripheral areas than in cities (MoH, 2008). To encourage a more equitable distribution, the NHS provides incentives for those health workers who are working in districts, such as topping up salaries for specialist MDs, or providing housing and subsidies for those who work in remote areas. However, in the last six years, internal brain drain of MDs has become a serious problem for the NHS as it jeopardizes the commitment of the Mozambican Government to achieve the Millennium Development Goals (MoH,2008). The focus of this study is internal brain drain,' which is defined as human resources (in this case MDs) movement from the NHS to NGOs and the private sector within

Mozambique. In this study we will consider as examples of internal brain drain all publicly trained MDs who work fulltime in NGOs and Private Sector.

Currently, Mozambique faces the problem of internal brain drain in several cadres in the health sector, particularly medical staff (Ferrinho and Omar, 2006). The emergence of HIV/AIDS in Mozambique worsened the shortage of health workers in the NHS, due to increased workload caused by this chronic disease and because a considerable number of health professionals died from it. NGOs, which support the NHS in fighting against HIV/AIDS, also recruited most of their field employees from the locally graduated pool of health workers (MoH, 2008).

According to the data available in the NHS, the number of requests for unlimited and registered work leave appears to predict brain drain. Data indicate that most MDs who request unlimited and limited work leave do not return to the NHS; usually, this request represents the first step to leave the NHS for good. It is important to note that this procedure is the only way to leave the NHS legally. Otherwise if MDs do not follow this procedure they might endanger their career because it will be difficult return and work anywhere in the Government. The Ministry of Health has information about MDs who request unlimited and limited work leave but data about the numbers of MDs who request to return to the System are not complete or well organized, so it is difficult to construct information. However, according to the data available in the Ministry of Health and the perception of Human Resources of the NHS, the number of MDs who request to return to the NHS is not significant.

In the last six years (2005-2010), the number of MDs who requested to leave the NHS reached over 134 (Table 2). As the total number of MDs who are actually working for the NHS is only 863, this is an alarming number. In 2010, there was a drop in the number of MDs who left the NHS. The reason for this drop is not clear. External brain drain appears to be less of a problem partly because of language barriers (Ferrinho and Omar, 2006).

Table 2.Trends of MDs brain drain in the National Health Service 2005 - 2010

Years	2005	2006	2007	2008	2009	2010
Total number of MDs	569	606	692	735	796	863
Number of MDs with unlimited and registered work leave	22	19	15	23	30	25
Loss of MDs in %	3.9	3.1	2.2	3.1	3.8	2.9

Source: Human Resource Direction DRH -REI

Brain drain from the NHS has undermined the improvement of such health indicators as reduction in maternal, neonatal, and infant mortality, increased coverage of immunization, and reduction of malaria mortality (MoH, 2008). Thus, ensuring quality, efficiency, and equity of services for all has become increasingly difficult, because it depends on the availability of skilled and competent health professionals.

1.2.2. Problem Statement

The production of MDs has been increasing for six years in Mozambique. The majority of MD graduates come from Eduardo Mondlane University, a public university, while a small number come from the Catholic University, a private university. Despite national efforts to increase the numbers of MDs graduating in Mozambique, the supply of doctors remains very low and the number of MDs who request leave (generally considered the first step to leave the NHS permanently) remains high. The NHS has 863 MDs and a disproportionate number of them (48.2%) are concentrated in Maputo city, the capital of Mozambique (MoH, 2010). The majority of national MDs (70%) with Master's and PhD degree are concentrated in Maputo, and during the period 2005-2010 the NHS lost 56.5% of them (MoH,2011). In order to cover the minimum needs for medical professionals, the Mozambican Government has to hire foreign professionals to fill vacancies in the NHS. Foreign medical doctors comprise 22% of total of specialist physicians in the NHS (MoH, 2010).

Therefore, it is important to recognize the magnitude of internal brain drain in Mozambique, including Maputo city, and to find solutions to improve attraction and retention of health

professionals. In order to find solutions to the problem, it is necessary to explore the reasons for internal brain drain of MDs in the NHS. While the general factors that influence brain drain are similar across countries, the specific factors or incentive packages are different from one country to another. No studies specifically examining internal brain drain of MDs in Mozambique were found so far. So, operational research in the context of Maputo and Mozambique is needed to understand and address the problem of internal brain drain.

1.2.3. Purpose of the study

The purpose of this study is to explore the perception of MDs and Human Resource Managers (HRMs) about factors that influence internal brain drain from the NHS in Maputo, the capital city of Mozambique. The findings of this study will inform human resources policies and strategies to minimize internal brain drain in the NHS, including incentive packages, which may contribute to attraction and retention of medical doctors in the Mozambican NHS.

1.3. Study Aim and Objectives

1.3.1 Aim

To explore the perceptions of medical doctors and human resource managers on factors that contribute to internal brain drain of medical doctors in the National Health Service in the Maputo City, Mozambique, who graduated between 2000-2010.

1.3.2 Objectives

1. To document the distribution of medical doctors between the NHS and NGOs and Private Sector over the period 2000-2010.
2. To explore medical doctors' perceptions about why some medical doctors remain in the NHS and others leave.
3. To explore the perception of Human Resource Managers about why some medical doctors remain in and others leave the NHS.

CHAPTER II: LITERATURE REVIEW

2.1. Introduction

This chapter first describes the general problem of brain drain of health professionals, with special attention to Sub–Saharan Africa and Mozambique (were the research was undertaken), and then it describes and discusses published studies on "push" and "pull" factors influencing the loss and retention of health workers.

2.1.2. Brain drain in the world

A number of studies point out that brain drain is not a new phenomenon worldwide (Lorenzo, 2005; Marchal and Kegels, 2003 and William et al., 1999). The term "brain drain" was first used in 1960 to describe the migration of scientists, engineers, physicians and others professionals from developing countries to industrialized ones (William et al ., 1999).

Countries, such as the Philippines, Fiji, Jamaica, Mauritius and others, train nurses, midwives and doctors to work in Saudi Arabia, Kuwait, the United States and the United Kingdom. For example, the Philippines are a major exporter of nurses (110, 000 in 2000) and India of physicians (56,000 in 2000) to member countries of the Organization for Economic Co-operation and Development (OECD) (Lorenzo F, 2005). These two countries train their health workers to emigrate and send back remittances to support the general economy of the country. In contrast, health workers themselves migrate to search for better income, send remittances home for their family and improve their standard of living (WHO, 2010). Several studies (e.g. Misau et al ., 2010; Biesma et al.,2009 and Pang et al., 2002) argue that brain drain of physicians and other categories of health professionals affects the delivery of health care in countries where they come from. The negative consequences are weakened health systems and loss of their investment in education. The positive aspects are reduction of poverty due to remittances and new skills and expertise gained by the migrating health professional when the professional comes back to the source country.

Due to this complexity of costs and benefits to individuals, communities and countries, and especially between the rights of individual health professionals and the costs to poor countries compared to the benefits to the wealthier countries to which health workers migrate, some conflicts have arisen between developing and developed countries. To minimize this conflict the UK Department of Health and Commonwealth countries adopted a *Code of Practice for NHS Employers involved in the international recruitment of healthcare professionals* in 2001 to reduce the impact of brain drain in the countries of origin. However, there was an agreement that this strategy should be followed by commitment of both countries to design programmes, strategies, and policies that can be beneficial for all with 'brain drain' shifting to 'Brain Gain' (Ahmad, 2005).

In fact, bearing in mind that the trend of migration of health workers in the world is a general problem, the WHO developed a voluntary code of practice on the international recruitment of health personnel, which is meant to apply to all health workers and stakeholders. The two main pillars of this code are to support countries affected by a shortage of health workers, and monitor international migration to develop relevant policies (WHO, 2010). For example, countries that are affected by this problem should design strategies to retain MDs in their own countries and attract those who are abroad to return home. In contrast, countries that receive health workers should invest more in education and training their own health workers to avoid depending on others countries. It is evident that this code only can be effective if source and recruitment countries are interested in implementing this code.

2.1.3. Brain drain in Sub-Saharan Africa

Friederik (2009) argues that health systems in Sub-Saharan Africa are facing constraints related to a shortage of health professionals in different categories. Studies (e.g. Khor, 2006; Labonte et al., 2006; and Lusale, 2007) demonstrate that significant numbers of physicians working in developed countries come from Sub-Saharan African countries**.** For example, 12% of all African MDs are working in Canada, USA and UK, are foreign-trained (and did not, for example, immigrate before beginning their studies) and most of them come from Nigeria and South Africa

(Hagopian et al 2004). Liese and Dussault (2004) reveal that some countries lose significant number of doctors. Kenya only retained 600 medical doctors out of 6,000 in 2003, Zimbabwe 360 out of 1200 during 1990s and 180 out of 1200 of those trained in Ethiopia and Zambia also emigrated in the same period. The study also showed that 68% of physicians in Zimbabwe, 49% in Ghana and around 60% in Ghana and South Africa intend to migrate. The migration of medical doctors from Sub-Saharan Africa (Ethiopia, Kenya, Nigeria, Malawi, South Africa, Tanzania, Uganda, Zambia and Zimbabwe) undermines the education investments of these countries (Mills et al et., 2011). For example, the United Nations verified that, when a Malawian MD migrates to Britain, this country saves $184,000 (Health, 2004). This migration brings problems for the African source countries such as negative effects on the MDs/population ratio, indicators of health, loss of public education investment and intellectual capital, poor health care delivery and others. On the other hand, there are benefits to the doctors' largest destination countries, which are the United Kingdom ($2.7 bn) and the United States ($846m); these countries reduce the shortage of health professionals, save in education costs, and increase their competiveness (Ahmad, 2005).

2.1.4. Brain drain in Mozambique

There are some studies of brain drain in Mozambique (e.g. Sherr, et al ., 2009 and Sherr et al.,2012) that suggest that internal brain drain (health worker movement from the NHS to NGOs and the private sector within country) occurs in Mozambique. The emigration of relatively small numbers of medical doctors (after the mass emigration immediately after independence) has been attributed to language and social reasons (Ferrinho and Omar, 2006). One of the biggest constraints in determining the magnitude of brain drain in Mozambique is related to the fact that available data in Human Resource Information Health System, only give the number of health professionals who left the NHS but do not give information about where they went. This suggests that studies to determine the magnitude of brain drain in Mozambique should be undertaken in the NHS to understand the causes and define strategies to reduce the problem.

2.1.5. Internal Brain drain

According to Chetsanga (2006), **internal brain drain** occurs when health workers move from the NHS to the NGOs and private sector within the country. Internal brain drain might be manifested in different forms, such as migration from rural to urban areas, from public sector to private and from clinical and researcher positions to managerial posts (Marchal and Kegels, 2003).

Internal brain drain affects many countries. For instance, in South Africa there is both external and internal brain drain. Reasons cited include lack of opportunity to manage patients adequately, poor working conditions and low motivation (Farham, 2005). Elsewhere, in their study, entitled "*Addressing the Internal Brain Drain of Medical Doctors in Thailand: The Story and Lesson Learned*" Wibulpolprasert and Pachanee (2008) noted that during 2004-2005 more than 350 MDs in Thailand abandoned the public sector to work in private hospitals and the others, those who stayed in the public sector, practiced in private hospitals in non- official hours in urban areas. Thailand has problems of internal brain drain and no problem with external brain drain due to suitable income, good working conditions, opportunities for career development, and an important additional factor is lack of knowledge of foreign languages.

In their review of the available literature on "*The effects of global health initiatives on country health systems: a review of the evidence from HIV/AIDS control* " Biesma et al (2009) argue that in countries such as Malawi, Kenya, Uganda and Ethiopia which already face problems of shortage of health professionals in the public health sector, the situation is worsened by the presence of externally funded Programmes which encouraged health workers to migrate from the public sector to the private sector, NGOs and Bilateral agencies. The presence of Global Health Initiatives (GHIs) can actually undermine the public health sector because they induce health workers to work with them to receive higher salaries than in the public sector. On the other hand, GHI funding can be helpful if thoughtfully implemented. For example, in Ethiopia the government adopted a human resource strategy which increased salaries and incentives to retain health workers in the public health sector using Global Fund resources. In addition, PEPFAR

also supported many activities and provided conditions to retain health workers in public health sector (Biesma et al., 2009).

2.2. Causes of brain drain: "Push", "Pull", "Stick" and 'Stay" factors

A number of studies focus on push and pull factors as the main causes of brain drain (NHI, 2005 and Misau et al., 2010). Push factors are those forces in countries or organization of origin that cause workers to migrate out. Pull factors are those forces existing in host countries, NGOs or the private sector that encourage workers to migrate in (Chetsanga, 2006). In general, the main push and pull factors are related with social, economic, cultural and political factors. Ahmad (2005) suggests that, the main push factors are low wages, poor motivation, lack of medical supplies, bad working conditions, outdated equipment, lack of supervision, poor human resources management and limited career opportunities. Ahmad adds that the pull factors are usually related to economic and social opportunities, including access to jobs, better living conditions, political and religious freedom, access to education, better medical care, and security. Labonté et al., (2006) note that brain drain from Sub-Saharan Africa to Canada has increased since the early 1990s. The reasons they identified, which include improved living conditions, better working conditions in Canada, and opportunities for better training, are compatible with other studies of push and pull factors (e.g. Oman, 2009 and Leshabari et al., 2008)).

However, a number of studies (Padaraty et al ., 2003; Pillay, 2007; and Lusale, 2007) argue that there are moderating factors which are "Stick" and "Stay" factors. "Stick" factors are those forces that contribute to health workers choosing to remain in their countries of origin; the main reasons indicated for this are socio-cultural and patriotic values such as families and property ties, and adequate working conditions (high levels of morale, rewards and incentives) in their countries. In addition, health professionals might be limited by other factors like an unknown language, cost of re-qualification and relocation and immigration procedures, which are time consuming due to the bureaucracy. Likewise, there are "Stay" factors that influence migrated health workers to decide to remain in the countries to which they have migrated, rather than returning to their country of origin. The main "Stay" factors are related to fear to disrupt with new socio-cultural bonds, family, social network, friendship and lifestyle. There is also the fear

of not having a new job opportunity with good salary, incentives and chance to have a promising career development in the source country. In addition, lack of information about the procedures to return and be integrated in the National Health System, (whether or not the professionals who want to return to their home country would be well received, integrated in the career system, skills and diplomas recognized and valued) for those who want to return influence the decision to come back or not to the source countries.

2.3. Motivation

Motivation in the work context can be defined as an individual's internal force to achieve organizational goals (Bennet and Franco, 1999). These authors add that determinants of motivation emerge in different levels such as: individual, organizational work context, health sector, and socio-cultural and environmental contexts. From these definitions, it can be concluded that motivation might contribute to the happiness of health workers on the job.

A number of studies (Dielemann, 2003; Mathauer and Imhoff, 2006; and Willis-Shattuck et al. ,2008) have shown that brain drain of health professionals is related to lack of motivation, which is manifested in different ways. Shattuck et al (2008), consider that some of the key factors in motivating health workers are financial incentives, career development and management issues. In addition, recognition, which is highly influential, adequate resources and appropriate infrastructure, can lead to a great extent to boost morale and motivation of health workers. These positions are reinforced by Mathauer and Imhoff (2006) findings, which confirm that non-financial incentives and the way human resources are managed, are crucial to enhance motivation and performance of health professionals. Thus, recognition, career development and further qualification are professional goals that should be ensured by human resources policies. Dielemann (2003) considers that motivation is intimately related with financial and non-financial incentives including recognition by colleagues, managers and community, job security, income and training as a few of the main factors. The demotivating factors pointed out by participants of this study were low salaries and poor working conditions. Leshabari et al (2008) argues that in addition to poor salaries, lack of motivation in the workplace can result from several factors such as lack of recognition, compensation, and communication between management and staff.

Van Saane et al (2003) in his study " *Reliability and validity of instruments measuring job satisfaction - a systematic review* " used seven instruments to *measure job satisfaction*. The findings show that there is a small number of instruments that confirm high validity and reliability for job satisfaction. On other hand, the study by Faye et al (2013) show good results of validity and reliability (except moral satisfaction which was less than 0.70) using eight dimensions of satisfaction of health professionals, which include: opportunity for continuing education, salary and incentives, management style, work environment, tasks, workload, moral satisfaction and job stability.

Willis-Shattuck et al .(2008) concluded that financial incentives, career development and management issues are important motivational factors, but acknowledgment, adequate resources and infrastructure can also raise morale of health professionals. In short, financial and non-financial incentives should be considered to enhance motivation and reduce the magnitude of brain drain.

2.4. Sources of Motivation

2.4.1. Financial factors (Salaries and incentives)

A number of studies (Misau et al., (2010), Willis-Shattuck et al ., (2008) and Dielemann (2003)) suggest that remuneration and salaries constitute the main reason for brain drain in different categories of health cadres. Hagopian et al (2005) state that incentives to stay, such as improved pay, educational opportunities and prestige are strategies that address push factors. For instance, Ghana and Nigeria have both increased the salary of medical doctors recently in an attempt to reduce brain drain and improve the morale of physicians.

It is important to note that the problem of brain drain is not only among medical doctors; it also affects other categories. Nguyen et al (2008) argue that compensation constitutes the basic influence on retention of health professionals. More than 70% of the nurses in this study demonstrated intentions to migrate, for reasons related to financial remuneration, while only 8%

do not want to migrate. Another study by Alonso-Garbayo and Maben (2009) reiterates that nurses first point out economic reasons for their migration.

However, Wuliji (2008) in " *Migration as a form of workforce attrition: a nine-country study of pharmacists"* concluded that intentions of migration are not influenced by remuneration alone, but also by professional factors such as working conditions and career development. Therefore, human resources management policies that take into account both the question of remuneration as well as professional development are required to reduce migration (Tjoa et al., 2010).

2.4.2. Career development and training

According to the World Health Report (2006), career development might be manifested by promotion, progression, training and individual performance review in time. In addition the study of Giri et al (2012) adds that all health professionals should have opportunities to develop their knowledge and skills through formal and informal ways, through continuing professional development to face new challenges in daily work. There is a link between career development and training. For example, Bach (2003) shows that one of the ways used by Brazilian medical doctors to develop their careers was to become specialists. Similarly, a recent study by Bailey (2012) reveals that Malawian medical doctors point out opportunity for postgraduate training as the main way to career development.

In contrast to the countries which train health workers explicitly for "export", there are countries that invest in training their staff, who after completing their degree leave the country. For example, at the turn of the millennium only 50 out of 600 new graduates of the Medical School in Lusaka worked in the public sector (WHO/Afro, 2001). Mills et al (2011) found that the insufficient number of doctors in some countries is caused by the incapacity to train and retain them. This position is reinforced by Omar et al (2009) who suggest that special attention to local and regional postgraduate training, career development, transparency in the selection of doctors for training, are important issues in MD retention. This argument is reinforced by Mandeville (2012) who maintains that, due to the lack of opportunity of career development a significant proportion of students in Malawi wants to work or train abroad.

2.4.3. Working conditions and environment

In the literature, "working conditions" refer primarily to the physical environment and include a safe and clean environment, adequate infrastructure and supplies and equipment necessary for providing quality services (Lusale, 2007). According to Makasa (2012) good working conditions should be provided for health professionals because it might increase the motivation to perform their tasks. For example, in 1999 Zambian MDs due to the lack of good working conditions decided to go on strike, which lasted about nine months. Oman (2009) argues that poor working conditions such as shortages of medicines, supplies and stock-outs obstruct the capacity of doctors to provide good health care. For instance, South African MDs, due to poor working conditions, asked for Government commitment to improve working conditions in Health Centers to provide better health care and ensure the retention of them in the Public Sector (Farham, 2004). In addition, Oman (2009) reveals in his study that one of the main reasons that motivate MDs to leave the Public Sector is working conditions. Lusale (2007) recommended the Government to build infrastructures and provide drugs, medical supplies and adequate diagnostic equipment to minimize the situation of poor health conditions in the workplace. Bach (2003) found that the shortage of health workers and the HIV/AIDS pandemic contributed to an increased workload and low morale of health workers in many countries. On the other hand, the author added that working environment might have also influenced migration of health workers. These problems are usually related with physical, psychological violence, stress and different types of abuse at work. To respond to this concern the International Labor Office (ILO), International Council of Nurses (INC), World Health Organization (WHO) and Public Service International developed guidelines against violence in the workplace. The study of Jackson and Ashley (2005) explains that violence in workplace cause disruptions to interpersonal relationships, consequently increasing the risk of attrition of health workers, decreasing their motivation, morale and performance with grave implications for the image of an organization. Therefore, presently there is a concern to provide better working conditions and environment for health workers because it is known that they might interfere in the performance of health workers as well as in the decision to stay or leave an organization.

2.4.4. Leadership, Management and Supervision

For the purposes of this discussion, we distinguish between management and leadership in the following way: leadership *is a key concept of management; so leadership is doing the right thing or deciding what to do while management is doing things rights or how to do things* **(**Cook and Hunsaker, 2001).

According to the WHO (2007) leadership and management are key human resources issues and are very important to improving health services. The study emphasizes that having good leaders and managers is a challenge to both the Public and Private Health Sectors. A major issue facing HRMs is the lack of definition of responsibilities, roles, knowledge, skills, and attitude of staff to change the working environment.

As a result of effective management, leadership and support, the functioning of service delivery in Districts and Hospitals improved (Lehmann and Sanders 2003). Again the authors add that management and support are essential to improve the performance of health professionals in terms of job satisfaction and productivity. In contrast, the absence of both can generate low motivation and unproductivity. Mejia (1978) suggests that effective management should contribute to minimize the wastage in an organization, and that effective management should include recruiting staff with the appropriate competencies, using health workers rationally, motivating them continuously, paying fair salaries and decreasing health worker turnover. Currently, the big challenges faced by Human Resource Management are the migration of health professionals, the inability to retain and attract to the public sector, inadequate use of personnel, low morale and poor distribution of staff.

With regard to leadership the study of Dellve L, Skargert K and Vilhelmssom (2007) entitled "*Leadership in workplace health promotion projects: 1-and 2 year effects on long term work attendance"* shows that leadership attitudes such as recognition, reward and respect had a positive effect on work attendance. In addition, Robbin et al (2007) emphasize that leaders who promote effective communication contribute to better work environments. It is evident that effective leadership and management should be followed by supervision, which includes support,

training, encouragement, monitoring and evaluation to improve the performance of supervisors. Again, to achieve these functions the supervisor should design objectives, identify problems, maintain regular contact with staff members, consider a system of supervisory schedules and appraisals (MSH, 1998). Lehman et al (2002) to reinforce this position add that supervision gives an opportunity to clinic personnel to get involved with protocols, policy developments and treatment. In addition, Seims et al (2012) conclude in their study that, leadership and management support in terms of competences might enhance health services delivery.

In summary, we can conclude that, leadership, management and supervision are three important components in an organization. If one of these three components fail, the organization might face problems in key areas such as job satisfaction, trust, relationship, motivation and others.

2.4.5. Conclusion

The literature reviewed shows that brain drain is not a new phenomenon worldwide and this term is usually used in the health sector to describe migration of health professionals from developing countries to industrialized ones. Again, internal brain drain could manifest itself in different forms, such as migration from rural to urban areas, from public sector to private, and from clinical and researcher positions to managerial posts. The main cause of this phenomenon is related with push, pull, stick and stay factors as described above. The literature review in this study focuses on factors that influence intentions to stay or leave the public health sector such as motivation. Other factors like financial factors (salaries and incentives), working conditions and environment, career development and training, leadership, management and supervision have also been identified as important issues for MDs retention.

CHAPTER III: STUDY METHODOLOGY

3.1. Introduction

This chapter describes the methodology, study design, sample size, procedures for data collection and analysis, as well as limitations of the study and ethical considerations.

3.2. Study design

An exploratory, primarily qualitative case study was used to document and analyze existing data, and explore perceptions, expectations and opinions of MDs and HRMs within and outside the NHS, regarding internal brain drain of MDs who graduated during the period of 2000-2010. In this study, documents were reviewed and analyzed, and semi-structured individual interviews with HRMs and individual interview with MDs who working in the NHS and out of NHS were undertaken to generate data.

The original study design had also included Focus Group Discussions (FGDs) with medical doctors who work in and out of the NHS. These were not undertaken because the researcher was not able to recruit participants in the NHS (Ministry of Health, Hospitals and Health Centers) and other organizations (NGOs and Private Sector). To undertake Focus Group discussions (FGDs) the researcher first disseminated the information through the Medical Association website, where all interested MDs who work in the public and private sectors or at NGOs were invited to be part of the study. In addition, letters were sent to hospitals, health centers, NGOs and private health facilities with no success. Personal contacts and phone calls made to persuade them to participate in the FGDs also failed. Time constraints, scheduling difficulties, work overload, lack of permission to take part in the study, and reluctance to discuss these issues together are some of the reasons for change in the study design.

3.3. Study population

The study population comprised all adult MDs (female and male) who graduated during the period 2000-2010 currently living in Maputo city, as well as HRMs of the NHS and NGOs employing MDs.

3.4. Sample and size

A combination of purposively and convenient selected sample were used including 20 MDs who work in various settings (10 in the NHS and 10 in NGOs) and 6 HRMs (NHS and NGOs). To recruit MDs, the researcher firstly invited MDs known to her to be part of the study, and then asked for referrals of other MDs who work both in and out of the NHS. Secondly, an announcement on the Medical Association website was disseminated, where all MDs who work in NHS, NGOs and the private sector were invited to be part of the study. Thirdly, letters were sent to public and private hospitals, health centers, NGOs and private clinics. The participants showed interest of being part of the study by calling or emailing back, confirming their availability for an interview. Participants chose the place and hour where the interview took place. Most of the interviews were conducted at the Ministry of Health, the Central Hospital of Maputo and the Health Directorate of the Maputo City. In the hospital and health centers, the researcher scheduled a general interview time and the administrative staff indicated which MDs were available for interview at the time of the visit. When meeting with the MDs, the researcher first explained the purpose of the study and confirmed that their graduation date fell within the study time period (2000 – 2010). Participants were also asked to sign consent forms. The majority of MDs and HRMs were selected purposively at their workplace. For NGOs, the researcher interviewed senior HRMs who are important partners of Ministry of Health. These HRMs are involved in many activities of Ministry of Health and NGOs, so they represent support to numerous of the MoH activities.

3.5. Data Collection Method

Interview guides have been developed, pretested and amended for clarity at the commencement of the study. Interviews were conducted in Portuguese, the official language of Mozambique. All interviews were recorded and detailed notes were taken during the interview. All instruments are included in the appendix. The researcher conducted all of the interviews and examined all of the documents.

First, the researcher examined the existing data sources, both published and unpublished, to document the distribution of MDs in the NHS for those MDs who graduated between 2000-2010. This was done between November 2011 until November 2012. This procedure consisted of reviewing documents from the NHS, NGOs, private sector, Medical Doctors Order, the Medical Association website, Ministry of Labour, and Eduardo Mondlane University (public university). The majority of information presented in this study was collected from such NHS documents as Human Resources Reports, Annual Human Resource Statistics Report, and the National Plan for Health Human Resources Development (NPHHRD 2008-2015). Other information was collected from various websites. It is important to note that in the NGOs and private sector reports there is scarce information related to Human Resources. To analyze the documents collected, the researcher paid attention to the information related to the number and distribution of MDs who graduated between 2000-2010 in the NHS, where they went after graduation, how long they stayed in NHS, and their distribution by gender, and specialization, as well as whether the MDs were in the NHS, private sector or at NGOs.

Second, semi-structured individual interviews were conducted with senior HRMs at the Ministry of Health, Central Hospital of Maputo, which is the major hospital in the country, and the Health Directorate of Maputo City, identified purposively in the range of relevant workplace settings to obtain specific knowledge and views about the perception of factors that influence internal brain drain in the NHS in the Maputo city. Similarly, semi-structured interviews were conducted by the researcher with key informants (HRM) from three NGOs, one HRM per NGO.

Finally, individual interviews were conducted with 20 MDs at their workplace (NHS and NGOs) and other locations convenient for the participants (e.g. restaurants, universities, the library).

3.6. Data analysis

Qualitative thematic analysis was used to interpret the recordings and transcripts of the interviews. The researcher conducted interviews with 20 MDs and 6 HRMs, after receiving permission from each participant. The researcher filled out questionnaires based on the participants responses and verified that all questionnaires were filled out completely and accurately. The interviews were also recorded and transcribed. The researcher listened to the interviews repeatedly and reviewed the transcriptions, coding the material and looking for similar words or phrases and organizing them by theme. The researcher also extracted appropriate quotations to support the themes. The main themes that emerged were:

- Factors contributing to the permanence of MD's in the NHS
  - Social Commitment
  - Career development
  - Retirement Pension
- Factors contributing to MD's leaving in the NHS
  - Financial Issue
  - Working condition
  - Management issue

The researcher then compared the results with other studies related to the same issue and interpreted the findings and developed conclusions.

3.7. Rigor

To optimize the credibility of the study, the researcher used triangulation method – data sources: document review and analysis, two phases of semi-structured interview. MDs and HRMs in different work settings were used to explore perceptions of factors that influence internal brain drain in the NHS in Maputo city (Mays & Pope, 2000).

3.8. Limitations of the Study

The study was conducted only in Maputo (not throughout the country) so perceptions of other MDs and managers in the country were not captured. The small sample, due to resource constraints (time and funding), limited its generalization. A cross-sectional study will not fully capture how decisions are made over time, or how perceptions change over time. Existing documentation does not provide detailed information about career trajectories of MDs; data about pre-2005 graduates is scarce. It was not possible to make interviews in the private sector, especially in private clinics, because most of the MDs do not work exclusively for the private sector. Delays were encountered in completing the interviews due to workload and reluctance of respondents in hospitals and health centers to participate. Some participants did not feel that the study added value as "everyone knows" what the problems are. The fact that the researcher works in the Ministry of Health as a human resource manager might also have had conflicting effects. On the one hand, respondents knew the researcher's position and seemed to trust that she was genuinely interested in their honest opinions and recommendations, otherwise they would not have participated. On the other hand, while precautions were taken to ensure the transparency of this study, social desirability bias in this study might have occurred due to respondents wishing to tell the researcher and the Ministry of Health what they wanted to hear. Lack of data about distribution of MDs in NGOs limits the interpretation of findings, as we do not know how the sample compares to the population. Aside from the sample size and cross-sectional study limitations, it was only in doing the study that the other limitations became apparent. A major limitation of the study was the lack of documentation and data needed to answer the first objective, about career trajectories of MDs graduated between 2000 and 2010.

3.9. Ethical Considerations

To undertake this study the researcher had permission for conducting this study by the Central Hospital of Maputo and from UWC's Senate Research Committee. All participants were given an information sheet and informed consent forms for interviews and were requested to sign a consent to conduct individual interviews form. The study considered ethical principles of voluntary participation, protection of anonymity of participants and confidentiality of

information, and ensured minimal if any risk to respondents. Most participants wanted to ensure that confidentiality and anonymity would be protected, because some of them believe that they might suffer reprisal. Others were doubtful that the study would positively impact their life. As such, reluctance of MDs might have interfered in the results of study, because some of the respondents were possibly not feeling comfortable to answer some of the questions. As noted above under “Limitations”, the fact that the researcher works in the Ministry of Health as a human resource manager might have had conflicting effects and may have dissuaded some people from participating in the study.

CHAPTER IV: RESULTS

4.1. Introduction

This chapter first presents documentary analysis about the distribution of MDs between the NHS, NGOs and the private sector over the period 2000-2010, followed by the socio-demographic characteristics of the participating MDs. Thereafter, the perceptions of MDs and HRMs of factors that influence intentions to stay in or leave the Public Health Sector in Maputo are presented.

4.2. Documentary analysis about distribution of MDs between the NHS and NGOs and Private Sector over the period 2000-2010.

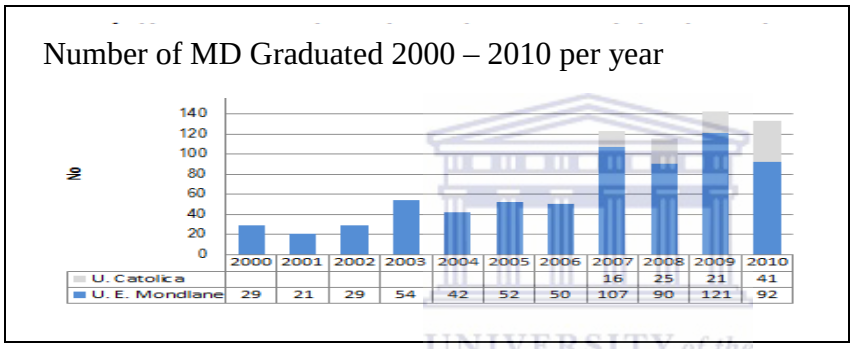
First, between November 2011 and November 2012 the researcher examined existing sources of data, both published and unpublished, to document the distribution of MDs who graduated between 2000-2010 within the NHS, NGOs and the private sector.

Documents were sought in the Ministry of Health, Ministry of Labour, Eduardo Mondlane University, Medical Doctors Order, NGOs, NAIMA (Network of Aids Impact Mitigation Associations) and the websites of the MoH (www.misau.gov.mz), Medical Association (www. Facebook.cim/AssociacaoMedicaDeMocambique) and NAIMA (www.naima.org.mz).In addition, requests to consult documentation in these organizations were undertaken to know about the distribution of MDs in the NHS, NGOs and the private sector. Unfortunately, responses to these inquiries revealed that this information is either not collected or that sharing this kind of information would be an ethical violation. One man at the Ministry of Labour said, "*This information is confidential… I cannot help you… it is a violation of ethics principles of our Organization."* Efforts to obtain information regarding categories of staff who work in NGOs also failed. Some NGOs reported that they were not authorized to share that kind of information or simply refused to give information about their staff. A female employee at the Medical Doctors Order responded, "*I am afraid …. But we do not have this information."* Similarly, a CCS NGO employee said, "W*e do not have this kind of information…but you can check our*

documents." However, the majority of documents analyzed also did not have information regarding human resources distribution.

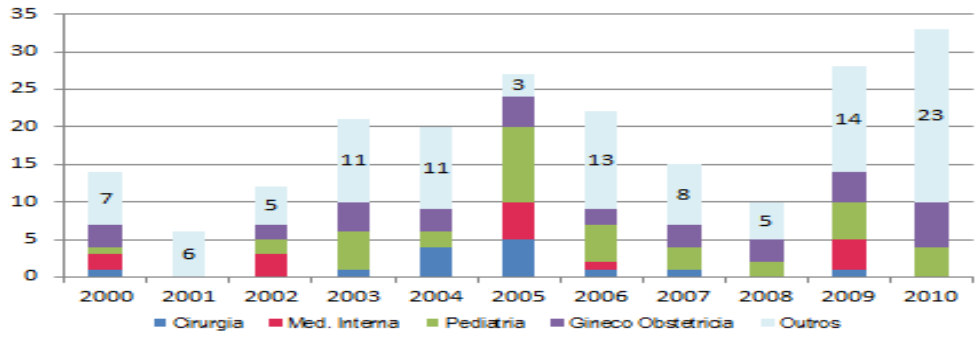
Although information on MDs distribution in the public and private sectors was not obtained, the researcher did find information regarding the number of MDs with the degree of "Licenciatura" as well as post-graduate medical degrees (Master and PhD) over the period 2000-2010, as shown in the graphics below. This information was obtained from Eduardo Mondlane University and the Ministry of Health.

Graphic 1: Number of MDs graduated during the period of 2000-2010 from Eduardo Mondlane University and Mozambique Catholic University.



Source: Ministry of Health (2011)

Graphic 2: Number of post graduate MDs graduated during the period of 2000-2010 from Eduardo Mondlane University.

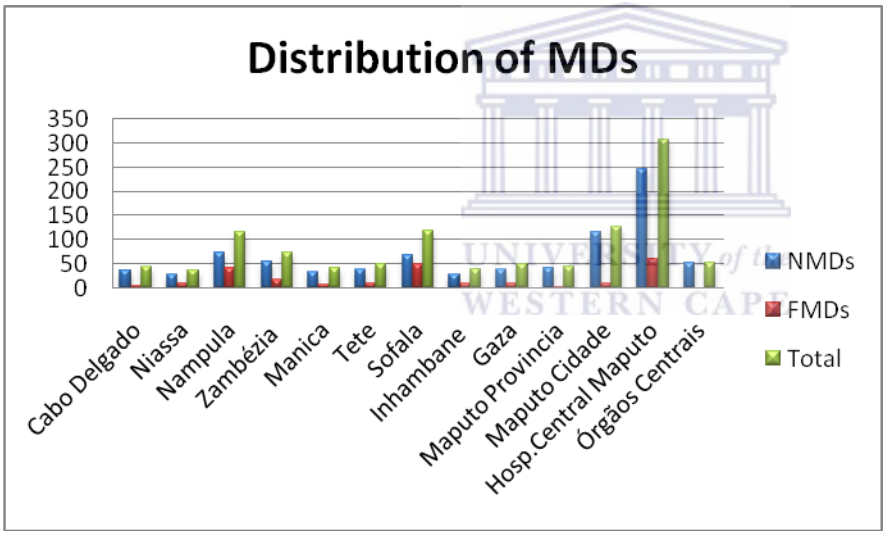


Source: Ministry of Health (2011)

Again, the documents show that in 2010 the National Health Service has 34.507 health workers, 863 are national medical doctors, of which 660 (76.5 %) were general practitioners, 200 (23.2%) were hospital MDs and 3 (0.3 %) were Public Health MDs. The majority of MDs were concentrated in the Central Hospital of Maputo and in Maputo city with 29% and 14 % respectively (MoH, 2010). In general, 53 % of MDs are female and this percentage is greater in Maputo province and Maputo city with 88% and 83% respectively (MoH, 2010).

The distribution of MDs around the 11 provinces as of the 31st of December 2010 can be seen in Graph 5 below. It is important to note that MDs who requested unlimited and registered work leave, and who asked for transfers are not included in this distribution.

Graphic 3: Distribution of national and foreign medical doctors per province in the NHS, 2010.



Source: MoH, 2010

4.3. Where MDs went after graduation

Every year the Faculties of Medicine send to the Ministry of Health the list of newly graduated MDs. The Ministry of Health has the responsibility of distributing them among the provinces according to the needs of each province. For this reasons, the NHS only provides information about where new graduates go after graduation according to the distribution in different provinces of the country. Information about MDs who do not present themselves in the NHS and those who request for unlimited and registered work leave is not available. Additionally,

information about how many MDs work in NGOs and the private sector, by specialty, was not available in documents reviewed.

4.4. How long they stayed in the NHS

There are no documents or evidence that directly address or show how long MDs stay in the NHS or how a typical career path evolves. That information is fragmented and incomplete. For example, the NHS has information about the name, number and province where the MDs are placed, which is collected by the Directorate of Human Resources at the Ministry of Health. However, information about MDs who do not present and where they went is unknown. Additionally, information about how long MDs stay in each organization is unknown. However, what appears to emerge from the study through the document analysis and especially from the interviews is that MDs stay more than two years in the NHS, after which they often start looking for better employment opportunities. The documents reviewed showed that the majority of national MDs (70%) with Master's and PhD degrees are concentrated in Maputo, and during the period 2005-2010 the NHS lost 56.5% of them (MoH,2011).

4.5. List of Registered NGOs in Maputo City

During the documentation analysis the researcher compiled a list of some organizations that work in Maputo city. The tables below show some of the NGOs, bilateral and multilateral health partners that are working in Maputo city. Some of the listed NGOs are registered in NAIMA (Network of Aids Impact Mitigation Association) and others were taken from various MoH documents as well as Medicus Mundi 50's Cooperation Plan for Mozambique (2012-2016). It is important to note that the majority of MDs leave the NHS to work at these organizations. The Directorate of Planning and Cooperation is currently undertaking an inventory of NGOs that operatate in Mozambique in the health sector.

Table 3: List of NGOs in Maputo City by area

HIV	**International**	
ICAP	HAI	MSF- Spain
EGPAF	CLINIC FOUNDATION	MSF - Portugal
CHASS	PSI	MSF - Switzerland
ChildrenNGOs	World Vision	MSF – Belgian
SAVE THE CHILDREM	MEDICUS MUNDI	Engineers Without Borders

Source: Health Directorate of Maputo City (2012); NAIMA; Medicus Mundi 50(2012)

Table 4: List of Bilateral Agencies

Bilateral Agency	**Bilateral Agency**	**Bilateral Agency**
AECID- Spain	USAID – USA	Italian Embassy
CIDA - Canada	JICA–Japan	Embassy of the Kingdom of Netherlands
DANIDA- Denmark	FICA – Netherlands	ACCD - Government of Catal
AFD – France	NORAD – Norway	IRISH AID – Ireland
GTZ/BMZ - German	SDC – Switzerland	DFID — British

Source: Health Directorate of Maputo City (2012); NAIMA; Medicus Mundi 50(2012

Table 5: Multilateral Institutions

International **Financial Institutions**	**Multilateral and international Institutions**	
ADB	UNICEF	UNAIDS
WB	UNFPA	WFP
	GFATM	UNDP
	WHO	CE

Source: Health Directorate of Maputo City (2012); NAIMA; Medicus Mundi 50(2012

4.6. Socio-Demographic Characterization of MDs

In this study we interviewed 20 physicians divided into two groups: one composed of MDs working in the NHS (Ministry of Health, the Central Hospital of Maputo, the Health Center of Malhangalene and the General Hospital of Mavalane), and the other group composed of MDs working in NGOs. NGOs interviewed include: Sciences for Improving Lives (CCS), Family Health International (FHI), International Center for AIDS Care and Treatment Programmes (ICAP) and Medicines Sans Frontieres (MSF).

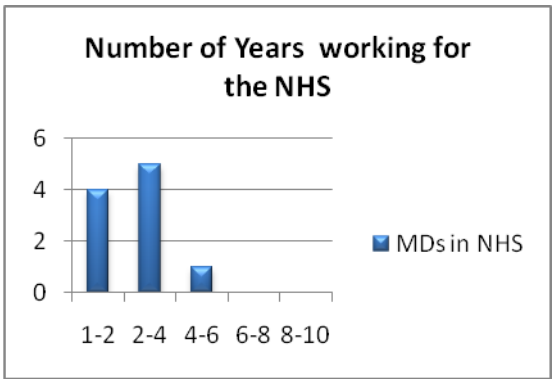
If we compare the mission of these NGOs with that of the MoH, we see a shared commitment to promote health care for all Mozambicans. The mission of CCS is to work on actions that promote health, disease prevention and to improve the quality and equity in access to health care and common disease treatment in Mozambique, giving particular attention to the health of women and children and other vulnerable groups. Family Health International's (FHI) mission is to improve lives in lasting ways by advancing integrated, locally driven solutions for human development. ICAP's (International Center for AIDS Care and Treatment Programmes) mission is promoting good mental health and well-being and rebuilding shattered lives through psychotherapy. Medicines Sans Frontieres' (Belgium) mission is to support the declaration of principles of human rights. Knowledge about the mission of each organization is important because these are the main organizations that pull MDs out of the public sector. This supports the idea that internal brain drain is not attributed to mission, but rather other factors as presented in this study.

The researcher interviewed six female and four male MDs in each type of institution (NHS and NGOS). All MDs interviewed were general practitioners, have Diploma degrees and have worked for the NHS at least for more than two years. Interviews were conducted in Portuguese.

In the sample of this study, the majority (9) of MDs who work in the NHS has less than 4 years and only one has (4-6) years of work experience with the NHS. In contrast, a significant number of MDs who work in NGOs has more than four years of experience with NGOs. However, the researcher was unable to interview more senior MDs in the NHS because of conflicting

schedules. Therefore, we cannot conclude that MDs are more experienced in NGOs than in the NHS.

Graphic 4: Number of years working for the NHS MDs



Graphic 5: Number of years of work experience with the NGOs MDs

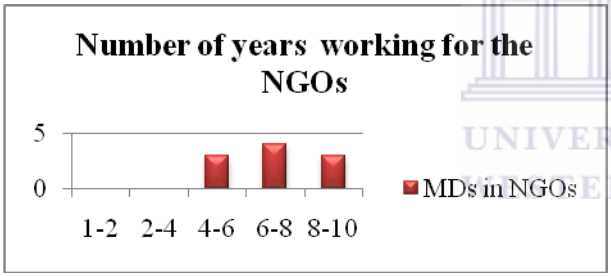


Table 6: Profile of MDs interviewed

Characteristic of variables	Number of MDs in the NHS			Number of MDs out of the NHS		
	Female	Male	Total	Female	Male	Total
Age						
< 25	-	-	-	-	-	-
25-30	1	2	3	-	-	-
30-35	4	1	5	6	3	9
35-40	1	1	2	-	1	1
>40	-	-				
Total	**6**	**4**	**10**	**6**	**4**	**10**
Specialty						
General practitioners	**6**	**4**	**10**	**6**	**4**	**10**
Public Heath Doctors Gynecologist						
Other categories						
Highest Educational						
Diploma	6	4	10	6	4	10
Master	-	-		-	-	-
PhD						
Others						
Total	**6**	**4**	**10**	**6**	**4**	**10**
Working Status						
NHS	6	4	10	-	-	-
NGOs				6	4	10
Private Sector						
Total	**6**	**4**	**10**	**6**	**4**	**10**
Number of years working for the NHS						
1-2	**1**	**3**	**4**	**-**	**-**	**-**
2-4	**4**	**1**	**5**	**1**	**2**	**3**
4-6	**1**	**-**	**1**	**1**		**1**
6-8	**-**	**-**	**-**	**1**	**2**	**3**
8-10	**-**	**-**		**3**	**0**	**3**
Total	**6**	**4**	**10**	**6**	**4**	**10**
Number of Years out of NHS						
1-2						
2-4				-		
4-6				**2**	**1**	**3**
6-8				**3**	**1**	**4**
8-10				**1**	**2**	**3**
Total				**6**	**4**	**10**

4.7. Respondents' reactions to the study

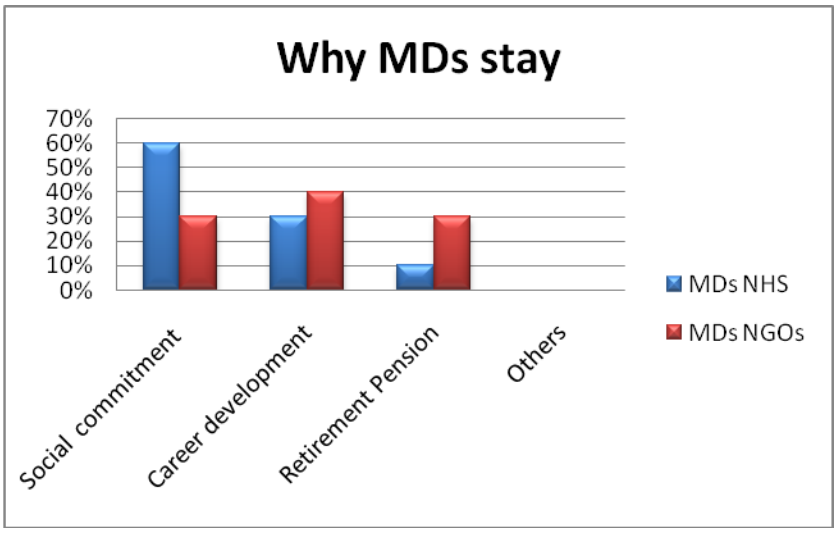
The details of participants and data collection described in Chapter 3 indicate some of the unexpected challenges of this study. Participant recruitment was not easy. The first reaction of MDs when the researcher explained the purpose of the study was refusing to participate, because they believe that the problem of internal brain drain is known by everyone, as well as the causes. Other reasons were related with lack of time due to workload. Additionally, most participants wanted to ensure that confidentiality and anonymity would be protected, because some of them believe that they might suffer reprisal. Others were doubtful that the study would positively impact their life. These problems were identified mainly in the hospitals and health centers. On the other hand, some of the participants showed enthusiasm to be part of the study, because they believe that it might influence decision-making in the NHS. Again, HRMs were invited to be part of the study and all of them showed their availability to comment around the brain drain issue.

4.8 Interview Results – Medical Doctors' and HRMs Perspectives

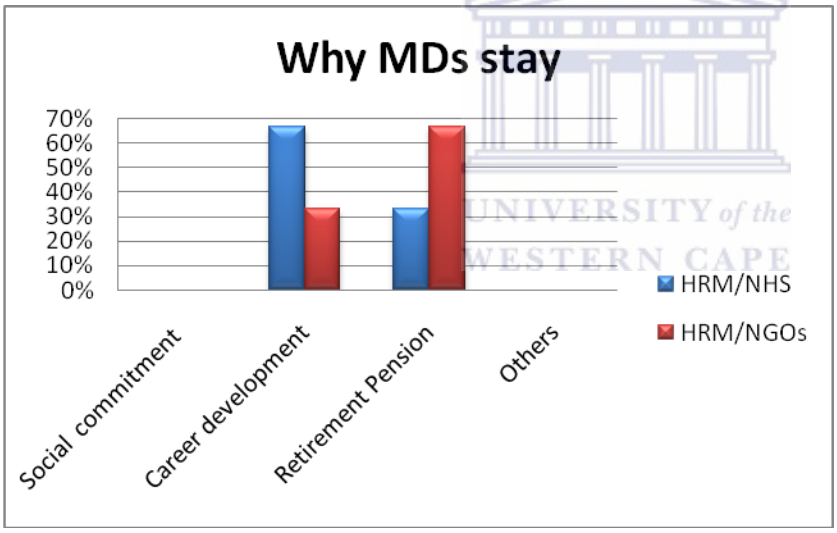
4.8.1 Factors contributing to the permanence of MDs in NHS

In this section, the results will be presented in order of priority given by MDs and HRMs from the NHS and NGOs who were asked about the factors that contribute to retention of MDs in the NHS. This structure was chosen to facilitate the understanding of main factors that contribute to internal brain drain in Maputo city and to show how strongly the various themes were reported across the entire sample. These respondents indicate that the main factors that influence MDs to remain in the NHS were social commitment, career development, and retirement pension as shown in the graphics.

Graphic 6: Why MDs stay in the NHS: Perception of MDs of NHS and NGOs



Graphic 7: Why MDs stay in the NHS: Perception of HRM in the NHS and NGOs



Social commitment

Among the medical doctors in the study, the most frequently and emphatically mentioned reason for staying with the NHS is social commitment. Sixty percent of the NHS MDs reported that they and other MDs have committed to the State to provide health care to those who need it and they know that in the NHS there is an opportunity to be connected to the life of the common Mozambican. It is interesting to note that this position was defended mostly by female MDs.

"I want to help Mozambican people who do not have money to pay private Clinics… I was in the private sector and I was settled down due to the salary, but I have returned to the NHS to help people who need, despite the difficulties… I have left the private sector because I feel that in clinics there is small contribution to the National Health System" (Female MD of NHS).

In a related theme, other MDs indicated that MDs with experience stay in the NHS because they believe that it constitutes the machine of the Ministry of Health and they feel that if they leave the NHS it will be empty in terms of people who can pass experience to young MDs.

"I want to believe that... there are MDs with experience who stay in the NHS because they are interested in passing their experience to others… few but … but they do exist..." (Male MD).

Expressing a similar opinion, another female MD said that "*there are MDs who are proud of interacting with newly graduated MDs".*

On the other hand, 30% of the interviewed MDs from NGOs reported a combination of contractual obligation in its own right, and social commitment. First of all, MDs remain in the NHS because after completing their course, they are automatically placed at the NHS and then it is difficult to leave, because they have signed a contract with the MoH, so they know that they have to serve the country for at least two years.

"*Some MDs stay in the NHS because they do not have another choice… others stay because they have the spirit of help in the first two years… they are more concerned with people… and they want to save lives"* (Male MD of NGO).

An interesting fact is that none of the HRMs from either NHS or NGO work settings mentioned social commitment as a reason for MDs to stay in the NHS. Both gave emphasis to factors that can provide benefits in financial terms.

Career development

The second most important theme, reported by 30% of the study MDs of NHS, is that physicians remain in the NHS because they intend to continue their studies in different areas of specialization. One NHS MD put it as follows:

"(…) I like the area of investigation and staying in the NHS may be part of research agenda, most interesting cross-over. I want to combine research with clinical (….) I want to continue my studies and staying in the NHS is one of the criteria required… there are more chances to be promoted here" (Male MD of NHS).

Another respondent states that:
" In the NHS you *have opportunity to get more experience and be promoted…. also to continue your studies… in the NHS there are many opportunities to share and exchange knowledge with other people from different provinces in the country and abroad"* (Female MD of NHS).

The participants emphasized that contact with provinces is a rewarding experience: during the visits to the field they are supported by their provincial counterparts but they also support them with new and different ideas and experiences, according to the specific context of each region.
"Staying here is not too bad… it is nice when you have an opportunity to visit some provinces… so you can share experience…learn more" (Female MD of NHS).

Other ways of reporting the career development theme were found in the interviews of 40% of the NGO-based MDs, who noted that young MDs stay because they are waiting for the time when they can win a scholarship or get permission to continue with their studies.

"*For me, there are no doubts that MDs stay in NHS because they want to continue with their studies … I have many colleagues there who said that… after having Diploma they will leave … this is the main reason*"(Female MD NGO-based).

In fact, MDs and HRMs agree that the NHS offers the opportunity to acquire experience and knowledge with no costs to the employee. This position is reinforced by two HRMs in the NHS. One respondent stated that:

" *MDs stay in the NHS because they have the possibility to gain experience from Government resources through participation in various seminars, training, courses, and they have a vast field to establish a career that would not be possible in the private sector"* (Male HRM of NHS).

An NGO-based HRM believes that people have different ambitions to stay in the NHS. For example one HRM's said that " *(…) those who stay are MDs who are in a position of leadership and management and those who have other sources of income, or those people who are interested in ensuring security for their families, career progression, community recognition or political ascent"* (Male MD of NGO).

Retirement Pension

Only one NHS-based MD reported that MDs stay in the NHS because they want to ensure retirement pension:

" *…in the Public sector the salary is low but we always get it… and in the Government we can ensure our retirement pension … get old quietly"* (Male MD of NGO). .

In contrast, 3 of the NGO-based MDs mentioned that MDs stay in the NHS to ensure retirement pension.

It is interesting to note what (1) HRM who works in NHS states "…*MDs stay in NHS because they are conformist and they are afraid of leaving the NHS and lose the chance to fix they pension after many years of work in the Government …(…) Also because many NGO are hiring people for a short period of time… So, these MDs are reluctant to terminate the contract and became unemployed… they prefer staying in the NHS despite the low salary".*

Two Human Resources Managers who work in NGOs reported that MDs stay in the NHS because they want to ensure their retirement pension and because they believe that one day the Government will provide better conditions for their employees.

"…. *It is fear of not knowing what awaits them in the private sector… so they prefer guaranteeing retirement because there is hope that salary will someday be increased incentives provided and working conditions improved (…)* "declared an NGOs HRM .

A further reason mentioned by this key informant is that the majority of MDs with experience who remain in the NHS do so because they are in positions of leadership or because of other interests, such as attending conferences, or working in the private sector/having a dual practice.

"*... Staying in the NHS has advantages because you can work in the public and private sector at the same time, there is no control (...) using the resources of public sector for your own benefit (...)".*

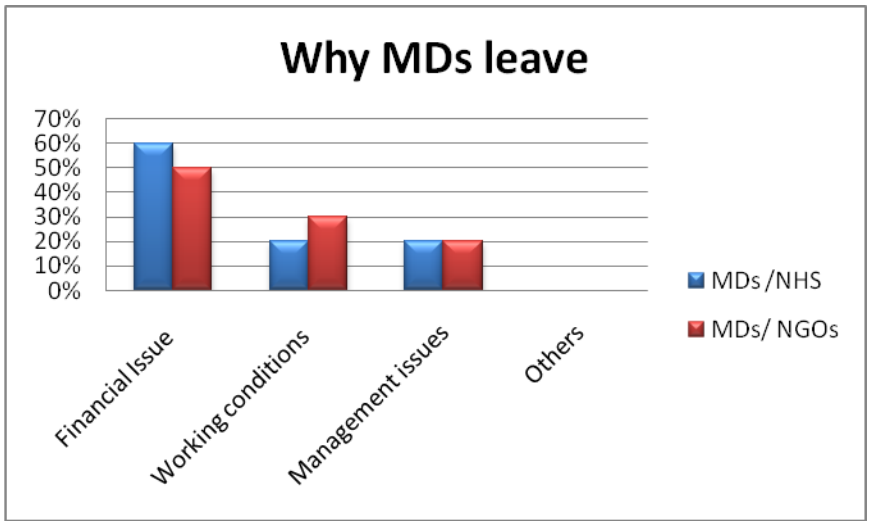
Apart from securing their retirement, another reason pointed out by a Human Resource Manager who works in an NGO is related to additional income MDs have from lecturing at Universities and Institutes.

"...these MDs usually are invited to lecture at some Universities and Institutes, they participate in many seminaries abroad without any costs, and these opportunities influence in their decision to stay...".

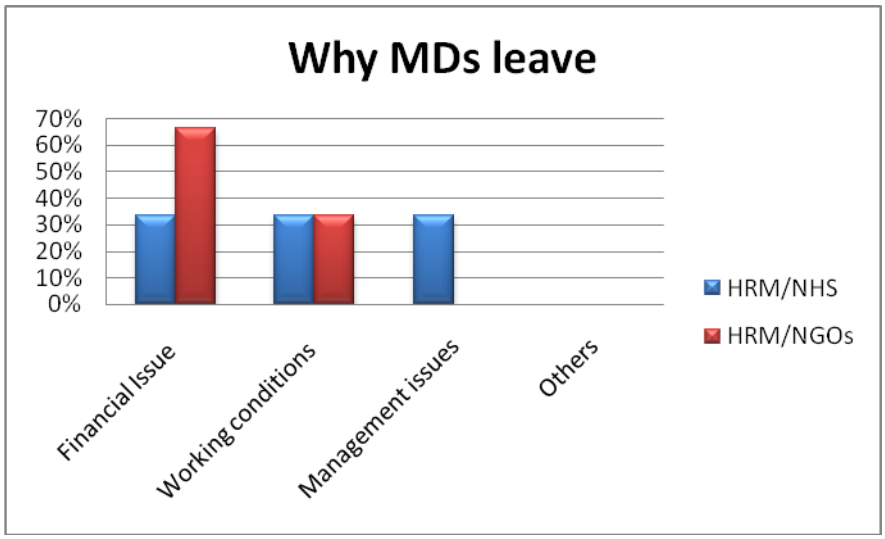
4.8.2. Factors contributing to MDs leaving the NHS

Financial issues (low salaries and few incentives or benefits), working conditions and management issues are the main reasons pointed out by MDs for leaving the NHS.

Graphic 8: Why MDs leave the NHS: perception of MDs of NHS and NGOs



Graphic 9: Why MDs leave the NHS: perception of HRM of NHS and NGOs



Financial issues

MDs who work in the NHS (60%) argue that salaries in the NHS are not reasonable; they do not reflect the effort and the demand of the work. These MDs emphasized that their salary should allow them to give their best, to be emotionally motivated, physically and financially comfortable. Most of those MDs said that low salary and lack of incentives are the main reasons that influence the decision to leave the NHS. These arguments were reinforced by the fact that this salary does not make it possible to buy or rent a good house, buy a nice car and provide good school and medical assistance for their families.

"*....salary does not allow renting or buying a decent house… If we had housing and good salary to pay for better schools for their children, perhaps it would help to retain MDs in the NHS" (*Female MD of the NHS).

MDs reported that if the salary is not increased substantially the problem of retention in the NHS will continue, so existing incentives should be implemented comprehensively and previous incentives should be revitalized to retain MDs in the NHS.

"…Previously there were others mechanisms of motivation but they were cut, thus, they should be rethought…. social benefits such as residence have been removed… the only way to increase

salary in the NHS is to become a specialist and receive "topping up" (Female physician of NHS).

Similarly, half of the physicians working with NGOs reported that the main factors contributing to the departure of MDs are low salary and lack of incentives. MDs in the NHS receive about 850 USD; in contrast MDs of NGOs receive more than 2500 USD per month.

It was interesting to see that doctors who work in the NGOs are satisfied with the salary. However, they do not feel professionally realized as many do not have opportunities to do clinical work in the offices. They do not have contact with patients. .

"...I decided to leave the NHS to improve the conditions of living, have money to rent or buy a house, provide better education for my children and have good material for my satisfaction as car, clothing and food…. *I'm happy with my salary ... they pay well ... but I would like to work in the clinic area .... in Hospital or Health Centers... be in contact with patients and their families and not only stay in an office..."(*Female MD NGO-based).

The question of incentives was also reported by an HRM within the NHS who argues "… *that Government should increase the retention of MDs in the NHS in terms of monetary and non monetary incentives in order to appreciate the efforts of medical personnel and alleviate the heavy expenditure that they have with their family (...) another aspect that should be considered, is paying for extra activities they perform, such as emergency calls, extraordinary hours, transport and housing subsidies that are not otherwise paid.. .In the NHS there are no supplements of salaries despite doctors working in poor conditions, they receive little , and all the effort is not recognized..."(*Female HRM of NHS).

One of the key informants from an NGO added that any strategy for retention should separate salary and incentives because the Government is not in a position to satisfy everyone: it would bring high costs. Another NGO HRM also added the same, that any strategy to implement incentives in the NHS should be sustainable.

Working conditions

The second main factor leading to brain drain is poor working conditions. MDs of NHS (20%) as well as (30%) of NGO-based MDs point out that the existing working conditions are deplorable in the NHS. There are cases in which doctors take about 30-40 minutes looking for medicine or buy it for patients with their own money. Doctors are placed where they do not have even minimally acceptable conditions, without basic material for screening, adequate infrastructure and condition of work, such as lack of equipment, drugs, medicine, and ventilation "*... It is sad to be MD and see people die due to lack of drugs… in the Districts you have to walk long distances to get your salary ….medicines… cars do not arrive in some Districts* (Female MD of NHS).

"*…. there are some Health Centers without basic conditions such as water, energy… working in these conditions is terrible ... the Government should think twice about this"* (Female MD of NHS).

"... I worked in the NHS…. in a Health Center where we were caught in the rain because of old infrastructure… so, the wall and floor were dirty... materials were scarce…it is difficult to work with these conditions" (Male MD of NGO).

An NHS-based HRM as well as an NGO-based HRM also reported that NHS facilities have poor working conditions characterized by lack of water, energy, inadequate infrastructure and workload.

" ... Is true that NHS have poor working conditions such as *lack of water, light, equipment, materials, consumables, high number of patients, inadequate infrastructure, lack of ventilation, chairs, etc".* (Female HRM of NHS).

"*…. sometimes MDs have to see more than 50 patients, it is not good because it decreases the quality of the services delivered"* (Male HRM of NGO).

These HRMs added that poor working conditions contribute to MDs leaving the NHS.

Management issues

The present study shows that work environment might influence retention and motivation of MDs. Interviewed MDs (20%) mentioned that this factor has implications in their motivation. One of the constraints mentioned in this study was lack of good relationship and communication between the top with the subordinates. This relationship, characterized by what they called "lack of respect", recognition of their work and effort, in spite of difficult conditions in which they work. On NHS-based MDs put it as follows:

"I have difficulties of communication with my boss, he chides me and he does not explain the reasons of my mistake, so, I cannot improve my work…. He only says this is not ok, without showing why it is wrong … this is frustrating" (Female MD of NHS*).*

*"… the communication here is very difficult… my boss always arrives late… but he wants to be saluted first… you have to stand up … then he bows… during a meeting you cannot disagree with him… you should say yes for everything … it is so boring… he wants to show you that he is the boss…" (*Reported another female NHS-based MD).

MDs (20%) of NGOs reported that the type of management in an organization is very important in terms of promotion, career progression and rotation of personnel in the district.

"*I have left the NHS because I was five years in the district and I could not return to Maputo due to lack of physician for exchange. After 5 years, I had an opportunity of work for a NGOs and I returned to Maputo. Here, I saw an opportunity of returning to Maputo to continue with my studies and of staying with family"* (Female MD of NGO).

"I stayed 3 years in the NHS and during this period I was never promoted…never received any gratification… "(Male MDs of NGO).

One HRM of NHS states that lack of opportunity to share new knowledge, discuss with colleagues in order to obtain recent information around the world have implications on decision

to leave. Apart from that, this HRM added that heavy/unpleasant management styles compound the demotivating effects of excessive workload and inadequate salaries.

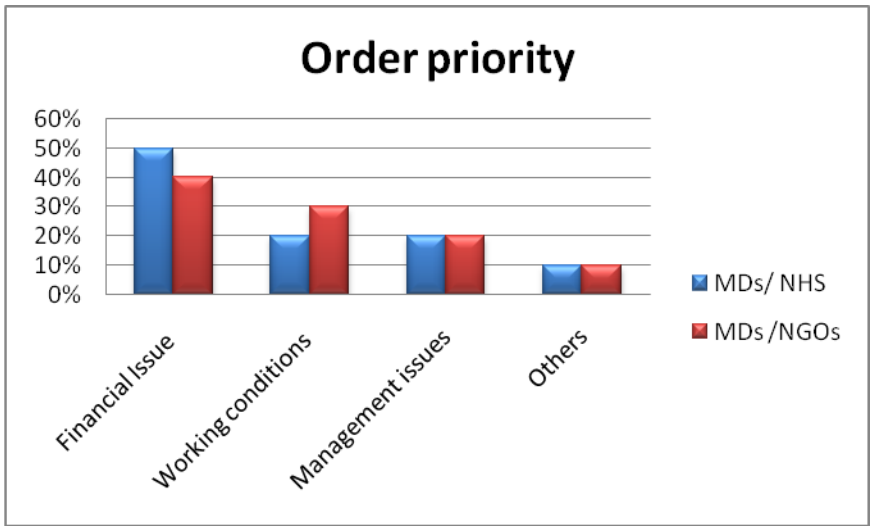
" *…between the NHS and NGOs the difference are in the type of management which is more quiet and workload is less in NGOs and further they give opportunity to stay more time with the family, so as to solve some social problems"* (Female HRM of NHS).

HRMs of NGOs did not mention anything about management issues.

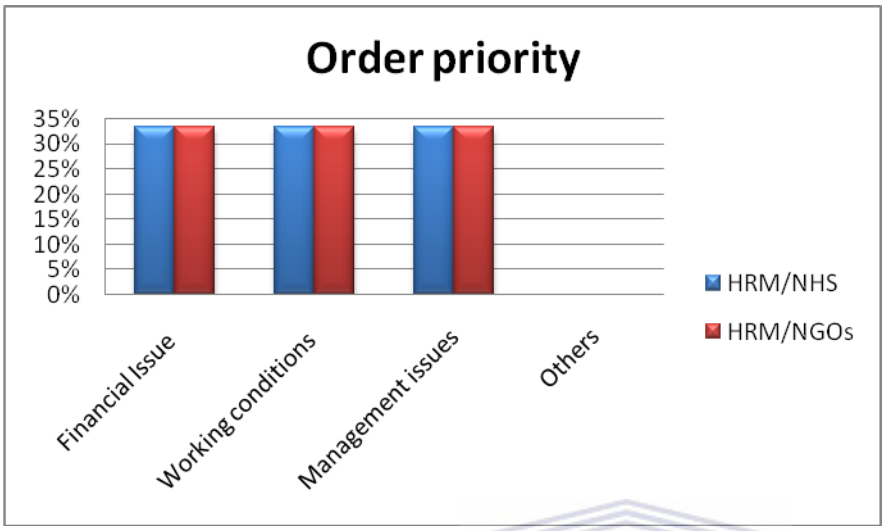
4.8.3. Retention of MDs

The respondents were asked to reflect on a range of factors identified in the literature as influencing motivation and retention, and to put in order of priority the most important factors that might help MoH to retain MDs and the replies focused on three key points: financial incentives (salary and other incentives), working conditions and management. There were no significant differences among the answers of MDs and HRMs both in and out of the NHS.

Graphic 10: Most important factors of retention of MDs in the NHS perception of MDs of NHS and NGOs



Graphic 11: Most important factors of retention of MDs in the NHS perception of HRM of NHS and NGOs



First factor - Financial Issue

- 50% MDs of NHS and 40% MDs of NGOs;
- 1 HRM of NHS and 1 HRM of NGO.

Second factor - Working condition

- 20 % MDs of NHS and 30% MDs of NGOs;
- 1 HRM of NHS and 1 MDs of NGO.

Third factor -Management issue

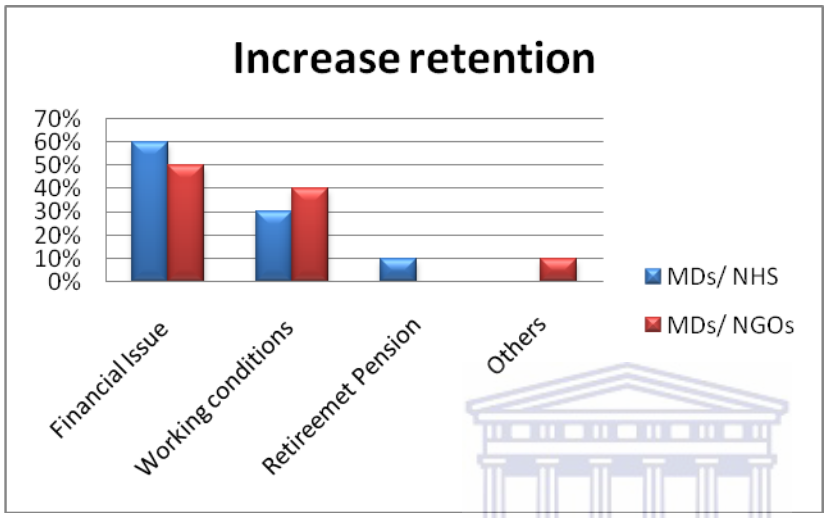
- 20% MDs of NHS and 20% MDs of NGOs;
- 1 HRM of NHS and 1 MD of NGO.

Other factors such as access to bank credit for purchase of housing and land distribution were mentioned by one MD who works in the NHS and one who works for an NGO.

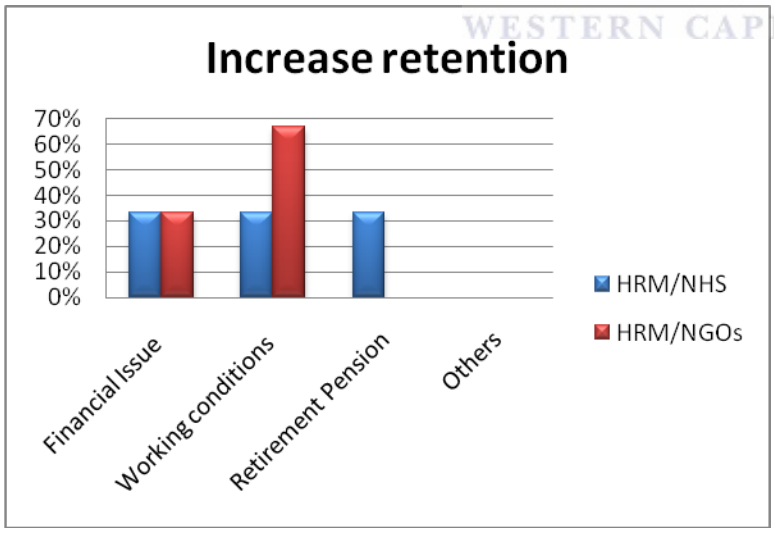
4.8.4. Strategies to increase retention of MDs in the NHS

The respondents were then asked to give their own opinion about what can be done to increase retention of MDs in the NHS. The results are summarized graphically below.

Graphic 12: Factors to increase retention of MDs in the NHS: perceptions of MDs



Graphic 13: Factors to increase retention of MDs in the NHS: perceptions of HRMs



Financial Issue

- 6 MDs of NHS and 5 MDs of NGOs
- 1 HRM of NHS and 1 HRM of NGOs

Working conditions

- 3 MDs of NHS and 4 MDs of NGOs
- 1 HRM of NHS and 2 HRM of NGOs

Management issue

- 1 MD of NHS and 0 MD of NGOs
- 1 HRM of NHS and 0 HRM 's of NGOs

Other factors were mentioned by (1) MD of NGOs who emphasized that giving a house and car to MDs who are in remote areas should contribute to retain Physicians.

4.8.5. MDs intention to leave the NHS

The ten MDs currently working in the NHS were asked if they thought to leave the NHS. Eighty percent revealed that they have thought of leaving the NHS, mainly due to low salary and lack of incentives, because this affects their quality of life.

"…Yes, I already thought of leaving the NHS. If an opportunity comes I will not think twice… salary does not cover my needs… if I were to leave it would be just for salary because I have a good working environment" (Male MD of NHS).

"…Yes...but first I want to finish my Master's… after that… who knows…" (Male MD of NHS).

"….. Of course… the big problem is that the opportunities come from provinces…. my family is here … I am waiting for good opportunity here…in Maputo…" (Female MD of NHS).

4.8.6. MDs intention to return to the NHS

Conversely, the ten MDs of NGOs were asked if they expect to return to NHS and 70% of them confirm this desire. However, all of those doctors want first to organize their life and finances.

"… One day I will return to NHS… but first I want buy a house, a good car and provide good schooling for my children" (Male MD of NGO).
"…. hummm….yes …in future …if the conditions were created… (Female MD of NGO).

"… It is a good idea… maybe … after 5 years I will return to NHS… at that time I hope to find better conditions …" (Male MD of NGO).

4.8.7. Conclusion

In summary, the study revealed that there are no documents or evidence that directly address or show how long MDs stay in the NHS or how their typical career paths evolve, where are MDs who do not present themselves in the NHS and those who request for unlimited and registered work leave is not available in the NHS, and they distribution in the National Health System. Some documents which indicate the list of some bilateral and multilateral NGOs and in Maputo city where identified by the researcher. NGOs refused to disclose or did not have data. It was not possible to examine internal brain drain to the private sector because the private sector organizations approached by the researcher declined to participate, and MDs and HRMs reported that most physicians who work in the private sector also work in the public sector so they would not meet the inclusion criteria for the study.

Many MDs contacted by the researcher refused to participate, either because of workload and scheduling concerns or because the study was not considered likely to add value to what "everyone knows". Some potential participants indicated that they feared reprisals might follow if they participated.

The main reason identified by MDs in both work settings for remaining in the NHS is social commitment, and this position was particularly reinforced by female MDs. In contrast, the main reasons identified by HRMs are career development. Both MDs and HRMs of NHS and NGOs reported that the main factor that contributes to leaving the NHS is financial issues. Priorities and strategies to increase retention reflected the reasons for leaving the NHS and counteracting these "push" factors, rather than directly reinforcing the reasons for staying.

The results also show that MDs who remain in the NHS are looking for an opportunity to leave the NHS and those who are out only think to return to NHS if they have organize their life.

CHAPTER V: DISCUSSION OF RESULTS

5.1. Introduction

This chapter presents a discussion of the findings under the main topics. The researcher will first present documentary analysis about distribution of MDs between the NHS, NGOs and Private Sector over the period 2000-2010, followed by Socio-demographic characterization of MDs. Thereafter, MDs and HRM perceptions of factors that influence intention to stay or leave the Public Health Sector in Maputo.

5.2. Document analyses

It was astonishing to identify that the majority of documents analyzed do not have data or information regarding Human Resources distribution. Efforts to obtain information regarding the distribution of MDs in the National Health System might have failed due to the lack of people who knew about the documentation of an organization and difficulties due to the lack of information to identify NGOs that are not registered, and time constraint in search for it jeopardized the search. The researcher searched the Internet for information on NGOs, and visited NGO offices to search for documents with no success. The individuals and institutions approached for documentation stated strongly that documentation about the distribution of MDs is not available. As the researcher is part of the human resources team in the Ministry of Health, it is unlikely that major sources of information were overlooked, but it is possible that further information sources could have been available if the right individual who knows about it was located. This exploratory study did not succeed in locating such key individuals or information. One of the contributions of this thesis is to highlight some of the many gaps in the human resource information system in Mozambique.

Data available show that the majority of national MDs (70%) with Master's and PhD degrees are concentrated in Maputo, and during the period (2005-2010) NHS lost 56.5% of them (MoH,2011).Equally, in their findings WHO/Afro (2001) mention that in Ghana 50% of MDs are located in the national capital. The study of Biesma et al(2009) show that NGOs and private

sector contribute to internal brain drain. The NHS, through the Ministry of Health, only provides information about where new graduates go after graduation according to their distribution in different provinces of the country. Information about the current work location of MDS who do not present themselves in the NHS or who request for unlimited and registered work leave is not available in the NHS. A study by Ferrinho and Omar (2006) points out that MDs who do not join the NHS are in NGOs and Private Sector, and other Public Sectors such as the Ministry of Defense where they are well-paid. This study suggests that some MDs are concentrated in NGOs. Information about how many MDs exists in NGOs as well as their expertise is not available in documents reviewed. Similarly, the study of Awases et al(2004) did not find data from private sector in Senegal.

There are no studies or documents that might demonstrate the duration of employment of MDs in NHS. But according to the sample of the current study MDs stay more than two years in the NHS, and after this time they start looking for better opportunities of employment. This tendency might be explained by the fact that there is a law which orientates that new graduated MDs must work in District for at least 2 years. After this time, MDs can work in the Private sector and NGOs and have opportunity to continue their study with NHS support.

In Mozambique there is a growing consensus that information related to distribution of MDs should be strengthened and specific actions undertaken to do this. The Directorate of Human Resources, Medical Doctors Order, Medical Doctor Association, Medical Doctor Oder, National Health institution and Cooperation Partners represented by NAIMA (A network of NGOs working in Health and HIV/AIDs in Mozambique) and Civil Society have started a debate to find the best way to collect data of MDs and other health professionals in different sectors in the National Health System. They agree that this information should consider ethics issue, such as confidentiality and anonymity because in Mozambique there is no law that regulates dual practice of MDs.

5.3. Socio-Demographic Characteristics of MDs

Results of the study demonstrated that MDs in Maputo city work at least two years in the NHS. This behavior might be explained due the existing law which obliges them to work in the NHS for this time.

All the respondents of this research have the Diploma degree, and they are general practitioners it might explain our sample which is composed essentially by junior MDs.

The study results do not allow the researcher to conclude that MDs who work in NGOs have more experience than those who work in the NHS due to the fact that all participants were junior MDs and have Diploma degree and senior MD's did not participate in the study due the schedule constrains. On the other hand, documents analyzed show that the NHS loses MD's with experience, most of them Master and PhD degree. Thus the NHS loss is not only in quantity but also in quality.

It was perceived that, findings from interview reveal that more female than male MDs both leave and stay in the NHS. This fact might be explained by the fact that, in general, 53 % of medical doctors of NHS are female.

5.4. Factors contributing to retention of MDs in the NHS

According to the participants in this study, the reasons which contribute to MDs staying in the NHS are social commitment, career development and retirement pension.

5.4.1. Social commitment

Findings from interviews revealed that social commitment is the most important factor for MDs stay in NHS, according to the MDs of NHS and NGOs. These professionals believe that the NHS needs them and they can fulfill their oath of Hippocrates, and it includes respecting scientific gains, applying all measures needed for the benefit of the sick, avoiding overtreatment, being

sympathetic, respecting privacy of their of patients and recognizing that prevention is preferable to cure.

The finding from interviews reported that MDs are in the NHS because they believe that the System needs them and they can help in different ways. For example, young MDs stay in the NHS because they feel that people need their services. The same applies to MDs who have experience and who believe that they must pass their experience and knowledge to others. This position is compatible with the study by Oman K (2009) which has examined the reasons why some doctors stay in the public health sector, and it was concluded that this provides opportunities for MDs to show their social responsibility, as well as opportunities for personal achievement, professional satisfaction and prestige.

An important finding was indentified among HRMs who did not point out social commitment as a reason for MDs staying in the NHS. HRMs seemed to feel that MDs are only interested in monetary and non-monetary incentives. This vision might be seen as a major concern if we consider that this senior professional has an important role in designing Human Resources policies, including strategies for MD retention.

5.4.2. Career development

MDs who have intentions to continue their studies know that the easy way to do it is to work at least for two years in the District Level according to the orientation from the Ministry of Health. In line with that view, Omar., (2009) suggest that special attention to local and regional postgraduates training, career development, clearness in selection procedures for doctors training, family stress, and working conditions are important issues to consider in MDs retention. The study shows that after two years in the NHS, MDs start looking for other opportunities, and this might occur because according to the study of Snow (2011), MDs recognize that salary is important, but career development is a priority for them because they know that specialization gives more chances to undertake other challenges.

5.4.3. Retirement pensions

It was interesting to note that only one MD from NHS mention that retirement pension is one of the factors that influence MDs to stay. This can be understood to mean that retirement pension might not contribute to retain MDs in the NHS. However (30%) MDs from NGOs have mentioned that retirement pension might influence decision to stay in the NHS. In addition, as most of the respondents were junior doctors, they may not yet have come to think about retirement pensions as an important issue.

As regards to HRM (1) working in the NHS, it was interesting to note his opinion which states that MDs stay in the NHS because they are afraid of leaving it without securing their pension and because many NGOs hire people for a short period of time.

This argument may be supported due to the fact that in Public Sector the process for asking registered and unlimited work leaves does not take long time. On the other hand, when you want to return to the Public Sector the process takes about six or more months. This delay in the process occurs because reintegration in the NHS does not depend only on the Ministry of Health, it involves the Ministry of Finance and the Administrative Court. So the decision to leave the Public Sector is not easy, it has implications. Even knowing that you can earn more in NGOs than in Public Sector, the major concern for most health professionals is that NGOs sign contracts for short period of time. So, if you do not have the chance to renew the contract, the process becomes expensive and bills increase. Again the process of looking for another employment is challenging. In addition this key informant states that other MDs stay in the NHS because they are in positions of leadership. This argument can be explained by the fact that a significant number of MDs who have been in positions as leaders or managers in NHS became Provincial or District Directors. This position implies being part of Government, as a consequence many of these MDs became politicians and as a result most of them do not do clinical work. Due to this situation a new informal debate in Mozambique was started '*What should be the profile of managers in the NHS '.*

The HRM also mentioned that MDs stay in the NHS because they work in public and private sector simultaneously. There are some specialists who have dual practices and use/access public

resources for their own benefit. By this way, quality of services they deliver is poor, as users of Health Service said, and it appears that they are only concerned with earning money. Apart from retirement pension, another reason pointed out by a (1) HRM who works in NGOs is related to other incomes MDs get from lecturing at Universities and Institutes. It is important to note that, MDs who work in the NHS have more chances to be invited to give lessons at Universities, Institutes and partake in seminars abroad than others who work out of NHS, as can be seen salary is not the only income they have. These arguments are compatible with the studies of Jan (2005) and Ferrinho (2004) who suggest that most health professionals join two or more salaries of different sources such as public and private sector to increase their income. These authors add that dual practice increase internal brain drain and undermine the delivery of health care and the relation between the health workers and patients.

Despite all these constrain, NHS needs their services and according to the CIPD (2006), the exit of senior professionals might have an impact in an organization because it can lose corporate knowledge, history and networks.

5.5. Factors contributing to the exit of MDs from the NHS

The study showed that financial issues, working conditions and management issues were the most common factors that contribute to MDs leaving the NHS**.**

5.5.1. Financial Issues

As we have identified, a considerable number of physicians indicated financial issues as the main factor contributing to leaving the NHS. MDs are aware, however, that an increase in wages alone will not solve the problem of retention in the NHS. MDs defend that there is a need of creating other forms of incentives and subsidies. Linked to this, studies by Conceição et al (2010) and Willis-Shattuck et al (2008) support that incentives and salaries should be a part of strategies to improve working and living conditions and to retain health workers. One of the problems raised during the research is that the existing incentives are not paid regularly. These issues were reported by Ferrinho and Omar (2006) who notice that there are two types of incentives in the

NHS, the first one prescribed by the law and others without any regulation due to lack of funds and difficulties with administrative processes.

There is an incentive in the NHS only for specialist MDs who work outside Maputo, and they receive about USD 2000. This incentive lasts five years, the period after which MDs return to the normal salary. However, the information available in the Ministry of Health suggest that after this time, most of them do not continue in the NHS, since they start looking for new opportunity mainly in the private sector, or they request unlimited and registered work leave. Another aspect that should be considered is to pay for additional activities they perform, such as emergency calls that are not paid. Key informant of NHS added that any strategy of retention should consider that it will be difficult to separate salary and remuneration and that it is important to consider the sustainability of new incentives. This caution reflects that more than half of the Mozambique's health budget comes from donors, and incentives are normally paid through these funds, which is not sustainable long-term. Salary increases, conversely, are decided on by the Government, and increases to salaries likely will not be significant to retain MDs in the NHS.

A curious fact is that MDs who work in NGOs are satisfied with the salary they receive which is more than 2500 USD per month and they have other benefits such as Medical Assistance in Private Clinic and holiday pay. In contrast, MDs in the NHS receive about 850 USD and they do not benefit consistently from the existing incentives. Nevertheless, MDs of NGOs do not feel professionally realized as many do not do clinical work so they do not have contact with patients. Definitely, financial issue has a great influence in decision to leave the NHS (Bezuidenhout, et al 2009).

5.5.2. Working Conditions

The problems of working conditions were manifested by significant part of MDs and HRMs from NHS and NGOs. The main points by the respondents are related to lack of minimal work conditions in the health centers such as water, energy, infrastructure, and equipment. One of the main concerns of respondents in the fact that MDs are placed in areas where there are no

adequate infrastructure, access is very difficult and instead of providing communities with health care, they are worried about their own survival. There are cases in which MDs have to walk long distances to get their salaries, to buy something at a market, to bring medicine, just because cars only pass there twice a year. Usually, at these places health workers stay a few months and this situation affects the delivery of Primary Health Care for those people who need. In this way, poor working conditions contribute to migration of health workers (Clemens, 2010).

5.5.3. Management issue

One of the constraints mentioned in this study was lack of good relationships between the top managers and their subordinates. Mathauer and Imhoff (2006) emphasize that MDs and nurses point out that recognition, professional development and work environment are very important issues for the retention of health workers. Other issues are promotion, career progression and rotation of personnel, which is not implemented in the NHS. For instance, MDs stay more than two years in Districts due to management issues. On the contrary, in the case study on northeastern Nigeria, job satisfaction was increased by promoting freedom of expression, career development, adequate human resources management, availability of resources in the workplace and follow up of professional progression; these factors played a crucial role in health workers motivation, despite salary conflicts. According to the WHO (2010), a strategy of retention should include Human Resource Management such as workforce planning and hiring practices. The results also show that HRMs of NGOs did not mention anything about management as reason of MDs leaving. This might be explained due the fact that they are managers and they do not feel comfortable to discuss about the management of NHS, or because they do not have any information regarding to the management in the Public sector, or because they do not think to look at management practices but only at frontline health worker performance.

Many MDs were reluctant to participate in the study for a variety of reasons as described above. It is possible that those who had particularly negative management experiences were particularly reluctant to participate for fear of reprisal if their negative views became known, especially since the researcher was known to be with the human resources department of the Ministry of Health. This factor might therefore need additional study.

5.6. Retention of MDs

In this study it was clear that the majority of MDs in the NHS have thought of leaving, mainly due to low salaries and lack of incentives, as it affects their quality of life. On the other hand, MDs working in NGOs consider returning to the NHS after they improve their quality of life (e.g. purchase a good home and send their children to top schools). Recruitment and retention strategies should be designed with this dichotomy in mind.

It is interesting to note that all MDs and HRMs agree that financial issues, working conditions and management issues are very important factors to consider in designing strategies of retention. However, this strategy should be followed by Programmes and policies that should include Government, Civil Society and other intervenients in this process, in order to convert 'Brain Drain' into 'Brain Gain' (Ahmad, 2005). It was interesting to note that factors that influence a decision to leave are compatible with the main factors that might be contributing to the retention of MDs in NHS. There is common consensus that the problem of retention cannot be solved by salary and incentives alone. Zurn et al (2011) defend that appropriate strategies and policies should be designed based on evidence about the financial cost and their sustainability.

Conclusion

The results of this study show that there are no documents which have data or information regarding Human Resources distribution in the National Health System. These results are in line with the Kober and Van Damme (2006) study which states that one of the limitations of their study was the lack of a Human Resources Health Information System with data on health professionals who do not work in the Public sector.

The study showed that financial issues, working conditions and management issues are the most common factors that contribute to MDs leaving the NHS. These results are similar to several studies (e,g. Afzal et al., 2012, Bach, 2006 and Awases, et al 2004). In another study conducted in Mozambique (Mussa, et al., 2013), further evidence suggests that the significant difference in salaries between sectors encourages the flight of MDs from the public sector to international

NGOs. The Ministry of Health should coordinate with all Donors, NGO's, Bilateral Agencies and Multilateral institutions regarding the recruitment of MDs and health professionals to minimize the impact of internal brain drain in the NHS as is suggested by (Sherr, et al., 2012). These publications supported anecdotal evidence that was available at the time the researcher conducted the study. Finally the participants of this study report that reasons which contribute to MDs staying in the NHS are social commitment, career development and retirement pension, while the strategies they recommend to increase retention of MDs in the NHS are aimed at counteracting the "push" factors rather than reinforcing these "stick" factors. These results support the views of Lehmann et al (2008) who report that attraction and retention of health professionals is a complex issue that should combine different factors. There is no one formula for solving this issue and any strategy to address it should be multi-faceted taking into account such factors as work environment, working conditions and career development in addition to financial factors.

CHAPTER VI

5.1. Conclusion and Recommendation

5.1.1. Conclusion

According to the perceptions of MDs and HRMs, the main factor that contributes to internal brain drain of medical doctors in the National Health Service in Maputo City is the financial issue. On the other hand, the main factor that influences decision to stay in the NHS is social commitment. However, it was an interesting finding that none of the HRMs in the NHS and NGOs identified social commitment as the one of the factors that lead MDs to stay in the NHS. The majority of them gave more importance to financial issues despite these NGOs having social commitment as the reason for their existence.

The study found that factors that influence the decision to leave are compatible with the main factors that might contribute to the retention of MDs in NHS. However**,** despite most of the MDs and HRMs of both institutions indicating that financial issues are the main reason to leave, they agree that salary/incentive increases will not solve the problem of internal brain drain in the NHS.

MDs who work in NGOs are satisfied with their salary, but they do not feel professionally realized because they usually do not do clinical work. Despite this situation they prefer to stay in NGOs to organize their life which implies buying a good house, car and providing good schooling for their children then they might return to the NHS.

The Human Resources Information System has a number of gaps. The Ministry of Health only has information about the number of national and foreign MDs distribution in the NHS. The study revealed that NHS is aware that there is a shortage of MDs in the Public Health Sector and they are not equitably distributed around the country. The Public Health Sector produces the majority of MDs and a significant number of these same doctors request registered and unlimited work leave. The NHS is also aware that the numbers of NGOs and private clinics in Maputo city

are increasing, consequently the demand of MDs as well. In contrast, there is less investment from the private sector for the training of MDs.

Information about where MDs are, those who do not present themselves in the NHS, and who have requested unlimited and registered work leave and those who are in NGOs and private sector is not available. So, the impact of private sector in the National Health System is unknown.

The lack of regulation of dual practice for those MDs who work in the NHS while concurrently working in different private clinics and/or some institutions of training undermines the delivery of health care because these MDs are absent from their workplace. Instead of focusing on service delivery in the NHS they focus on finding alternatives to increase their salary. These MDs in the end of the month receive salaries from different employers and the combined salary can be superior to the salary that might be received in NGOs. This means that, staying in NHS where there are not any controls might be more interesting than leaving the NHS.

The findings of the current study support the view that management style in the NHS interferes in the decision to leave or stay in the NHS, because it is characterized by lack of good work environment; difficult relationship between the top and subordinators, fear, lack of effective communication, lack of support, recognition, turnover of MDs. The results show that unpleasant management has implications in terms of promotion, career progression and rotation of personnel in the NHS. Although the number of interviews was small, it was troubling to find that few of the HRMs interviewed appeared to be concerned about the management side of health worker performance, and that few of the HRMs considered that MDs might be motivated by altruism or concern for the public good.

5.1.2. Researcher Recommendation

To minimize the problem of internal brain drain and increase retention of MDs in the NHS, strategies and policies should be designed to bring solutions to respond to this concern. There have been several attempts at addressing retention (e.g. topping up of salaries for MDs) but these

have been fragmented and not very successful. While this study did not specifically evaluate existing strategies, its findings can inform the development of better ones. Retention strategies should be holistic, addressing financial and non-financial concerns. Furthermore, a multisectorial approach is needed, which implies an investment in medical education to scale up production of health workers, as well as decentralization of Human Resource Management and sustainability of new incentives.

To reinforce the social commitment of MDs in the National Health System and in the Society the Government, leaders and managers should recognize the role of MDs in society and design strategies to promote MDs work, encourage these professionals by different ways such as promoting of their work, providing different types of incentives and better working and management conditions to retain MDs in the NHS.

There is an urgent need to improve the completeness, accuracy and availability of data and information regarding the distribution of MDs in and outside NHS, how many and what kinds of MDs work in NGOs, how and when they were recruited. With that we can understand the magnitude of internal brain drain, so as to take decisions based on factual evidence. The MoH should conduct a study to know about MDs experience, career path in the NHS, NGO and private sector.

The MoH should explore ways to make it easier to return to the NHS after taking leave, as currently it is easy to leave but difficult and time consuming to return.

The MoH should regulate dual practice, whether in the private sector or in NGOs. But first there is a need to conduct a study to understand the impact of dual practice for the National Health System and for the MDs. On the other hand, due to the shortage of MDs in the NHS, the MoH could explore ways to give some clinical opportunities for those MDs who work in NGOs and do not have opportunity to do clinic activities. This would be one example of regulated dual practice. These measures should contribute to retain and attract MDs, who work in and out of the NHS.

Management style should be rethought in the NHS. It should promote support to staff, good attitudes, and effective communication, which might lead to trust and good relationships between the top and subordinates. HR managers should also receive training on effective management and leadership styles so that they can include these issues in their work.

Finally, the NHS should coordinate with NGOs, bilateral, multilateral, international agencies and private sector, to find the best way to regulate the rules for hiring MDs who work in NHS. This coordination of partnership should be at all levels and all activities to ensure that roles and responsibilities of all parties are defined and to avoid duplication and wasted effort.

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APPENDIXES

Appendix 1: Participants interview

1. Key Informants Semi-Structured interview with HRM working in and out of NHS

Place	Number of Human Resource Management
Human Resources Management in National Health Service	3
Human Resource Management out of National Health Service	3
Total	6

2. Individual interview for MDs who stay in NHS

Place	Number of medical doctors who will participate in interview
MDs of NHS	10
Total	10

3. Individual interview for MDs who leave NHS

Place	Number of medical doctors who will participate in interview
NGOs	5
Private Sector	5
Total	10

Appendix 2: Guide to conducting Semi-Structured Interviews for HRM who work and do not work in NHS - Key Informant

One hour of discussion

Welcome/ introduction and purpose of the discussion

1. What is your position in this organization/Institution?

2. In your opinion why do some medical doctors leave National Health Service?

3. In your opinion why do some medical doctors stay in the National Health Service?

4. Some people say that**,** salary and remuneration, social aspects, general working conditions recognition /appreciation, educational factors can be important factor. **What do you think? Can you put in order of priority? Can you tell me more (examples)?**

5. In your point of view, what can be done to increase the retention rate in National Health Service?

6. Is there anything else you would like to add about what we have been discussing?

Thank you very much for your participation

Appendix 3: Guide to conducting Individual Interview for MDs who stay in the NHS

One hour of discussion

Welcome/ introduction and purpose of the discussion

1. Gender

Female _____ Male _____

2. Age

25-30_____30-35____35-40_____ >40_____

3. Specialty

General practitioners _____ Public Heath Doctors _____

Gynecologist _____ Other categories _____

4. Highest Educational Degree

Diploma _____ Master_____ PhD_____Others ____

5. Work place

NHS _____ NGOs _____ Private Sector_____

6. How long do you work for the NHS ?

1-2 _____ 2- 4 _____ 4-6 _____ 6-8 _____ 8-10 _____

7. Why you have stayed in the NHS?

8. Some people say that**,** salary and remuneration, social aspects, general working conditions Recognition /appreciation, educational factors can be important factor. **What do you think? Can you put in order of priority? Can you tell me more (examples)?**

9. Do you think it is likely that you leave the NHS? Can you tell me more?

10. In your opinion why some medical doctors leave National Health Service?

11. In your opinion, what can be done to increase the retention rate National Health Service?

12. Is there anything else you would like to add about what we have been discussing?

Thank you very much for your participation

Appendix 4: Guide to conducting Individual interview for MDs who leave the NHS

One hour of discussion

Welcome/ introduction and purpose of the discussion

1. Gender

Female _____ Male _____

2. Age

< 25 ____25-30 _____ 30-35_____35-40_____>40 _____

3.Specialty

General practitioners _____Public Heath Doctors _____ Gynecologist _____

Other categories _____

4.Highest Educational Degree

Diploma _____ Master_ _____PhD_____ Others _____

5. Work place

NHS _____NGOs _____ Private Sector_____

6. How long do you worked for NHS ?

1-2 _____ 2- 4 _____ 4-6 _____ 6-8 _____ 8-10 _____

7. How long have you been out of the National Health Service ?

8.Why did you decide to leave NHS?

9. Some people say that**,** salary and remuneration, social aspects, general working conditions Recognition /appreciation, educational factors can be important factor. **What do you think? Can you put in order of priority? Can you tell me more (examples)?**

10. Are you considering to return to the National Health Service? can you tell me more? **.**

11 In your opinion why some medical doctors stay in the National Health Service?

12. In your opinion, what can be done to increase the retention rate National Health Service?

13. Is there anything else you would like to add about what we have been discussing?

Thank you very much for your participation

Apendix 5: Guide to conducting Semi-Structured Interviews for HRM who work and do not work in NHS - Key Informant (Portuguese version)

Uma hora de discussão

Boas Vindas / Apresentação e propósito da discussão

1. Qual é a sua posição nesta organização/instituição?

2. Na sua opinião porquê alguns médicos decidem sair do SNS**?**

3.Na sua opinião porquê alguns médicos permanecem no Serviço Nacional de Saúde?

4. Algumas pessoas dizem que, salário/remuneração, aspectos sociais, condições gerais de trabalho, reconhecimento/apreciação, factores educacionais são factores importantes. O que acha? Pode colocar em ordem de prioridade? Pode dar exemplos concretos

5.No seu ponto de vista, o que se pode fazer para aumentar a retenção dos médicos no SNS.

6. Existe algo que queira acrescentar a volta do que foi discutido?

Muito obrigada pela sua participação

Apendix 6: Guide to conducting Individual Interview for MDs who stay in the NHS (Portuguese version)

Uma hora de discussão

Boas Vindas / Apresentação e propósito da discussão

1. Genero Feminino _____ Masculino _____

2. Idade? < 25 _____ 25-30 ____ 30-35_____ 35-40 _____ >40 _____

3. Especialidade

Médico generalista _Médico de Saúde Publica __Ginecologista __Outras categorias ____

4.Nível Educacional

Licenciatura _____ Mestrado _____ Doutoramento_____ Outro _____

5. Local de trabalho

SNS _____ ONGs _____ Sector Privado _____

6. A quanto tempo trabalha para SNS?

1-2 _____ 2- 4 _____ 4-6 _____ 6-8 _____ 8-10 _____

7.Porquê você continua no SNS?

8. Algumas pessoas dizem que, questões salariais/remuneração, aspectos sociais, condições de trabalho, reconhecimento/apreciação, factores educacionais podem ser factores importantes de permanência de médicos no SNS. O que acha? Pode colocar em ordem de prioridade.

9.Você já pensou na possibilidade de sair do SNS? Comente sobre o assunto.

10. Na sua opinião porque alguns médicos decidem sair do SNS?

11.No seu ponto de vista, o que se pode fazer para aumentar a retenção dos médicos no SNS?

12. Existe algo que queira acrescentar a volta do que foi discutido?

Muito obrigada pela sua participação

Apendix7: Guide to conducting Individual interview for MDs who leave the NHS (Portuguese Version)

Uma hora de discussão

Boas Vindas / Apresentação e propósito da discussão

1. Genero Feminino _____ Masculino _____

2. Idade < 25 _____ 25-30 ____ 30-35_____ 35-40 _____ >40 _____

3. Especialidade

Médico generalista _____ Médico de Saúde Publica _____ Ginecologista _____

Outras categorias _____

4.Nível Educacional

Licenciatura _____ Mestrado _____ Doutoramento_____ Outro _____

5. Local de trabalho

SNS _____ ONGs _____ Sector Privado _____

6. Durante quanto tempo trabalhou para o SNS?

2- 4 _____ 4-6 _____ 6-8 _____ 8-10 _____

7.A quanto tempo esta fora do SNS

1-2 ____ 2- 4 _____ 4-6 _____ 6-8 _____ 8-10 _____

8.Porquê decidiu sair do SNS?

9. Algumas pessoas dizem que, questões salariais/remuneração, aspectos sociais, condições de trabalho, reconhecimento/apreciação, factores educacionais podem ser factores importantes de permanência de médicos no SNS. O que acha? Pode colocar em ordem de prioridade.

10. Você já pensou na possibilidade de voltar para do SNS? Comente sobre o assunto.

11. Na sua opinião porquê alguns médicos decidem ficar no SNS?

12.No seu ponto de vista, o que se pode fazer para aumentar a retenção dos médicos no SNS?

13. Existe algo que queira acrescentar a volta do que foi discutido?

Muito obrigada pela sua participação

APPENDIX 8: Participant Information Sheet

Dear participant

Thank you for joining this research. What follows is an explanation of the research project and an outline for your potential involvement. The research is being conducted for a mini-Thesis as a partial requirement for a Master's degree in Public Health which focus on Health Workforce Development, which I am completing at University of the Western Cape. If there is anything you do not understand or unclear about, please do not hesitate to ask me. My contact details and those of my supervisors are available at the end of this memo.

Title of Research

Internal Brain Drain in Mozambique's National Health Service: medical doctors' and managers' perception of factors that influence intentions to stay or leave the public health sector in Maputo city, Mozambique (2000-2010).

Purpose of this study

The purpose of this study is to explore the perception of MDs and Human Resource Managers (HRM) about factors that influence internal brain drain from the NHS in Maputo city, Mozambique. The findings of this study will inform human resources policies and strategies to minimize internal brain drain in the NHS, including incentive packages which may contribute to attraction and retention of medical doctors in the NHS in Mozambique.

Description of the study and your involvement

I am the researcher who will interview participants in the workplace or other locations convenient for study participants. First, I will review existing NHS, MoH and other relevant documents to document where MDs who graduated 2000-2010 in NHS have been working. Then I will conduct individual semi-structured interviews with several Human Resource Managers. Next, Focus Group discussions will be held with MDs who work in the NHS, and outside the NHS in NGOs and Private Sector. Finally, individual interviews will be conducted with 20 MDs.

Confidentiality

Your identity will be kept confidential at all times. All the information provided by you will always be handled with confidentiality and anonymity. I shall keep all records of your participation, including a signed consent form which I will need from you should you agree to participate in this research study, locked away and destroyed after the research is completed.

Benefits and costs

You may not get any direct benefit from this study. However, the information obtained from participants in this study may help in guiding health workers and human resources department staff to improve their effective functioning and working conditions in the future. There are no costs for participating in this study other than the time you will spend in the group discussion and/or interview.

Voluntary participation and Withdrawal

Your participation in this research is entirely voluntary, it is not mandatory to participate. However if you choose to participate, you may stop at any time. You may also choose not to answer particular questions that are asked in the study. If there is anything that you would prefer not to discuss, please feel free to say so.

Informed Consent

Your signed consent to participate in this research study is required before I proceed to interview you. I have included the consent form in this information sheet so that you can be able to review it and then decide whether you would like to participate in this study or not.

Questions

Should you have further questions or wish to know more, I can be contacted on:

Adelaide Humberto Mbebe

Student Number: 2974547

Cell phone - +258 82 4402610

E-mail. mbebeadelaide@gmail.com

I am under the supervision of Professor Christine Czarowsky (PhD) and Dr. Antonio Mussa. They can be contacted on:

Prof Christina Zarowsky (PhD)
University of Western Cape
Cell Phone +27 0793361066,
Office +27 21 9592809
E-mail. czarowsky@gmail.com
WEBSITE: www.uwc.ac.za

Dr. Antonio Mussa (Md, MPH)
Director, Human Resource Department
ICAP
Maputo
Cell phone - +258 823002505
E-mail: antoniomussa@columbia.org.mz

Appendix 9: Participant Information Sheet (Portuguese Version)

Ficha de Informação do participante

Caro participante,

Muito obrigada, pelo seu consentimento em aceitar fazer parte desta pesquisa. O que se segue e uma explicação do projecto de pesquisa e um esboço do seu potencial envolvimento. A pesquisa esta sendo conduzida para o trabalho de Mini-Tese, parte do requisito para obtenção do Grau de Mestrado em Saúde Publica focado para o Desenvolvimento de recursos Humanos de Saúde no qual sou candidato na Universidade de Western Cape, na cidade de Cabo, África do Sul. Caso exista algo que não percebe ou não esteja claro não hesite em me perguntar. O meu contacto e dos meus supervisores encontram-se no fim deste memo.

Título da pesquisa

Imigração de médicos no Serviço Nacional de Saúde em Moçambique: Percepção dos médicos e dos gestores de recursos humanos sobre os factores que influenciam a sua permanência e saída do sector publico na cidade de Maputo, Moçambique (2000-2010).

Objectivo da Pesquisa

A pesquisa tem como objectivo explorar as percepções dos médicos e gestores de Recursos humanos sobre os factores que influenciam a sua permanência e saída no Serviço Nacional de Saúde na cidade de Maputo. As conclusões deste estudo irão ajudar no desenho de estratégias e politicas para minimizar imigração dos médicos do Serviço Nacional de Saúde, incluindo criação de pacotes de incentivos que possam contribuir para reter os médicos no Serviço Nacional de Saúde**.**

Descrição do estudo e do seu envolvimento

Eu sou a pesquisadora que entrevistara os participantes no local de trabalho ou outros locais que se julgarem convenientes para os participantes. Primeiro, serão colectados documentos relevantes no Sistema Nacional de Saúde e outros sectores para se documentar a distribuição dos médicos que graduaram no período 2000-2010 no Serviço Nacional de Saúde. Segundo, será levada a cabo uma entrevista semi-estruturada com os gestores de Recursos Humanos. Terceiro, será feita discussão em grupo com médicos que trabalham no SNS e fora do SNS. Finalmente entrevistas individuais serão conduzidas com 20 médicos.

Confidencialidade

A sua identidade será mantida em sigilo, toda a informação que for a fornecer será tratada de forma anónima, confidencial em todos os momentos.Serão mantidos os registos de sua participação (incluindo formulário de consentimento assinado por si, se concordar fazer parte da pesquisa será guardada em segurança e serão destruídos depois de terminada a investigação.

Custos e benefícios

O participante não terá nenhum tipo de benefício directo neste estudo. Contudo, as informações obtidas poderão ajudar o Ministério da Saúde - Direcção de Recursos Humanos a melhorar a sua funcionalidade em termos de condições de trabalho no futuro. Não será dada nenhum tipo de recompensa aos participantes deste estudo, somente será gasto o seu tempo.

Participação e Retirada Voluntaria

A sua participação na pesquisa e totalmente voluntaria e não obrigatória, portanto poderá desistir no momento que desejar, sem que isso lhe traga qualquer prejuízo. Caso não queira responder a uma das questões informe ao pesquisador e ele passara a pergunta seguinte.

Informação de Consentimento

Antes que se inicie a entrevista, será solicitada a sua assinatura de consentimento para participar na entrevista. A ficha de informação estará junto com a folha de consentimento, de modo a garantir que antes de assinar a folha de consentimento, possa ter a possibilidade de decidir se pretende fazer parte do estudo ou não.

Questões

Todas as questões adicionais que possam surgir em torno da pesquisa, poderão ser esclarecidas basta que para tal entre em contacto pelo seguinte endereço:

Adelaide Mbebe

Número do estudante: 2974547

Telefone Celular - +258 82 4402610

E-mail. mbebeadelaide@gmail.com

Estou sobre orientação da minha supervisora Prof Christina Zaroswsky UWC e co-Supervisor Dr. Antonio Mussa. Os seus enderecos de contacto são:

Prof Christina Zarowsky (PhD)

University of Western Cape

Telefone Celular- +27 79 336 1066

+27 21 9592809

Email. czarowsky@gmail.com

WEBSITE:www.uwc.ac.za

Dr. Antonio Mussa (Md, MPH)

Director de Recursos Humanos

ICAP

Maputo

Telefone Celular- +258 823002505

E- mail: antoniomussa@columbia.org.mz

Appendix 10: informed consent to conduct an individual interview

Date……..

Interviewer's name: Adelaide Humberto Mbebe

UWC student no: 2974547

Cell phone : +258 824402610

E-mail:mbebeadelaide@gmail.com

Institution: Ministério da Saúde – Direcção de Recursos Humanos

Avenida Eduardo Mondlane / Salvador Allende, 1008

Caixa Postal, 264 – MAPUTO - Republica de Moçambique

Interviewee's pseudonyms:.....

Place at which the interviews will be conducted: Maputo city, National Health Service (Ministry of Health, Hospitals, Health Center, NGOs and Private sector).

Thank you for agreeing to allow me to interview you. What follows is an explanation of the purpose and process of this interview. You are asked to give your consent to me on tape, for me to conduct an interview with you and to use this data for my research project for fulfillment of the requirements of the MPH Programme with the School of Public Health, UWC, South Africa.

1. Information about the interviewer

I am Adelaide Humberto Mbebe, a student at the SOPH, University of The Western Cape, South Africa. As part of my Masters in Public Health, I am doing an operational research project focused on Human Resource Managers (HRM) about factors that influence internal brain drain from the NHS in Maputo city, Mozambique. I am accountable to Prof Christina Zarowsky (PhD) who is my supervisor and my co- supervisors Dr. Antonio Mussa (Md, MPH).

2. Purpose and Content of the interview

The purpose of this study is to explore the perception of MDs and Human Resource Managers (HRM) about factors that influence internal brain drain from the NHS in Maputo city,

Mozambique. The findings of this study will inform human resources policies and strategies to minimize internal brain drain in the NHS, including incentive packages which may contribute to attraction and retention of medical doctors in the NHS in Mozambique.

2. The interview process

The interview will take approximately one hour and the information will be collected by the researcher in the workplace or other locations convenient for study participants. Questions about medical doctors' and managers' perception of factors that influence intentions to stay or leave the public health sector in Maputo city, Mozambique will guide the interviews.

3. Anonymity of Contributors

Your identity and contributions shall be kept in confidence and shall not be revealed outside this study at all time. Records of your participation and signed consent from which you will complete before the research beginning will be confidential and destroyed after the completion of the research.

4. Things that may affect your willingness to participate

Your participation in this research is voluntary and you may accept to participate or not and you may withdraw at any stage you choose to do so. You are not obliged to answer any questions you do not feel comfortable with and you do not have to discuss issues that you feel you should not discuss in the study.

6. Interviewee's Agreement

I----------(full name) after having read and understood the information and received clarifications about this study from the researcher, I voluntarily agree to participate in this interview.

Date:----------

Place:----------

Signature:……..

7. Interviewer agreement

I shall keep the contents of the above research interview confidentially in the sense that the pseudonym noted above will be used in all documents which refer to the interview. The contents will be used for the purposes referred above, but may be used for published or unpublished research at a later stage without further consent. Any change from this agreement will be re-negotiated with you.

Signed:…….

Date:…….

Place:……

Appendix 11 : informed consent to conduct an individual interview (Portuguese Version)

Ficha de consentimento para entrevista

Data……..

Nome do entrevistado: Adelaide Humberto Mbebe

Número do estudante na UWC: 2974547

Telefone cellular : +258 824402610

E-mail:mbebeadelaide@gmail.com

Instituição: Ministério da Saúde – Direcção de Recursos Humanos

Avenida Eduardo Mondlane / Salvador Allende, 1008

Caixa Postal, 264 – MAPUTO - Republica de Moçambique

Pseudónimo do entrevistado.....

Lugar onde a entrevista terá lugar : Maputo city, National Health Service (Ministry of Health, Hospitals, Health Center, NGOs and Private sector).

Muito obrigado por permitir que lhe entreviste. O que se segue é uma explicação do propósito e o processo de como ira decorrer esta entrevista. Seu consentimento para gravar a entrevista e usar os dados da entrevista para o meu projecto de pesquisa com vista a obtenção do grau de Mestrado em Saúde Publica, na UWC, África do Sul será solicitada.

1. Informação sobre a entrevista

Eu Adelaide Humberto Mbebe, estudante na Universidade the Western Cape, África do Sul, candidata a Mestrado em Saúde Publica, estando na fase de pesquisa focada para a Gestão de Recursos Humanos, cujo objectivo é estudar os factores que influenciam a fuga de médicos do Serviço Nacional de Saúde na cidade de Maputo, Moçambique. Estou sobre orientação da minha supervisora Prof Christina Zarowsky (PhD) e co-supervisor Dr. António Mussa (Md, MPH).

2. Objectivo da Pesquisa

A pesquisa tem como objectivo explorar as percepções dos médicos e gestores de Recursos humanos sobre os factores que influenciam a sua permanência e saída no Serviço Nacional de Saúde na cidade de Maputo. As conclusões deste estudo irão ajudar no desenho de estratégias e politicas para minimizar imigração dos médicos do Serviço Nacional de Saúde, incluindo criação de pacotes de incentivos que possam contribuir para reter os médicos no Serviço Nacional de Saúde**.**

3.Processo da entrevista

A entrevista será feita em aproximadamente 1 hora de tempo e as informações serão colectadas pelo pesquisador no local de trabalho ou outros lugares que se julgarem convenientes para os participantes. Questões sobre os factores que levam os médicos e percepções dos gestores de recursos humanos sobre as razões que levam os médicos a permanecerem e a saírem do Serviço Nacional de Saúde na cidade de Maputo irão guiar esta entrevista.

3. Anonimato e Contribuições

Sua identidade e contribuições serão mantidas em sigilo e não serão revelados fora deste estudo em todos os seus momentos. Registos da sua participação e sua assinatura de consentimento serão solicitados antes de se dar inicio a entrevista e será confidencial e destruído logo que a pesquisa termine.

4. Situações que eventualmente possam contribuir para sua não participação

Sua participação nesta pesquisa é voluntária e poderá concordar em participar ou não nesta pesquisa sem que isso lhe traga qualquer prejuízo. Você não é obrigado a responder questões nas quais não se sente a vontade e não tem que discutir questões que acha que não devem ser discutidas neste estudo.

5. Termo de Compromisso do entrevistado

Eu_____ (nome completo) após ter lido e entendido as informações e esclarecido todas as minhas dúvidas referentes a este estudo com a académica _____, concordo voluntariamente em participar neste estudo.

Assinatura: …….

Data:----------

Lugar :----------

6. Termo de Compromisso do Entrevistador

Todo o conteúdo da presente pesquisa será mantida em sigilo e os pseudónimos serão usados em todas partes do documento onde serão referidos os entrevistados. O conteúdo será usado somente para o propósito da pesquisa mencionada anteriormente. Contudo, poderá também ser usada posteriormente para pesquisas publicadas ou não publicadas num estágio mais avançado. Qualquer alteração deste compromisso poderá ser negociada.

Assinatura:……

Data……

Lugar: Place:…….

UNIVERSIDADE EDUARDO MONDLANE

Faculdade de Medicina

15-02-12

Exmo. Senhor
Dr. Francisco Cândido
Director do Hospital Central de Maputo
MAPUTO·

Nota n: 16/MSP/12 **Proc. N: 3.1.19** **Data 06/02/12**

Assunto: **Pedido de autorização para a realização de Trabalho de Fim de curso da Sra. Adelaide Humberto Mbebe no Hospital Central de Maputo.**

A Faculdade de Medicina da Universidade Eduardo Mondlane em colaboração com Escola de Saúde Pública da "*Wertern Cape University*", África do Sul concedeu, com financiamento da OMS/Bill & Mellinda Gates, uma bolsa de estudo a **Sra. Adelaide Humberto Mbebe**, funcionária afecta no MISAU-DRH a fim de frequentar o curso de Mestrado em Saúde Pública com o enfoque para o Desenvolvimento de Recursos Humanos no Sector da Saúde.

Como requisito parcial para obtenção do Grau de Mestre, a estudante deve fazer um trabalho do fim do curso, reflectindo sobre os problemas reais dos recursos humanos no sector da saúde.

Neste contexto, solicitamos autorização para que o estudante realize o seu trabalho do fim do curso no Hospital Central de Maputo, cujo tema é ***"Percepções dos médicos e gestores de recursos humanas sobre os factores que influenciam a permanência e a saída do Sector Publico, na cidade de Maputo, Moçambique."***

Parecer

Sem mais de momento, subscrevemos com elevada estima e consideração.

O Director da Faculdade

Prof. Doutor Mamudo Rafik Ismail, MD, PhD
(Professor Associado)