BRAIN DRAIN IN THE HEALTH SECTOR IN SOUTHERN AFRICA: A COMPARATIVE STUDY OF PUSH AND PULL FACTORS IN MALAWI AND ZAMBIA

By
Daniel Msonda

Submitted to
Central European University
Department of Public Policy

In partial fulfilment of the requirements for the degree of Master of Arts in Public Policy

Supervisor: Professor Thilo Bodenstein

Budapest, Hungary
2010
ABSTRACT

This paper explains the differential patterns of nurse migration between Malawi and Zambia, two countries with similar pre-colonial, colonial and post-colonial histories, and with similar social-cultural contexts. It advances the argument that institutional reforms in the health and economic sectors had more perverse externalities in Zambia than in Malawi, which constituted push factors for nurse migration from the Zambian health sector. It finds that macro-level policy factors and micro-level players and actors, all of which depend on the institutional policy environment, play a significant role in influencing the decision to migrate. While theory predicts that poorer countries would register higher rates of migration, this study finds that conventional indicators of economic development play a less important role than institutional factors. The study draws evidence from secondary data sources and academic literature on migration to explain the puzzle. It benefits from wider discourses on migration including neoclassical theories and structural theories of migration. Frameworks on public service motivation also form part of the analytical tools. Based on the analysis of the findings, the paper draws conclusions and implications relevant for policy and intellectual discourses on migration and public service motivation.
# TABLE OF CONTENTS

ABSTRACT ........................................................................................................................................... I

TABLE OF CONTENTS .................................................................................................................. II

LIST OF TABLES ...................................................................................................................... III

INTRODUCTION .............................................................................................................................. I

CHAPTER 1: BACKGROUND AND RESEARCH DESIGN .......................................................... 4

1.1 MIGRATION AND THE HEALTH PERSONNEL CRISIS .................................................. 4
1.2 CASE SELECTION .................................................................................................................. 5
1.3 PROBLEM STATEMENT AND RESEARCH QUESTION .................................................. 8
1.4 RESEARCH METHODOLOGY ........................................................................................... 9
1.5 LIMITATIONS OF THE STUDY ....................................................................................... 10

CHAPTER 2: ANALYTICAL FRAMEWORK ............................................................................. 12

2.1 THEORISING THE DETERMINANTS OF MIGRATION ................................................ 12
2.1.1 FUNCTIONAL APPROACHES .................................................................................... 12
2.1.2 STRUCTURAL APPROACHES ................................................................................... 15
2.2 THEORISING PUBLIC SERVICE MOTIVATION .............................................................. 17
2.2.1 Of ‘Knights’ and ‘Knaves’: EXTRINSIC AND INTRINSIC MOTIVATION .............. 17
2.2.2 MODELLING NURSE TURNOVER ........................................................................... 19
2.2.3 CONCEPTUALISING “PULL” AND “PUSH” FACTORS ........................................... 20
2.3 A GENERAL CRITIQUE OF THE THEORIES AND MODELS .................................... 23

CHAPTER 3: EXPLAINING THE DIFFERENCES – MACRO-LEVEL CONTEXTUAL PUSH FACTORS ................................................................. 25

3.0 HEALTH SYSTEM STRUCTURES ....................................................................................... 25
3.1 THE ROLE OF SERVICE PROVISION ACTORS ............................................................. 26
3.2 DISTRIBUTION OF RESOURCES IN THE HEALTH SECTOR ...................................... 27
3.3 CHANGES IN DISEASE PATTERNS: THE IMPACT OF HIV/AIDS .............................. 29
3.4 PRIVATIZATION OF THE MINING SECTOR ................................................................... 32
3.5 IMPACT OF HEALTH REFORMS: USER FEES AND PATIENTS’ ATTITUDES .................. 34

CHAPTER SUMMARY .................................................................................................................. 36

CHAPTER 4: EXPLAINING THE DIFFERENCES – MICRO-LEVEL PUSH FACTORS ......................... 38

4.1 PATH DEPENDENCE: INFLUENCE OF ACHIEVEMENTS OF PAST MIGRANTS ......... 38
4.2 PATH DEPENDENCE: ROLE OF MIGRANT NETWORKS ............................................. 40
4.3 ROLE OF INTERMEDIARIES ......................................................................................... 42
4.4 HIGH RATES OF INFLATION: UNFULFILLED FAMILY DEMANDS .............................. 45

CHAPTER 5: CONCLUSION AND IMPLICATIONS .................................................................. 48

5.1 IMPLICATIONS FOR THEORY .......................................................................................... 49
5.2 IMPLICATIONS FOR POLICY .......................................................................................... 50
5.3 LIMITATIONS AND FURTHER RESEARCH .................................................................... 51

BIBLIOGRAPHY ............................................................................................................................. 53
LIST OF TABLES

Table 1: A comparison of staffing levels in the health sector .......................... 5
Table 2: Key socio-economic indicators for Malawi and Zambia .................... 7
Table 3: A comparison of nurse migrants from Malawi and Zambia to the United
         Kingdom .................................................................................... 8
Table 4: Comparison of salaries of nurses in Malawi and Zambia .................... 9
Table 5: Main Push and Pull Factors in health worker mobility ....................... 21
Table 6: Trends in health expenditure by level of care in Malawi and Zambia (%).... 28
Table 7: HIV Trends in Malawi and Zambia .............................................. 30
Table 8: Deaths of Health Sector Staff in Malawi and Zambia ......................... 32
INTRODUCTION

Migration of health workers has dominated international health policy debates in recent years (see e.g. WHO, 2006; OECD, 2002; USAID, 2003; UNFPA, 2006). Health care provision is labour intensive, and the availability of adequate healthcare staff is important for effective health service delivery. Unfortunately, the bulk of well-qualified health workers that migrate are nurses, with most of them moving from poorer countries to developed countries, leading to the collapse of health service systems in the poor countries (WHO, 2006).

The World Health Report of 2006 has shown that in general, countries that have fewer than 2.3 doctors, nurses and midwives per 1000 people may not achieve an 80% coverage rate of measles immunization, leading to high infant mortality, or to provide skilled birth attendants during childbirth, which leads to higher maternal mortality rates (WHO, 2006).

Malawi and Zambia are among the poor countries that have been experiencing an increased exodus of health workers. In 2000, an estimated 25% of Malawian nurses worked abroad (Clemens and Patterson, 2006). The Zambian Ministry of Health estimated the figure of Zambian nurses living abroad to be between 35% and 45% in 2002 (MoH Zambia, 2004). Unfortunately, these are two countries where HIV prevalence, childhood mortality and maternal death rates rank among the highest in the world (WHO, 2006) and these trends in nurse migration compromise the likelihood of the two countries attaining the Millennium Development Goals (MDGs).
While many studies have focused on country specific problems of nurse migration (See Manafa et al, 2009; Muula et al, 2006, Hamada 2007), this paper seeks to explore the “Push” factors that have propelled the attrition of nurses from Zambia and Malawi, with the aim of understanding why two countries with similar pre-colonial, colonial and post-colonial histories, and comparable institutional and economic reforms which took place almost simultaneously, would exhibit different patterns of migration of nurses, with Zambia presenting higher rates of nurse migrants to the United Kingdom than Malawi. The argument advanced in this paper is that policy reforms, as advocated by the World Bank and IMF, and the bigger role of government\(^1\) in health care provision may have had more negative externalities in Zambia than in Malawi, leading to higher nurse turnover and subsequent migration in Zambia.

The paper situates itself in the broader theoretical frameworks on migration and particularly applies, and critiques, functionalist neoclassical macro- and micro-economic approaches to migration as well as structural neo-Marxist approaches. Another important analytical tool for this paper is the theory of public service motivation. This study notes that the grand narratives such as the functionalist and the structuralist approaches do not adequately explain trends in migration induced by micro-level factors such as migrant networks and the role of power relations in families and societies.

The paper is organized as follows: Chapter 1 briefly gives a background context of the study and its research design. Chapter 2 presents the analytical framework, comprising

\(^1\) This should not be misinterpreted in the sense of bigger role of government as opposed to private sector, but government compared to Christian mission hospitals (Malawi has a higher proportion of Christian hospitals than Zambia, as will be discussed in subsequent sections).
the theoretical and conceptual underpinnings of the study. Chapter 3 isolates the macro-level push factors that may explain the differences, before Chapter 4 presents the relevant micro-level factors. Chapter 5 gives conclusions drawn from the study and the implications of the findings on theory and policy.
CHAPTER 1: BACKGROUND AND RESEARCH DESIGN

1.1 Migration and the health personnel crisis

The movement of people from one place to another continues to shape today’s global political and social-economic landscape, and its impact continues to be a major influence on society. According to the United Nations Population Division (2002), in 2000 almost 175 million people, representing about 2.9% of the world’s population, were living outside their country of birth for longer than one year.

International migration has been widely blamed for the current human resource crises in the health sectors of developing countries and it is undoubtedly the case that significant numbers of health personnel are moving to developed countries (USAID, 2003). Migration is also dispossessing poor countries who invest heavily on education of health professionals. Chen and Boufford (2005) estimate that about $500 million is spent annually on medical education of health workers in Africa who will eventually emigrate. In Malawi alone, US$31,726 is spent on educating a single nurse from primary school to university and for every nurse who emigrates, the lost returns to investment ranges from US$241,508 to US$25.6 million at 7% and 25% interest rate per annum for 30 years respectively (Muula et al, 2006).

Targeted recruitment drives for health workers from resource-poor countries to fill vacancies in richer countries, particularly in the United Kingdom and the United States, are an important factor in explaining these trends. In addition, migration of health
personnel is vulnerable global convergence in regulatory frameworks that determine the training, employment and deployment of health professionals (Buchan et al., 2003). This has two implications: First, governments may arrange multi-bilateral agreements to recognize one another’s qualifications, making it easier for qualified health workers to move and work in other countries. Second, the long periods of training required for specialized healthcare cadres imply that losing even small numbers of health professionals may not be compensated for in a short time. The temptation for richer developed nations then is to hire staff from poorer countries to compensate quickly for shortages in their own health systems (Martineau et al., 2002).

The shortage of healthcare professionals is critical in Africa and in Zambia and Malawi in particular. Table 1 below shows a regional comparison of staffing levels in the health sector of selected countries in Africa, and demonstrates the desperate situation of nurse shortage in Malawi and Zambia:

<table>
<thead>
<tr>
<th>Cadre</th>
<th>South Africa</th>
<th>Botswana</th>
<th>Ghana</th>
<th>Zambia</th>
<th>Malawi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctors</td>
<td>69.2</td>
<td>28.7</td>
<td>9.0</td>
<td>6.9</td>
<td>1.1</td>
</tr>
<tr>
<td>Nurses</td>
<td>388.0</td>
<td>241.0</td>
<td>64.0</td>
<td>113.0</td>
<td>25.5</td>
</tr>
</tbody>
</table>


1.2 Case selection

Malawi and Zambia have been selected for this study because they share very similar colonial, historical, social, cultural and economic characteristics and conditions. First,
both countries were established as British protectorates in 1891 and were part of the Federation of Rhodesia and Nyasaland until they both got independent in 1964 (CIA World Fact Book, 2010). Birmingham (1983) notes that Nyasaland (Malawi) was included in the federation in order to supply labour to the copper mines in Southern Rhodesia (Zimbabwe) and Northern Rhodesia (Zambia). Close to 500,000 Malawians trekked to Zambia and Zimbabwe during the colonial and post-colonial period to work in the mines and most of them permanently settled there (Birmingham 1983). The peoples of the two countries therefore largely share similar languages, tribes, values, beliefs and traditions, which makes the path-dependence of socio-cultural institutions in the two countries comparable, from a historical and a sociological institutionalist perspective.

The population of both countries is demographically similar, each having about 13 million inhabitants and a median age of 17 years. The majority of the population in both countries is Christian (75% in Zambia and 79% in Malawi) (CIA World Fact Book, 2010), which may enable us to rule out age and faith-induced migration as major factors for explaining migration differentials. The political dynamics of the two countries are also similar. Both countries were under one party dictatorship after independence, until 1992 when they both adopted multiparty systems of government. They are both presidential regimes with five-year terms and are politically stable (Freedom House,

---

3 For a detailed discussion of the almost similar political transitions in the two countries, see Simutanyi, N. (1996) 'The Politics of Structural Adjusment in Africa', *Third World Quarterly* 17(No. 4): 825-839.
Political stability may therefore not constitute a major factor for the differential patterns of migration.

On the economic front, although both countries are classified as ultra-poor by the World Bank (1997), Zambia presents better indicators than Malawi, a fact that may be attributed to the presence of copper mines in Zambia and the absence of mineral resources in Malawi. Table 2 below juxtaposes and summarises the main social-economic indicators of the Malawi and Zambia (World Bank 2009 statistics):

**Table 2: Key socio-economic indicators for Malawi and Zambia**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Malawi</th>
<th>Zambia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>13,146,182</td>
<td>12,620,219</td>
</tr>
<tr>
<td>GDP per capita</td>
<td>$248</td>
<td>$927</td>
</tr>
<tr>
<td>Inflation (GDP deflator)</td>
<td>7.4%</td>
<td>11.8%</td>
</tr>
<tr>
<td>Poverty Headcount Ratio at $1.25 (PPP) (2004)</td>
<td>73.9%</td>
<td>64.3%</td>
</tr>
<tr>
<td>Life expectancy at birth</td>
<td>52</td>
<td>45</td>
</tr>
<tr>
<td>Health expenditure per capita</td>
<td>$17</td>
<td>$57</td>
</tr>
<tr>
<td>Health Expenditure as % of GDP</td>
<td>9.9%</td>
<td>6.2%</td>
</tr>
<tr>
<td>Health expenditure public (as % of total health expenditure)</td>
<td>59.7%</td>
<td>57.7%</td>
</tr>
</tbody>
</table>

Despite the many institutional and socio-cultural similarities, from Table 2 we note substantial differentials in investment in health, with Zambia registering higher per capita expenditures. A further difference is that Zambia’s GDP per capita is four-times that of Malawi and population living below the poverty line is higher in Malawi.

---

1.3 Problem statement and research question

Despite the economic situation in Zambia looking seemingly better than in Malawi, and Zambia having a lower nurse to population ratio (see table 1 in section 1.1), Zambia registers between 35% and 45% of its nurses working outside the country (MoH Zambia, 2004), while Malawi reports 25% (Clemens and Patterson, 2006). In terms of absolute volumes of nurse migrants, Zambia registers relatively larger volumes of migrant nurses than Malawi. Table 3 below illustrates the trends in nurse migration from Malawi and Zambia to the United Kingdom:

Table 3: A comparison of nurse migrants from Malawi and Zambia to the United Kingdom

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Zambia</td>
<td>15</td>
<td>40</td>
<td>88</td>
<td>183</td>
<td>133</td>
<td>169</td>
<td>162</td>
</tr>
<tr>
<td>Malawi</td>
<td>1</td>
<td>15</td>
<td>45</td>
<td>75</td>
<td>57</td>
<td>64</td>
<td>52</td>
</tr>
</tbody>
</table>

(Source: Nurses and Midwives Council – UK, 2005)

Furthermore, the African Development Bank (ADB, 2005) has shown that salaries of nurses are higher in Zambia than in Malawi. Table 4 below shows the salary differentials:

Table 4: Comparison of salaries of nurses in Malawi and Zambia

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Malawi</td>
<td>31</td>
<td>45</td>
<td>3,403</td>
<td>110:1</td>
<td>76:1</td>
</tr>
<tr>
<td>Zambia</td>
<td>40</td>
<td>145</td>
<td>1,357</td>
<td>34:1</td>
<td>9:1</td>
</tr>
</tbody>
</table>

(Source: ADB, (2005))
The Neoclassical micro- and macro theories of migration, as well as the structuralist theories (see Chapter 2), would predict that Malawi would have larger volumes of nurse migrants, given its higher poverty levels and lower wage scales. But these two countries are showing us otherwise. This puzzle needs to be explained.

This research will investigate the potential explanatory causes of high attrition rates of health workers in Malawi and Zambia, with a focus on the reasons behind the relatively higher migration rates in Zambia. This is important for policy learning and transfer for countries that exhibit similar socio-economic contexts and histories. In the absence of such intellectual information, it is difficult to develop effective human resources strategies in SSA, and in Malawi and Zambia in particular.

To understand this puzzle, the paper will attempt to address the following main research question: How may we explain the relatively higher levels of nurse migration from Zambia than from Malawi? To answer this question, the paper will analyse the “pull” and “push” factors responsible for retention and attrition of health workers in both countries. A further sub-question that will be investigated is: What are the health system policies that may explain differentials in retention/attrition of nurses in Malawi and Zambia?

1.4 Research methodology

This research seeks to contribute to theory and knowledge in public policy by undertaking a comparative approach to studying policy environments in the health sector.
The paper has taken a positivist approach, which considers research as an unbiased investigation of reality and treats social research as a natural science. The research uses secondary sources of data, which are mainly sourced from key institutions such as the Ministries of Health in Malawi and Zambia, and organizations such as the WHO, the World Bank and USAID. Most of the articles, data and databases used were internet based. Key policy documents from the Malawi and Zambia governments, the World Health Organization and other key stakeholders in the health sector (DFID, Norway and the World Bank) also formed a valuable source of evidence for this research. Internet social networking sites such as Facebook and diaspora associations were also consulted.

1.5 Limitations of the study

There is common agreement that statistics on health workers’ migration are fragmentary and incomplete (OECD 2002). The most common difficulties in getting reliable data include the diverse sources used by countries to record migration (e.g. work permits, population registers) and the absence of data linked to occupation. This study therefore faces the challenge of having to rely on secondary data that was collected in such fragmentary circumstances.

In addition, this paper could have been more robust had it benefited from primary research methods, including exploratory qualitative methods, which would have established the descriptions and interpretations of phenomena as well as enabling the research to learn about peoples’ feelings, thoughts and experiences. This was not possible
due to time, space and cost constraints. However, every effort was made to ensure that this paper piggybacks on relevant previous scientific research to generate the relevant evidence to address the research question.

Besides international migration there is also considerable within-country migration between the public and private health sectors, urban and rural areas, and between tertiary and primary health care levels, which impact on in-country inequalities in the distribution of health workers. However, in the interest of space, this paper does not discuss this important aspect in detail.
CHAPTER 2: ANALYTICAL FRAMEWORK

This chapter positions the study within the relevant theoretical and conceptual underpinnings on migration and public service motivation of health workers. These theories and concepts will establish the boundaries within which the study has to be read. While the author is mindful of the existence of other theories and concepts that the study could benefit from but, only the theory of public service motivation, functional and structural theories of migration, are considered more relevant for the study. Furthermore analytical concepts such as “Pull” and “Push” factors will form the mainstay of the study.

2.1 Theorising the determinants of migration

According to Arango (2000), at present “there is no single, articulate theory of international migration, but a muddle of models, analytical frameworks, conceptual approaches, empirical generalizations, simple notions, and only seldom pieces of real theory segmented by disciplinary boundaries” (Page 283). Nevertheless, this paper will utilise two distinct approaches to the study of international labour migration: Functional approach and Structural approach.

2.1.1 Functional Approaches

Most functional models explain migration using the neoclassical macro-economical approach which defines migration as a process of transferring surplus labour from an agricultural economy to the urban industrial sector, providing for economic growth and a
psycho-social reorientation of the migrant in the process (Hicks, 1932 as cited in Arango, 2000). The neoclassical macro-framework exhibits methodological individualism by assuming that “individuals make rational decisions to maximize their utility on the basis of available knowledge of objective conditions […], or that they migrate in response to the wage differences that result from uneven distribution of returns to the factors of production” (Goss and Lindquist, 1995: 320).

This perspective conceptualizes countries with large endowment of labour relative to capital as having low equilibrium market wage, whereas countries with a limited endowment of labour relative to capital as having high equilibrium market wage. This differential persuades workers to move from low-wage poor countries high-wage richer countries, and from rural to urban regions within a particular country. This theory predicts that equilibrium will be reached at some point, as the constant movement of migrants results in higher labour supply and lower wages in capital-rich regions, while economic growth in the source regions, attained through remittances and the return of skilled migrants, will gradually eliminate the spatial inequalities and difference in wages.

However, Massey et al (1993) find the neoclassical macroeconomic model to be too restrictive and simplistic. They rightly argue that there are instances that rural-urban and international migration has increased in many contexts, despite the high levels of unemployment and underemployment in the urban-industrial economies. Also the predicted economic development is yet to be seen in the source regions (1993: 434), including in the Zambia and Malawi cases that are the focus of this essay.
To address the shortcomings of the neoclassical macroeconomic model, Harris and Todaro (1970) take a neoclassical microeconomic approach and hypothesize that individuals act rationally to perceived differentials in wages and the expected probability of securing employment in the receiving region, as opposed to actual opportunities. This behaviour is a sensible move in that this recognizes agency of the individual (Harris and Todaro, 1970). However, this study observes that this model reduces migrants – a social category that is structured by gender, religion, social class and other vertical and horizontal differences – to a mere category of labour power, and thus loses sight of the realities of social structural barriers to mobility.

Massey et al (1993) note that, through the simple explanation of labour migration, neoclassical economics has become the prominent discourse on migration and providing the intellectual foundation for immigration policy. This is rightly confirmed by Ellerman (2005) who observes that the neoclassical approaches have shaped migration policy of most Asian countries that encourage their citizens to seek income opportunities overseas with the belief that the host country is provided with a supply of cheap labour while the sending country gains foreign exchanges in the form of remittances.

Another fundamental functional approach is the 'new economics of labour migration' perspective (Stark 1991). This model takes a different view of the microeconomic determinants of migration, and argues that it is not just the individual who is decision-maker but the household or the family. Closely related to this aspect are remittances from the emigrants, which can be seen as the outcome of an implicit contract with their
families that stayed behind (Stark, 1991). This perspective is particularly relevant in developing countries where public social security is inadequate, and working private capital markets are rare.

### 2.1.2 Structural Approaches

The structural approach focuses on the macroeconomic and socio-political dynamics that produce social and spatial dislocations and obstruct the life chances of members of some social classes (Arango, 2000). This section discusses some of the models in this approach.

One of the major models in this approach is the Neo-Marxist Dependency perspective. This model suggests that labour migration is “stimulated by the uneven spatial development resulting from colonial and neo-colonial political and economic relationships between the developed capitalist economies and their underdeveloped peripheries” (Mahmud *et al*., 2009: 149). In this perspective, migration represents a spatial transfer of value greater than the return to the individual in remitted wages, because it selectively captures only the most productive and educated workers from the underdeveloped regions. This latter point is typified by the economic costs of training a single nurse in poor countries as presented in the introductory chapter of this paper with the example of Malawi.

Scholars in this approach are criticized for emphasising too much on historical processes and exploitation rather than on the existing social relations of production in the home
country. They are also seen to lose sight of the differences among the source countries as well as the contradiction between different social classes within them (Arango, 2000).

Another important structural perspective is the World System theory. Building on Wallerstein (1974), this model proclaims that “the penetration of capitalist economic relations into peripheral societies creates a mobile population that is prone to migrate abroad” (Massey et al., 1993: 444). According to this theory, labour migration is a natural outcome of the dislocations and disturbances caused by capitalist development. With the expansion of capitalism in the world, the influence of the market is also extended over land, raw materials and labour within the peripheral regions, creating a vast mobile population. The material and ideational links along with the investment capital induce these dispossessed poor people from the underdeveloped countries to the developed countries where they take up low-paying jobs (Sussen, 2001 as cited in Mahmud et al, 2009).

In summary, we may conclude that both the functional and structural approaches reduce migration to mere responses of individuals to the wage differentials and inequalities between the sending and receiving countries. Arango (2000) observes that the major difference between the two is that while functional approach conceives migration as a temporal process and a move towards equilibrium as source countries develop with the aide of remitted wages and new skills acquired by returnees, thus making migration a ‘win win game’, the structural approach considers migration as a more permanent phenomenon and a ‘zero sum game’ that fuels and reinforces underdevelopment in the source regions, thereby widening inequalities between the rich and the poor regions.
2.2 Theorising public service motivation

Most studies on attrition and migration of nurses have cited lack of incentive and motivation to work as one of the major reasons for the intention to migrate (see WHO, 2006; Hamada, 2007; USAID, 2003). This section presents some of the relevant theories of motivation and attempts to link them to the situations in Malawi and Zambia.

2.2.1 Of ‘Knights’ and ‘Knaves’: Extrinsic and Intrinsic motivation

The literature on public service motivation distinguishes between two categories of public servants’ motivation: extrinsic and intrinsic (see Frey and Osterloh, 2002; Le Grand, 2003). Extrinsic motivation is external and results from satisfying the lower-level human needs associated with basic survival. It includes financial rewards, working conditions and job security (Frey and Osterloh, 2002). Intrinsic motivation is internal to the individual, and results from satisfying the higher-level human needs. These may include job satisfaction, compliance with standards for their own sake (e.g. ethical standards) and the achievement of personal goals (ibid).

Although evidence in the health sector is limited, some socio-psychological experiments have shown that, in certain circumstances, there may be a trade-off between intrinsic and extrinsic motivation. Le Grand (2003) argues that emphasizing too much on extrinsic motivation can drive out intrinsic motivation. In other words, motivations activated by external factors such as monetary incentives can ‘crowd out’ motivations that are internal...
to the individual, such as more altruistic concerns. A crowding out effect might explain why the new public management style of health reform being introduced in Africa, including in the subject countries of this paper, may undermine caring and ethical behaviour and patient trust in the provider (Le Grand, 2003). An increase in salaries of nurses in Malawi by 52% in 2005, for example, did not stop the attrition of nurses through resignations and migration (Manafa et al, 2008). It should, however, be noted that extrinsic motivational factors may also reinforce intrinsic motivation if they are seen as supporting self-determination or self-esteem, in which case the extrinsic factors may be seen as ‘crowding in’ the intrinsic ones (Le Grand, 2003).

Le Grand further points out that assumptions concerning human motivation and behaviour are the key to the design of social policy (Le Grand 2003). He argues that extrinsic strategies that are based on the belief that individuals are more self-interested than public-spirited may make public-spirited altruistic doctors\(^6\) (knights) behave in a more self-interested way (knaves). In line with “crowding-out effect” suggestions, he also supports potentially similar effects in the health sector (e.g. the introduction of performance-related pay may make doctors/knights pay more attention to their own interests). He argues that there is a link between the commonly-accepted extrinsic incentives of pay and job security, and intrinsic rewards such as public recognition, peer acceptance, professional advancement, family well being and self-esteem (ibid).

\(^6\) In this paper we apply the same assumptions to nurses
2.2.2 Modelling nurse turnover

Several models have been developed to explain nurse turnover behaviour (see e.g. Price and Mueller, 1981; Mobley, 1982). While these models may exhibit different levels of complexity and in factors selected to predict behaviour, they are all characterized by attitudinal (job satisfaction), decisional (behavioural intentions) and behavioural (turnover) processes (Irvine and Evans, 1995). Irvine and Evans (ibid) conceptualised a model which summarizes different disciplinary variables including economics, sociological and psychological. Figure 1 below summarizes the conceptualization of nurse turnover:

Figure 1: A general model of nurse turnover

Economic Factors:
- Pay
- Job market
- Training

Structural factors:
- Work environment
- Work context

Job Satisfaction

Behavioural Intentions

Psychological:
- Individual
- Demographic

Nurse Turnover

7 Adapted from Irvine and Evans 1995
From the model above, *behavioural intentions* may be considered a direct antecedent of nurse turnover, while *job satisfaction* is expected to relate indirectly to *nurse turnover* through behavioural intentions. *Structural factors* including workload, management style, staff development opportunities and staff recognition, opportunities for promotion and work schedules may also influence nurse turnover. *Economic factors* in this conceptualization have both direct and indirect effects on turnover intent and a discussion relating to pay structures on turnover was covered in the preceding section. *Psychological factors* including age, inexperience and years of employment, higher educational attainment and family or kinship responsibilities are also identified as impacting on nurse turnover.

### 2.2.3 Conceptualising “Pull” and “Push” factors

A commonly used framework to analyze health workers’ mobility differentiates between push and pull factors (WHO 2006; Buchan et al, 2003). Push factors comprise those pay, working conditions and broader management and governance factors that encourage health workers to exit their own health systems and leave their country. Pull factors consist of those factors that encourage health professionals to move to other countries, including staff shortages and active recruitment from high-income countries (WHO, 2006). Other pull factors for some individual health professionals include the opportunity to travel and to participate in aid work (Buchan et al, 2003). Buchan et al (*ibid*) summarize push and pull factors as follows:
Table 5: Main Push and Pull Factors in health worker mobility

<table>
<thead>
<tr>
<th>Push Factors</th>
<th>Pull Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Low pay (absolute and/or relative</td>
<td>- Higher pay (and opportunities for remittances)</td>
</tr>
<tr>
<td>- Poor working conditions</td>
<td>- Better working conditions</td>
</tr>
<tr>
<td>- Lack of resources to work effectively</td>
<td>- Better resourced health systems</td>
</tr>
<tr>
<td>- Limited career opportunities</td>
<td>- Career opportunities</td>
</tr>
<tr>
<td>- Limited educational opportunities</td>
<td>- Provision of post-basic opportunities</td>
</tr>
<tr>
<td>- Impact of HIV/AIDS</td>
<td>- Political stability</td>
</tr>
<tr>
<td>- Unstable/dangerous work environment</td>
<td>- Travel opportunities</td>
</tr>
<tr>
<td>- Economic Instability</td>
<td>- Aid work</td>
</tr>
</tbody>
</table>

Paradath et al (2003) note that in order for the push and pull factors to actually effect mobility of health workers, they have to surmount some ‘stick’ factors. High levels of morale among health workers, for example, may go a long way towards improving the retention of health personnel (ibid). Rewards and incentives have also been shown to work effectively as stick factors (ibid). Other stick factors beyond the health system include social values, which place a high premium on family kinship, strong social and cultural ties and patriotism (Muula et al, 2006). Finally, barriers to migration such as the cost of re-qualification and relocation, may also act as important stick factors.

Once people have moved to work abroad, they may decide not to return because of a variety of ‘stay’ factors. These include the development of new social and cultural bonds; the risk of disruption to the education of their children; or avoidance of a disruption of their new lifestyle patterns (IOM, quoted in Paradath et al, 2003). The IOM (ibid) also
notes that some migrants do not return home due to information asymmetries regarding job opportunities back home.

Figure 2 below condenses the discussions of the foregoing sections in a schematic form. In addition to the push, pull, stick and stay factors, this schema takes into account the influence of natural (non-migratory) attrition of health workers, including factors such as HIV/AIDS, as well as inflows from the production of health workers by health science training institutions.

Figure 2: Factors affecting nurse distribution

---

8 Adapted from Paradath et al (2003)
2.3 A general critique of the theories and models

This paper takes cognizant some weaknesses worth taking caution of in the theories, models and conceptualisations presented in this chapter. While the frameworks are useful in explaining ‘actor-based’ intentions that lead to brain drain and migration of nurses in Malawi and Zambia, they are somewhat deficient in examining macro-level variables such as funding status of the health sector and policy and environmental factors, which might contribute indirectly to nurse migration or turnover. Political instability, poor social-economic conditions, and employment of health professionals in field other than those of their expertise are also not taken care of in this model. Kingma (2006) warns that cautions has to be exercised when examining the relationship between intention to leave and actual turnover, particularly in contexts where higher barriers to movement of nurses are expected, such as the expense of re-qualification and physical transfer; the need to learn a new language and different clinical practices.

Generally these frameworks, which are rooted in the neoclassical economic orthodoxy, consider nurses exclusively as economic migrants, rationally aiming at economic utility maximization. However, a focus on the individualistic calculations of migrants may represent a limited understanding of nurses’ altruistic motives and the structural factors that influence migration patterns. Furthermore, health system reforms, which are often part of structural adjustment programmes discussed earlier in this chapter, and the liberalization of trade in health services, are contributing to the restructuring of labour markets for health professionals. These patterns of restructuring influence mobility of nurses in ways that enable us to safely conclude that migrants’ choices are underpinned
by the ways in which nation states are integrated into the global economy (Van Eyck, 2004).

A further missing link in these frameworks are old colonial ties to specific countries as an important influence on migration and choice of destination. Ranghuram (2009) suggests that efforts to understand health workers' migration should include a postcolonial perspective, especially in regard to the United Kingdom's health system. McNeil-Walsh (2004) agrees with this view and explains the post-colonial influence on the decision by South African nurses to move to the United Kingdom. This paper is of the strong opinion that colonial ties may also undoubtedly play an important role in influencing the patterns in migration among Malawian and Zambian nurses.
CHAPTER 3: EXPLAINING THE DIFFERENCES – MACRO-LEVEL CONTEXTUAL PUSHER FACTORS

This chapter discusses the macro-level push factors that may help explain the differentials in the patterns of nurse migration in Malawi and Zambia. For purposes of this paper, the macro-level push factors will be those that directly relate to the policy environment in the two countries. Analytically, this chapter utilizes structuralist approaches to explain the reforms that generated the contextual push factors discussed here were driven by the IMF and World Bank sponsored structural adjustment programmes; as well as functionalist approaches and theories of public service motivation. The argument advanced in this chapter is that the Zambian policy and environmental context, which was significantly different from that of Malawi, greatly contributed to the higher rates of migration of nurses from Zambia.

3.0 Health system structures

The public health systems in both Zambia and Malawi are largely comparable and are organized as into five categories in both countries (MoH Zambia, 2004; MoH Malawi, 2004): What are called Third-level hospital in Zambia (5 in total), are classified as Central Hospitals in Malawi (4 in total). In both countries, these represent national-level

---

9 Due to space limitations, this paper has not been able to discuss the common push factors that exist in both Malawi and Zambia, but may not significantly assist in explaining the differences in migration patterns. These include: 1. Lack of career development opportunities, as government and sponsors prefer to award scholarships to personnel in training institutions as opposed to hospitals (Muula and Maseko, 2005). 2. Limited recognition of additional qualifications (Muula and Maseko 2005; Hamada 2007), as most of those who return from further training are never promoted (higher positions in both countries are political appointments, resting under the office of the president). 3. Lack of transparency in recruitment practices, as most of the positions are never advertised (DFID Malawi, 2007). 4. Discriminatory remuneration systems, where expatriates are paid more than local health workers, even when they have the same qualifications (Hamada 2007, Muula and Maseko 2005)
referral of care with highly-specialized medical care and teaching hospitals. Second-level hospitals in Zambia (18 in total) are provincial-level referral of care with specialized medical care. This category is not available in the Malawi typology. The First-level hospital in Zambia (74 in total) are district-level referral of care with in- and outpatient services within the main specialties (medicine, surgery, gynaecology/obstetrics, paediatrics). These are called District Hospitals in Malawi (24 in total) and they have the same role as in the Zambian case. Health centres (1210 in Zambia and 328 in Malawi) are another important category. They provide basic preventive and curative health care, normal deliveries and some inpatient capacity. Health posts in Zambia are an equivalent of Rural Hospitals in Malawi. These are the first level of contact with the formal health care system. They conduct outreach activities such as initiating and supervising community-based health activities through community health workers and traditional birth attendances.

3.1 The role of service provision actors

According to the Zambia National Health Strategic Plan (2001 – 2005), Health services in Zambia are provided by the Government, Christian missions and the private sector, including mining and other industrial companies (MoH, 2004). Despite a recent increase in the number of private clinics, the Government still plays a major role in Zambian health services. According to the Central Board of Health, 77% of health facilities in Zambia are owned by the Government, 16% by the private sector and 7% by Christian missions (CBoH, 2002).
The situation in Malawi is strikingly different, as Christian hospitals are responsible for more than five-times higher percentage of service provision than in Zambia. The Malawi National Health Plan (1999 – 2004) states that health care services in Malawi are mainly provided by three agencies: The Ministry of Health (MoH) is responsible for about 60%; the Christian Health Association of Malawi (CHAM) provides 37%; and Ministry of Local Government (MLG) runs a share of 1%. The other providers, namely private practitioners, commercial companies, Army and Police, provide 2% of health services.

The 500% difference in the role of the church in health service provision between Malawi and Zambia could be a significant factor in explaining differentials in nurse migration. As will be shown in subsequent sections, Christian mission hospitals are mostly based in the rural areas, where access to recruitment agencies, internet, job vacancies and influence of former migrants is very low. More so, Christian hospitals are semi-private; hence they pay their staff more than government hospitals. Considering that Malawi has a higher percentage of mission hospitals than Zambia, we expect more attrition and migration from Zambia than Malawi, in line with the functionalist theoretical perspectives and the theories of public service motivation discussed in the previous chapter.

3.2 Distribution of resources in the Health Sector

The general trend in financing of tertiary level facilities has been declining, thanks to the Structural Adjustment Programmes, Poverty Reduction Strategies (PRSP) and Heavily Indebted Poor Countries Initiative (HIPC), all of which are advocated by multilateral institutions, represented by the World Bank and the IMF. District-based health services
(secondary and primary care) have increasingly captured a bigger share of the recurrent health budget, as the allocation to tertiary care has dropped over the years in both Malawi and Zambia (MoH Zambia, 2004; ADB, 2004). Table 6 below shows the levels of funding for the different levels of care in Malawi and Zambia:

**Table 6: Trends in health expenditure by level of care in Malawi and Zambia (%)**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>40.3</td>
<td>44.9</td>
<td>57.9</td>
<td>53.4</td>
<td>64.1</td>
<td>69.9</td>
<td>66</td>
<td>70.1</td>
</tr>
<tr>
<td>Secondary</td>
<td>17.1</td>
<td>8.0</td>
<td>25.8</td>
<td>11.4</td>
<td>24.1</td>
<td>10.2</td>
<td>24.9</td>
<td>9.9</td>
</tr>
<tr>
<td>Tertiary</td>
<td>43.6</td>
<td>47.1</td>
<td>16.3</td>
<td>35.3</td>
<td>11.7</td>
<td>19.9</td>
<td>9.1</td>
<td>20.0</td>
</tr>
</tbody>
</table>

*Source: Adapted from MoH Zambia (2004) and ADB (2004)*

Inevitably, declining overall level of resources requires prioritization of budgetary lines of expenditure. Muula *et al.* (2006) note that the declining level of tertiary-level funding had a number of indirect effects on nurses’ motivation: limited funding created few professional development opportunities and reduced access to essential equipment and drugs; lower allowances caused lower salary levels; low staffing increased workloads. Lower funding also led to lower expenditure on protective equipment, which raised the risk of infections through a lack of protective means. Thus the declining level of funding contributes to a de-motivating work environment.

Declining levels of funding may be one of the major explanatory factors towards high turnover rates of nurses in both Malawi and Zambia. An analysis of urban/rural
distribution of the nurse workforce in both Zambia and Malawi shows that the majority of skilled health service providers are located in urban areas, which are typically catered for by tertiary level health facilities. Hozumi (2003) reports that although only 20 percent of Malawians live in urban areas, a large majority of nurses are in Central Hospitals, with 66 percent of nurses working in central hospitals. Fortunately, 60 percent of the Christian mission hospitals in Malawi are based on the rural areas and are well staffed with nurses (ADB, 2004). The skewed distribution of nurses in Zambia is worse than that of Malawi. Hamada (2007) notes that in 2000, up to 78% of nurses in Zambia worked in the tertiary level facilities that cater for 20 percent of patient beds (just like in Malawi).

From the foregoing we may draw two main conclusions: Firstly, declining levels of funding to tertiary hospitals led to low motivation of nurses at the level with the highest concentration of that cadre. This inevitably provided a push factor for nurse attrition and migration. Since Zambia had larger percentage of nurses in tertiary health facilities than Malawi, we would rightly expect Zambia to have higher attrition and migration rates than Malawi. Secondly, we earlier noted that there were five-times more Christian hospitals in Malawi than in Zambia. Since up to two thirds of these mission hospitals are rural based, there were lesser nurses that were affected by the reduced funding in Malawi than in Zambia.

3.3 Changes in disease patterns: The impact of HIV/AIDS
Disease patterns in Malawi and Zambia have changed since the mid 1980. The arrival of HIV/AIDS has had a pervasive impact on nurses’ work environments: increased workload; risk of infection; demands from extended family due to death of relatives and increasing cases of orphan-hood; and possible death of the nurses themselves due to AIDS (WHO, 2006).

HIV prevalence rates have generally been higher in Zambia than in Malawi, the reasons behind which are beyond the scope of this paper. In 2004 the UNAIDS/WHO 3 by 5 Initiative estimated the following HIV trends in the two countries:

<table>
<thead>
<tr>
<th>Year</th>
<th>1987</th>
<th>1989</th>
<th>1991</th>
<th>1997</th>
<th>1999</th>
<th>2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malawi</td>
<td>8.15</td>
<td>16.9</td>
<td>21.9</td>
<td>25.0</td>
<td>25.25</td>
<td>20.10</td>
</tr>
<tr>
<td>Zambia</td>
<td>11.62</td>
<td>24.50</td>
<td>27.0</td>
<td>27.19</td>
<td>32.13</td>
<td>26.83</td>
</tr>
</tbody>
</table>

Source: adapted from UNAIDS 2004 epidemiological fact sheets for Zambia and Malawi

The WHO (2006) notes that greater numbers of HIV related patients increase nurses’ workloads, hence reducing their motivation. Furthermore, HIV/AIDS patients tend to stay longer in the hospital, and increased contact with them creates more exposure to infection and consequently increases stress. Hamada (2007) observed that there was a general perception among nurses in Zambia that they were at an increased risk of occupational exposure to HIV and other infectious diseases, which augmented their
intentions to leave. In her PhD Thesis study, Hamada (2007) interviewed a senior Zambian nurse with over thirty years experience, and she had this to say:

Initially, the patients were not as many, the disease patterns were different. There are more complicated cases now in terms of [patients] not recovering. Patients come, you treat, you give this, you do ABCD, they are not getting better... it’s like you are working for nothing, you are not getting any recoveries... And again in terms of the actual work, it's more strenuous. There are few people to work. So there is too much workload. It doesn’t satisfy. Job satisfaction is not there (Zambian Ward Manager, quoted in Hamada 2007, p91).

The situation is made worse when the workload is combined with shortage of infection prevention equipment and supplies. Kinoti (2002) is quoted in Paradath et al (2003) as noting that in Zambia, where gloves are frequently unavailable in health facilities, the fear of contracting HIV/AIDS or other illnesses through work-related accidents is a significant push factor.

Furthermore, like in any other profession, the nurses themselves are also infected and die of AIDS. The loss of staff due to HIV/AIDS, coupled with other forms attrition, further puts extreme workload on the remaining staff. USAID (2003) captures the rates of mortality due in the health sector as follows:
Table 7: Deaths of Health Sector Staff in Malawi and Zambia

<table>
<thead>
<tr>
<th>Country</th>
<th>Doctors</th>
<th>Nurses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>%</td>
</tr>
<tr>
<td>Malawi (1997/98)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Zambia (1999)</td>
<td>2</td>
<td>8</td>
</tr>
</tbody>
</table>

Note: % is the percentage that death represents of all losses.
Source: adapted from USAID 2003: The Health Sector Human Resource Crisis in Africa, page 12

We note from the table above that Zambia had lost 185 nurses in 1999, 50% of which were due to death against Malawi’s 43%. It is difficult to conclude that the deaths were attributable to AIDS but, given the high prevalence rates of HIV in both countries, we may conclude that HIV/AIDS had a significant contribution to these accelerated losses of nurses through deaths. This paper therefore proposes that disparities in HIV/AIDS prevalence between Malawi and Zambia are an important explanatory variable for the higher rates of nurse migration in Zambia, as they lead to increased workload and infection risk factors which have adverse effects on nurse motivation.

3.4 Privatization of the mining sector

Zambia is endowed with copper deposits which constitute about 10% of the country’s GDP (IMF, 2009). After independence in 1964, Zambia followed a socialist type of

---

10 This paper reviewed the Human Resource Strategy for the Health Sector in Zambia for the period 2006 to 2010, and noted that there was no deliberate effort to address the issue of HIV/AIDS among health workers. The Malawi HR strategy, on the other hand, had a whole component that deals with HIV post-exposure prophylaxis and Anti-retroviral therapy for infected health personnel.
administration and the mining sector was state-owned (Simutanyi, 1996). In the early 1990s, however, with the onset of the Structural Adjustment Programmes, the mining sector was privatized. Privatization in most African countries led to massive retrenchment of staff in a bid to make the industries more efficient and profitable. Among the staff affected by privatization were nurses who worked in mine-based hospitals and mine workers whose wives were nurses.

The retrenchment of Zambia Consolidated Copper Mines (ZCCM) as a result of privatization facilitated nurse migration from Zambia. Simutanyi (2006) reports that up to 40% of nurses in the mining sector were retrenched and could not be reintegrated into the public sector due to the downsizing of the civil service as part of SAP conditionality. The retrenched nurses used their separation packages to pay for air tickets and migrated from Zambia (Hamada, 2007). Furthermore, redundant male mine workers often asked their wives, who were nurses, to migrate in order to improve the financial status of the family through remittances. Hamada (2007) reports that a human resources manager at one of the mine-based hospitals observed that unemployed husbands used to come to the hospital to negotiate resignation on behalf of their working wives. According to Hamada’s account, the retrenched husbands actively searched for nursing vacancies overseas and found the necessary information for migration through the internet (Hamada, 2007). This resonates well with the critique to the neoclassical micro theory of migration as it shows that a decision to migrate is not for individual utilitarian, rational choice determinants alone, but also a function of collective family or societal pressure, including reflections of power relations in society.
As mentioned earlier in this chapter, the private sector in Malawi accounts for less than 2% of the nurse workforce. Furthermore, most of the state-owned companies that were privatized in Malawi did not employ significant numbers of nurses and, if those companies that had nurses, they were not retrenched (Nurses Council of Malawi, 2003). This contrasts with the Zambian situation and may provide a valid and plausible explanatory factor for the higher rates of nurse migration in Zambia than in Malawi.

3.5 Impact of health reforms: User fees and patients’ attitudes

In resource-constrained settings such as Zambia and Malawi, policy makers place greater emphasis on questions of how to mobilize additional resources for financing growing health care needs. It is in this context that user fees or cost sharing has been used as part of resource mobilization strategies in most Southern African countries, including Zambia.

In 1993, Zambia introduced user fees for health care in public facilities at all levels as part of the implementation of the Structural Adjustment Programmes (Masiye et al, 2008), which typically called for the removal of public subsidies and withdrawal of direct government provision of many social services including health care. The introduction of user fees was veiled under the need for promotion of community participation, empowerment and responsibility (Masiye et al, 2008). All this was to be accomplished under a decentralized health system in which a ‘paying community’ would be motivated to demand and ensure accountability for how health care service provision was planned and delivered (ibid).
Patients’ attitudes may influence nurse motivation both negatively and positively. According to Gilson and Khumalo (2007), the introduction of user fees in most Southern African health systems had perverse externalities on the attitudes of patients towards health service provision and, in particular, nurses. Hamada (2007) reports that patients in Zambia typically complained about long waiting times and lack of attention by nurses due to staff shortages. She further notes that Patients’ complaints are reported to have intensified since the health reforms started due to the increasing role of the consumer or the introduction of user fees. Hamada’s study showed that many nurses on high-cost wards highlighted the pressure to provide higher quality nursing care. She quotes an enrolled nurse as reporting:

...like when they take long to be assisted, the patients will start insulting you as a nurse... "You are not doing anything, you're just seated here, you are not attending to us...you are useless nurses” ... there are a lot of patients who come, and since they pay a lot of money...they want to be seen as quickly as possible (Quoted in Hamada, 2007 p93).

It is apparent that health reforms in the form of user fees promoted the customer orientation of health service provision, which is a positive development, and inline with the good governance practice (World Bank, 1997), but it at the same time ignored the rights of nurses. McIntyre and Klugman (2003) note that in South Africa, public sector workers have a widespread view that patients' rights have been established but nurses’ rights have been ignored; public expectations of care have increased but nurses’ ability to
provide that care has been restricted. We opine that in Zambia this acted as a demotivating factor for frustrated nurses whose inadequate work environment failed to meet patient expectations and hence may have contributed to the higher levels of attrition and subsequent migration of nurses.

On the other hand, the public health service in Malawi if free-of-charge and, contrary to the Zambian case, patients complain more about the attitude and negligence of nurses (Nurses Council of Malawi, 2003). From the foregoing discussion, we may therefore conclude that health reforms in the forms of introduction of user fees empowered patients to exercise their rights to claim better service. But at the same time, nurses could not deliver the expected level of service due to staff shortage and inadequacy of equipment and supplies (which is also a negative externality of the reforms). Frustrated nurses therefore dropped out of service and ended up migrating.

**Chapter summary**

This chapter has discussed possible contextual push factors that may be responsible for the higher migration rates among Zambian nurses than Malawian nurses. These have ranged from those inherent in the structure of the health system, such as the proportion of health services under Christian missions, to the externalities brought about by health reforms under the guise of structural adjustment programmes. The important issue to highlight is that reforms such as the introduction of user fees and privatization of industries brought with them negative externalities that need to be taken into account

---

11 The reasons for this situation in Malawi are beyond the scope of this paper.
when designing such reforms in other countries. The next chapter will present micro-level push factors that may also help to explain the differentials in migration volumes in Malawi and Zambia.
Chapter 3 introduced the macro-level contextual explanatory factors that may be responsible for the difference between the volumes of migration between Malawi and Zambia, most of which may broadly be addressed at policy level. This chapter brings the discussion down to a more micro level, focusing on factors that may directly or indirectly influence an individual nurse’s intention to leave her country. Much as some of the factors may also be addressed at policy level, this paper is of the opinion that they are more to do with the individual than the policy environment. The analytical tools for understanding these micro-level factors are the functionalist approaches, particularly the neoclassical micro theories of migration (see chapter 2).

4.1 Path dependence: influence of achievements of past migrants

The neoclassical micro theory of migration that was discussed in Chapter 2 of this paper would predict that nurses weigh the foreign wages of their counterparts abroad and make decisions to stay or leave (see Arango, 2000). However, we note that in practice they usually do not directly use the salary scale of foreign wages to compare their current salary, but rather see the achievements of fellow nurses who left for overseas and make comparisons which tend to induce remaining nurses to consider migrating. Arango calls these the ‘demonstration effects’ (2000: 291). Stephen Bach (2006) suggests that evidence of past migrants’ achievements includes buying a house, sending children to
private schools, sending money to relatives, buying a car and improved general appearance.

In the study by Hamada (2007), it was noted that nurses in Zambia reported envying former colleagues especially those who bought a house within a short time after leaving the country. The study quotes a nurse who would like to follow a former colleague that had migrated to the UK as saying:

*I have seen those who are gone [to the UK] and are really supporting their families. Some have even bought houses... just [within] a year she has bought a house... in Zambia... Even the children are going to private school, while me, I have worked for 17 years I can’t afford to take my child to a private school. Even at the government school I have not finished paying the fees because of the money which I am getting. I can follow my friends... If chances come, I can fly...* (Enrolled Nurse, quoted in Hamada 2007: 109).

The influence of achievements of former migrants may also be prevalent in Malawi, although this study has not found any research done in that area so far. Inference may, however be made from a study by Muula et al (2006), which noted different attitudes to migration between urban and rural settings in Malawi. They observed that nurses in rural areas are not as exposed to migration because there are limited stimuli of seeing the achievements of friends, as most of the past migrants invest in urban areas. This line of thinking may also be applied to Zambia, where most of the nurses are concentrated in
urban areas; hence they may easily be influenced by the achievements of former colleagues.

To augment the importance of the influence of past migrants, this paper further proposes to draw evidence from the volume of remittances between Malawi and Zambia so as to explain that there may exist a greater influence in Zambia than in Malawi. The Central Bank of Zambia estimates that in 2007/8 Zambia received an estimated $201 million in remittances (Bank of Zambia, 2008 Annual Report). In Malawi, during the same period, the volume of remittances was $102 million (Reserve Bank of Malawi, 2008 annual Report). Assuming that the remittances were invested into buying houses and sending children to private schools, we may conclude that the achievements of past migrants as represented by their investments through remittances may have had greater influence on Zambian nurses’ intention to migrate than on their Malawian counterparts. If this proposition is true, there may be need to further study the policy environment that influences the volume of remittances between the two countries and the implications on attrition of skilled human resources including nurses. A more detailed study may need to be conducted to validate the causal relationship of this proposition.

4.2 Path dependence: Role of migrant networks

The network theory of migration recognizes that networks are the main mechanism for making migration a self-perpetuating phenomenon (See Arango 2000). The theory defines migration networks as “sets of interpersonal relations that link migrants or returned migrants with relatives, friends or fellow countrymen at home” (Arango, 2000:
As Charles Tilly argued in the early 1990s, it is not only individuals or even households who engage in migration, but groups of people who have kinship, professional or other ties. Such networks provide information, financial assistance, accommodation, and may also facilitate employment. Arango (2000) notes that in so doing, the networks reduce the costs of uncertainty of migration, hence facilitating migration.

Our investigation revealed that Zambians living in the United Kingdom have an association known as UKZambians, which was established in the late 1990s. Such associations were also established in the United States, Canada and Australia, among other countries. The UKZambians provides information on settling in the United Kingdom, job vacancies and immigration assistance (providing reference, surety, etc) for Zambians intending to migrate to the UK. Another network of Zambians abroad is one called Zambia Diaspora Connect. One of the express aims of this network is to “partner with migration specialist agencies” (Lupunga et al, 2008: 13), with the aim of facilitating easy migration of Zambians to the UK and other countries.

Although this paper found no study that has established how many Zambians have benefited from these diaspora associations, it is apparent that they address some of the main “stick” factors that prevent potential migrants from moving, including uncertainty and cost of migration. Furthermore, the associations address problems of information

---

12 See http://ukzambians.co.uk/
13 See http://www.diasporacnect.blogspot.com/
asymmetries through posting of job vacancies and scholarships opportunities abroad (see the web pages of the aforementioned examples).

The situation for Malawi is different. Apart from a Facebook forum that brings together Malawians already living in diaspora, there is no other formal institutional interface between Malawians living abroad and potential migrants. Also, considering that internet access in Malawi is as low as 1% (National Statistical Office, 2004), use of forums such as Facebook may not be as effective in targeting and influencing potential migrants from Malaw.

This paper therefore proposes to conclude that the existence of migrant networks for Zambians is a significant explanatory factor for the higher volumes of migrant nurses from Zambia, as compared to Malawi. However, further research may need to be conducted to establish the exact numbers and professional cadres that have been influenced by, and benefited from, such associations. There may also be need for further explanation as to why Malawians abroad do not have such associations to attract fellow countrymen to live and work abroad.

### 4.3 Role of Intermediaries

Just like migrant networks, intermediaries play a significant role in facilitating the migration process. According to the UNDP (2009), these intermediaries include informal social networks, recruitment agencies and their subsidiaries, travel agencies, legal

---

advisers and similar businesses. Legitimate intermediaries play an important role in bridging the gap between employers or sponsors and prospective migrants (UNDP, 2009). They provide the best information on jobs at destination or the financial and social capital to support a move. Indeed, their absence sometimes hinders the migration process.

In the Zambian study by Hamada (2007), some nurses reflected that the availability of recruitment agencies made it easier for their fellow nurses to migrate, playing two important roles in the migration process. Firstly, they match the supply of nurses to demand from hospitals overseas, screening prospective migrants and introducing them to employers. Secondly, they issue loans for the nurses to cover migration costs following a small initial commitment fee (Hamada 2007).

A Nursing Service Manager in Hamada’s study also describes the role of intermediaries as matchmakers between the UK demand side and the Zambia supply side as follows:

Yes, there is one white man who comes. I have never seen him...but I hear his name is Frank. He comes with air tickets for the U.K. So he will come around maybe in the evening when the nurses are off, then start asking “Is there nobody who would want to go to U.K. I want this type of rank”...So those who are already itching to go, they just say “Put me there. When can I go? When are you ready?” So they understand each other and then she continues working. But she will not mention to anybody. Then when

---

15 The UNDP also distinguishes between smugglers and traffickers, but this paper will focus only on formal intermediaries.
the time is about to come she will just take about a ten days emergency leave...And then she flies off (Nursing Service Manager in Zambia, quoted in Hamada 2007, p129).

While recruitment agencies in Zambia are formalized, across the border in Malawi the situation is different. There is no documentation in any research on migration in Malawi on the existence of recruitment agencies. Nevertheless, informal intermediaries do exist and, as Adamson Muula (2006) notes, most Malawian nurses are skeptical about using intermediaries to process immigration issues on their behalf, and this hinders the fulfillment of the nurses’ intentions to migrate. Muula quotes a Malawian nurse as saying:

*It’s a bit tricky because these days you don’t know who is a genuine agent or not... Most of them are fake. So it’s a bit difficult sometimes because you will find that...you may just end up being swindled.* (Registered nurse quoted in Muula 2006: 49)

The existence of vibrant intermediary agents such as recruitment agents and travel agencies in Zambia, and their formal absence in Malawi may therefore be an important explanatory factor for the big disparities between volumes of nurse migrants between the two countries. The concentration of Christian mission hospitals in rural Malawi, as discussed in the previous chapter, may also hinder nurses’ access to information about recruitment agencies and vacancies, besides restricting access to information technology
that presents such opportunities. On the other hand, the concentration of nurses in urban areas in Zambia provided a conducive environment for exposing them to recruitment agencies and information about them. It would be interesting to find out whether the low infiltration of recruitment agencies and other intermediaries in Malawi is due to policy bottlenecks or otherwise. This is a potentially policy relevant topic, warranting more in-depth study, which is beyond the scope of this paper.

4.4 High rates of inflation: Unfulfilled family demands

The typical neoclassical line of thinking would predict that decisions to migrate are made by rational actors who seek to improve their well-being by moving to countries where their Labour will be rewarded more (See Todaro, 1976). This reasoning goes well with the discussion that follows, but there is need to add that the urge to migrate is also influenced by family pressures, especially in high HIV prevalence areas, where extended families and female-headed households are common.

Zambia experienced a long period of high inflation which in the 1990s after liberalization of the economy, which decreased the real wages of nurses (Simutanyi, 2006). The high inflation rate caused basic commodity prices to rise while salary levels remained the same. Hamada (2007) gives an example of the cost of basic items for a family of six living in Lusaka (food basket) which was KW 6,375 in March 1991, and had risen by 77 times by January 2000 (costing KW 492,940) (Jesuit Centre for Theological Reflection 2005, quoted in Hamada 2007: 90). In the study by Hamada, 70% of nurses reported that high costs of living were a demotivating factor, as they were not able to fulfill their
family obligations. Those with extended families and female headed households were in a much worse situation (Hamada, 2007).

Inflation rates in Malawi also skyrocketed in the 1990s, and Stambuli (2002) reports that between 1991 and 2000 prices had risen 45 times (compare with Zambia’s 77%). In contrast, only 51% of nurses in a study by the Nurses Council of Malawi (2006) mentioned cost of living as a major demotivating factor for their work. Muula and Maseko (2006) suggest that most Malawian nurses have alternative survival strategies such as farming in their villages (as most of them are rural based), to cut down on expenditure on food as well as sell extra produce to earn income. The study by Muula and Maseko further suggests that most nurses in Malawi may be surviving by pilfering drugs from the hospitals and selling them to street vendors and private hospitals. They report having seen a lot of drugs labelled ‘MG’ (which stands for Malawi Government) in the open markets in Malawi, being sold by street vendors. Furthermore, courts are known for acquitting suspects for lack of evidence, hence there is no deterrent for this survival strategy.

No study has shown that drug pilferage is a problem in Zambia, so this paper cautiously assumes it is not a prevalent strategy in that country. Furthermore, unlike in Malawi where nurses can farm in their villages, Zambian nurses are concentrated in urban areas and therefore depend on buying producer from commercial farmers. This may explain why the effects of high rates of inflation may be a significant explanatory factor for the
differences in migration trends between Malawi and Zambia. Further research on the
survival strategies of nurses in Zambia is worthwhile.
CHAPTER 5: CONCLUSION AND IMPLICATIONS

This study has analyzed the possible explanatory push factors for the differences in patterns of migration of nurses between Malawi and Zambia. The puzzle was to understand why two countries with similar pre-colonial, colonial and post-colonial histories, similar cultures and traditions, similar geographical characteristics, almost similar population sizes and similar patterns of democratization, would register different migration patterns of nurses to the United Kingdom. Specifically, the paper set out to understand why Zambia, with higher GDP per capita, lower poverty levels and higher salaries of nurses, registers higher volumes of nurse migrants than Malawi.

The paper explained the potential push factors that may be attributed to the differential patterns of nurse migration in the two countries, by first isolating the macro-level contextual push factors from the micro-level push factors. The macro-level contextual push factors, as the name suggests, are the broader system-wide and policy related issues such as the composition of government-run hospitals as opposed to private and mission owned ones; the distribution of resources among the different levels of health service provision; changes in disease patterns, particularly the impact of HIV/AIDS on the understaffed and resource drained health systems; privatization of industries that owned hospitals; and health reforms such as introduction of user fees and their impact on attitudes of patients. Worth noting on these macro-level push factors is that migration of nurses in Zambia may have been a negative externality of institutional reforms, most of which were done under the structural adjustment programmes and conditionalities of the World Bank and the IMF. To a larger extent, although the reforms in Malawi were
similar to those in Zambia, their operationalisation and manifestations were different, which may explain the differential migration patterns. Structural and World System theories would apply in explaining migration induced by these structure-agency relationships between multilateral institutions and poor countries.

Micro-level push factors resonated very well with the neoclassical micro theory of migration, which sees migrants as utility maximizes and rational actors. Although not necessarily related to the wage-based explanation of that neoclassical theory, this paper identified the micro-level factors to include the influence of achievements of past migrants; the role of migrant networks; the role of intermediaries and high rates of inflation. The paper observed that the absence of these factors in Malawi, and their presence in Zambia, may explain why Zambia registered more nurse migrants than Malawi.

5.1 Implications for theory

The paper reviewed theoretical perspectives on migration, which included the functional theories, the structural theories and the theories of public service motivation. Although very useful in understanding and predicting the overall global trends in migration, these theories may not be robust enough to explain lower level differentials between countries that are similar in socio-cultural and economic characteristics. More so, while all these grand theories would predict that a country like Malawi, with lower wages and higher poverty levels would register more migrants, this paper showed that this should not
necessarily be the case, as migration largely depends on networks, path dependence and intermediaries, all of which were present in Zambia and absent in Malawi.

The focus of theories on the “rational” individual is also flawed, as the decision to migrate may be influenced by asymmetric power relations in families and societies. Furthermore, theories such as Wallenstein’s World System theory and other structuralist approaches may well explain the disparities between rich and poor countries (centre-periphery dependency relationships), but they fall short of explaining the differentials between poor nations as well as between rich nations.

Further theorizing is therefore needed to understand the role of migrant networks; the role of remittances, the policy environment for intermediary agents; and the role of other service provision actors such as Christian missions.

5.2 **Implications for policy**

This study has observed that policy reforms, particularly in the Zambian health sector, had negative effects on staff motivation and they contributed to their propensity to migrate. Although in both Malawi and Zambia expenditure levels at the tertiary level of the health sector fell, in Zambia they fuelled migration because most nurses were concentrated at the tertiary level than in Malawi. Furthermore, introduction of user fees in Zambia increased the rights of patients to demand better services from nurses who could not provide the services due to shortage of drugs, equipment and supplies. This study also notes that while there is a close relationship between the commonly-accepted
extrinsic incentive of remuneration and the intrinsic motivation of public appreciation and self-esteem, this link is neglected in the discussions of non-financial incentives and reform. Nurses’ self-esteem was damaged by public perception of the lower status of their role, partly as a result of the decline in the financial constraints that limit their ability to provide quality care.

Hazardous work environments also increased the risk of infection, especially in hospitals already overcrowded with HIV/AIDS patients. With no infection prevention facilities and supplies in the Zambian hospitals, where HIV prevalence rates are higher than in Malawi, most nurses opted to leave in order to protect themselves from infections. Policies that provide a safe environment for nurses through universal infection prevention measures are therefore worthwhile to retain staff, as exposure to risk of infection tends to crowd out intrinsic knightly motivations (Le Grand 2003).

Reforms such as privatization also need to be designed in ways that prevent the loss of essential and skilled service providers such as nurses. Reintegrating retrenched nurses into the public service, and providing livelihood support for retrenched husbands may reduce the motivation to migrate in order to feed their families.

5.3 Limitations and further research

This has been largely qualitative and hence the volumes of migrant nurses may not be attributed to any specific factor, i.e. it has not established which factors take precedence over others. Survival strategies for nurses in Malawi and Zambia were also not well
explored, for example, whether indeed nurses in Malawi survive on pilfering drugs and why their Zambian counterparts don’t do the same. A study on the survival strategies in both countries is worthwhile, as it would also provide policy insights on how to piggyback on those strategies and utilize them as “stay” factors for the nurses. Furthermore, the role of training institutions in the production of nurses has not been adequately discussed in this paper. This is important as it would ensure that the burden of work is reduced among nurses. However, with the structural adjustment related reforms which require retrenchment of staff, this strategy may not be relied upon.
Bibliography

African Development Bank (ADB) (2005): Human Resources and Financing for the Health Sector in Malawi. ADB: Tunis


Martineau T, K. Decker and P. Bundred (2003): “Briefing note on international migration of health professionals: levelling the playing field for developing country health systems.” Liverpool School of Tropical Medicine.


UNAIDS/WHO Epidemiological Fact Sheet - 2004 Update


