

Nurse migration from Zimbabwe: analysis of recent trends and impacts

Abel Chikanda

University of Zimbabwe, Department of Geography & Environmental Science, Harare, Zimbabwe

Accepted for publication 11 January 2005

CHIKANDA A. *Nursing Inquiry* 2005; 12: 162–174

Nurse migration from Zimbabwe: analysis of recent trends and impacts

The migration of nursing professionals from developing countries such as Zimbabwe to industrialised countries is taking place at an alarming rate, with little signs of slowing down. In Africa, nurses form the backbone of the healthcare delivery system and their migration has a huge negative impact on health service provision. Drawing on evidence from selected health institutions, the paper shows the magnitude of migration of nurses from Zimbabwe. The paper also shows that public to private health sector migration of nurses is occurring at a significant rate. The effects of such movements are examined in detail. For instance, at the health institution level, nurse migration has led to staff shortages, and health institutions located in the disadvantaged areas have been the worst affected. The paper calls for the adoption of an integrated approach in managing and addressing the concerns of the nursing professionals.

Key words: emigration, nurse migration, nurse professionals.

The global movement of both skilled and unskilled workers has increased tremendously and it is estimated that by 2000 almost 150 million people (or 2.5% of the world's population) were living outside their country of birth (IOM 2000). African countries in particular continue to lose their skilled professionals at an alarming rate. For instance, by the late 1980s Africa had lost nearly one-third of its skilled workers, with up to 60 000 middle- and high-level managers migrating to Europe and North America between 1985 and 1990 (World Bank 2000). In the mid-1990s, Africa was losing about 23 000 professionals annually in search of better working conditions in the developed world (World Bank 1995). The figures show a steady increase in the number of skilled professionals migrating from developing countries.

It has been noted that the migration of skilled professionals is often a response to the lack of opportunity in their home country and the availability of opportunity and

deliberate promotion of immigration in the other (Saravia and Miranda 2004). Hence, a significant 'brain drain' has been witnessed in key professions in Africa such as engineers and information technology (IT) workers (Johnson and Regets 1998), doctors (Grant 2004) and nurses (Buchan and Sochalski 2004). These professionals are often replaced by high-cost expatriate professionals. It is estimated that African countries spend nearly \$4 billion annually to replace the professionals lost through migration with expatriates from the west, a figure which represents nearly 35% of Africa's total overseas development assistance (ODA) (Oyowe 1996). Expatriates are more expensive to hire than locally trained professionals are and the fact that they are prepared to work in the host country for a limited period of time makes sustainable economic development even more difficult to achieve.

The migration of nursing professionals has recently been the subject of much policy discussion globally (WHO 1997; Hardill and McDonald 2000; Bloom and Standing 2001; Hawthorne 2001; Ndlovu et al. 2001; Kline 2003). In Africa, nurses form the backbone of health service delivery. Consequently, their migration to the more developed countries has been attributed to worsening of the health crisis

Correspondence: Abel Chikanda, University of Zimbabwe, Department of Geography & Environmental Science, PO Box MP 167, Mount Pleasant, Harare, Zimbabwe.

E-mail: <achikanda@arts.uz.ac.zw> or <achikanda@hotmail.com>

in the affected sending countries (Buerhaus, Staiger and Auerbach 2000; De Castella 2003).

Healthcare delivery is highly labour intensive and its quality and efficiency is dependent on the availability of health professionals who are adequately trained to deliver the required standards. The problems that may result when nurse professionals migrate from developing to developed countries have been well documented (see, for example, Gaidzanwa 1999; Buchan, Parkin and Sochalski 2003; Bach 2004). It has been argued that nurse migration from Africa has deprived the continent of its skilled human resource base, making it necessary for the placement of health workers in positions they are not trained to facilitate. Other negative impacts include heavy workloads resulting in poor service provision to the public and in countries losing their financial investments made in educating the nurses. What is particularly worrying is the fact that nurse migration is taking place at a time when most African governments are fighting to contain the HIV/AIDS pandemic. Consequently, the stresses caused by handling several HIV/AIDS-related deaths every day takes its toll on nurses who choose not to migrate, many of whose colleagues have the disease too (Dovlo 1999; Stilwell 2001).

The paper presents the findings of a nationally representative study that was conducted in Zimbabwe in 2002. The study sought to examine the magnitude of, and trends in the migration of nurses and midwives from the country, establish the effects of the migration on the country's quality of health-care, identify causes of the migration, and recommend measures for reducing the migration. It is hoped that the results of the study can be used to strengthen the health system of Zimbabwe and other African countries.

NURSE MIGRATION IN ZIMBABWE

The migration of nurses from Zimbabwe and other African countries to developed countries has raised concerns on the effects of the 'brain drain' (Mutizwa-Mangiza 1996; Dovlo 1999; Bloom and Standing 2001). It is argued that the continent is losing most of its qualified nursing personnel to the more developed countries that reap the benefits of financial investments made by the less-developed countries in human resource development. The exodus of nursing personnel to developed countries clearly threatens the structure of the health system in affected developing countries.

The rise in the scale of nurse migration in Zimbabwe in the postcolonial era has been a cause for concern for the government. The expansion of nurse training programmes

by the postcolonial government created a large pool of skilled nursing professionals. The political and economic downturn that was witnessed in Zimbabwe in the 1990s saw an increased number of professionals migrating to European countries (mostly to the UK) as well as to other African countries such as South Africa and Botswana. According to the Health Minister, Dr Timothy Stamps, Zimbabwe has been losing an average of 20% of its healthcare professionals every year to other countries (*Sunday Times*, 17 December 2000). The activities of recruitment and relocation agencies have been blamed for fuelling the brain drain from the health sector. This has left most of the country's health institutions running on skeleton staff, who are failing to cope with the increased workloads in the face of a growing HIV/AIDS crisis.

The decline of salaries in real terms and the inability of government to provide other incentives and allowances have led to low morale and productivity among the nurses. Frequently, nurses have gone on strike to press for higher salaries and better working conditions, but the government has not been responsive to their demands. This has led to the departure of many nursing professionals for greener pastures abroad.

Shortages of Registered Nurses exist in most countries throughout the world (Hardill and McDonald 2000; Buchan 2001). Developed countries are faced with a demographic dilemma, as they need to care for an increasing number of elderly people while their workforce are ageing (Buchan and Sochalski 2004). There has also been a reduction in the number of people enrolling for nursing programmes thereby creating severe nursing shortages. Hence, nurses have been recruited from developing countries such as Zimbabwe to fill the gap.

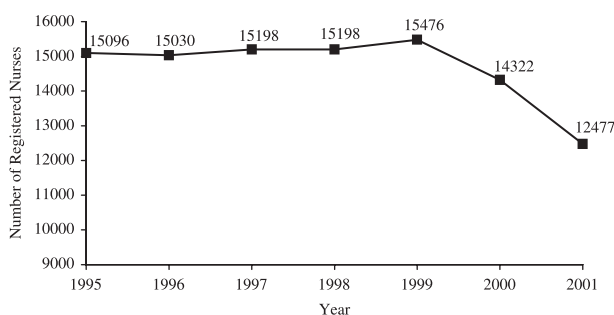
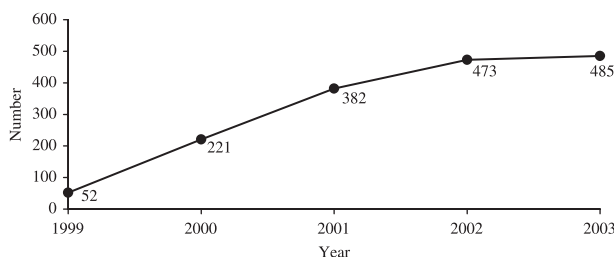
It is difficult to establish the magnitude of nurse migration from Zimbabwe because of lack of reliable data sources. This is because the country has no proper mechanisms to monitor the loss of professionals through migration, death or retirement. In the absence of properly recorded statistics, an analysis of the trends in registration figures provides useful insights on the magnitude of nurse migration from Zimbabwe. Data obtained from the Central Statistical Office (CSO) showed that the number of registered nursing professionals available in the country was stable up to the late 1990s, when a significant decline was experienced. For instance, while there were 15 476 Registered Nurses in Zimbabwe in 1998, only 12 477 remained by December 2001 (Fig. 1) (CSO 2003). Such a sudden decline is a cause for concern and is clearly indicative of international migration of nurses from the country.

Table 1 shows that, while there were some marginal increases recorded in nursing categories such as midwives

Table 1 Registered Nurses, 1997–2000 (selected categories)

	1997	1998	1999	2000
Midwives	3656	3840	4264	4250
Psychiatric Nurses	496	525	550	547
State Certified Nurses	5946	5927	4773	4101
State Certified Maternity Nurses	3912	3922	3572	3257
Paediatric Nurses	22	23	20	20

Source: CSO 2003.

**Figure 1** Registered nurses in Zimbabwe, 1995–2001. Source: CSO 2003.**Figure 2** Zimbabwean Nurses registering in the UK, 1999–2003.

Source: Nursing and Midwifery Council 2004.

and psychiatric nurses during the period 1997–2000, in other categories dramatic decline was recorded. For instance, while there were 5946 State Certified Nurses in 1997, only 4101 remained in 2000 (a decline of 31%). The same trend can be observed for other categories such as State Certified Maternity Nurses and Paediatric Nurses, where net losses of 17% and 9%, respectively, were recorded.

The loss of nurses and midwives from Zimbabwe's health sector is reflected by a corresponding increase in the number of Zimbabwean trained nurses in the UK. For instance, while 52 nurses were registered by the Nurses and Midwives Council (NMC) in the period 1998/99, as many as 485 were on the register in 2002/03 (Fig. 2). This figure could be much higher especially if one considers the fact that some Zimbabwean

trained nurses are employed in other jobs where they are not required to register with the NMC.

The shortage of nurses in Zimbabwe's health institutions is more severe in public health institutions than in privately run ones. In fact, a considerable number of nurses in Zimbabwe have moved, and continue to move to the private sector, which offers better remuneration and other conditions of service compared to the public sector. An analysis of the staffing situation in the year 1997 shows that the public sector employed only 7923 nurses out of its total requirements of 14 251 (or 55.6%), when the country had 16 407 Registered Nurses (Republic of Zimbabwe 1999). The privately run health institutions accounted for 8484 (or 51.7%) of all the Registered Nurses in the country in the same year but are mostly concentrated in the urban areas. This has implications on access to health services, with the urban areas being better served than the rural areas.

RESEARCH METHODOLOGY

Two main survey instruments were used to collect field information. The first research instrument aimed at collecting information relating to staffing patterns at health institutions, as well as data on their workload. The questionnaire was administered after pilot testing. One questionnaire was distributed to each of the selected health institutions for completion by the hospital superintendent. However, a major problem encountered during the research was the unavailability of vital data. Data on staffing patterns in public health institutions were sometimes incomplete or even unavailable from the Ministry of Health and Child Welfare (MoHCW). Only some health institutions studied, and only 10 of the 21 health institutions surveyed (48%) could provide information relating to the staffing patterns as well as the workload of the nursing professionals. The second research instrument was designed to collect information from individual nursing professionals on a wide range of issues such as their migration intentions and their general working conditions. The questionnaire provided useful information on the causes of migration of nurses from the country.

Stratified random sampling was employed in selecting healthcare facilities. Zimbabwe is classified into 10 provinces and seven of these were selected using the random sampling method. It was not possible to conduct interviews in all of the 10 provinces due to limited funding available for the study. For each of the selected provinces, the main provincial town or city was selected as well as one district health institution and one health centre. In addition, two schools of Nursing and Midwifery were also selected; these are located at Harare and Mpilo Central Hospitals.

The individual nurses were drawn from the health institutions selected using the stratified random sampling method. The number of nurses that were drawn from each health institution was proportional to the total number employed. It was not possible to obtain the figures of health professionals employed in each of the targeted health institutions from the Ministry of Health and Child Welfare (MoHCW) and this presented problems in determining the target number of respondents for each of the institutions. The study thus relied on informal figures presented by individuals with expert knowledge on staffing patterns in the country's hospitals. A total of 157 questionnaires were administered to nurse professionals employed in the public health sector.

PROFILE OF RESPONDENTS

One hundred and fifty-seven questionnaires were administered to nurses and midwives working in selected health institutions (Table 2). Twenty per cent of the respondents were male, while 80% were female showing the dominance of women in the nursing profession in Zimbabwe. The majority of the respondents were married (68%) while 21% were single, 6% widowed and 5% divorced. Furthermore, only 31% of the sample population were aged below 30 years.

Table 2 Profile of respondents

	Percentage
<i>Gender of respondents</i>	
Male	20
Female	80
<i>Marital status</i>	
Married	68
Divorced	5
Single	21
Widowed	6
<i>Age group</i>	
20 years and below	3
21–30	28
31–40	34
41–50	17
51–60	6
No response	12
<i>n = 157</i>	

Note: Data for 1998 were missing.

The vast majority of the respondents were nurses (87%) while midwives comprised 13% of those interviewed. They have been trained at the nurse training centres scattered throughout the country and most of them held Diploma qualifications. However, it is worth noting that 3% were holders of a Bachelor's degree qualification while only 1% held a Master's degree.

SURVEYING THE HEALTH SYSTEM

The public sector is the principal provider of health-care in most African countries where it provides affordable health-care to many people on the continent. It is therefore important to investigate the staffing patterns in this sector over the past decade. Information gathered from the MoHCW on the staffing situation in the country's public health institutions shows a general decline in the number of nurses employed nationally (Fig. 3).

The number of nurses employed in the public health sector fell by 1655 (about 19%), from 8662 in 1996 to 7007 in 1999. This decline occurred at a time when the country's public training institutions produced 1370 newly trained nurses. While some of the nurses might have left the public sector through attrition (such as retirement and death) or moving to the private sector, or could have moved out of nursing, a significant proportion of the departures may be blamed on migration. This lends credence to media reports that many Zimbabwean trained nurses are leaving for overseas destinations such as the UK where salaries are much higher than those offered locally.

The staffing crisis in Zimbabwe's public health sector can be highlighted by examining the number of nurses employed in 1997. While the MoHCW nursing staff requirements for that year stood at 14 251, only 7925 posts were filled, which represents 55.6% of the national requirements. Evidence that internal migration of nurses (that is, movement

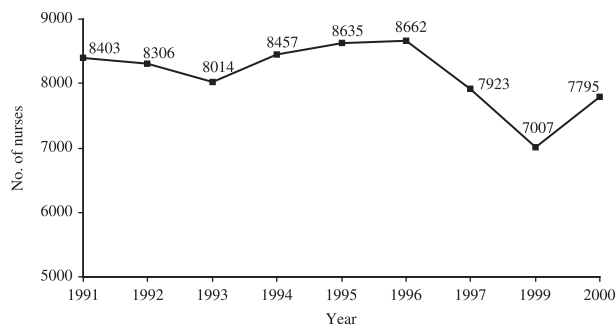


Figure 3 Number of nurses in the public health sector, 1991–2000.

Note: Data for 1998 were missing.

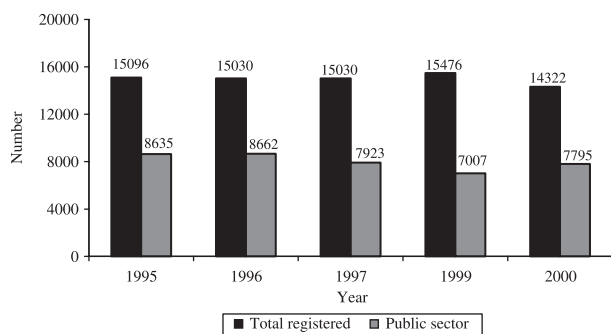


Figure 4 Public versus private sector share of nurses.

from public to private sector) has been occurring can be obtained by examining the changes in the percentage share of nurses employed in the public sector. The public sector share of nurses in Zimbabwe fell significantly during the mid-1990s. As shown in Fig. 4, the share fell from 58% in 1996 to 45% in 1999. The number of nurses registered nationally also provides further evidence that nurses have been moving to the private sector. This rose marginally from 15 096 in 1995 to 15 476 in 1999 (an increase of 2.5%), while the number of nurses employed in the public health institutions declined from 8635 in 1995 to 7007 in 1999 (a decline of 19%).

It is therefore evident that some of the nurses who leave the public sector in Zimbabwe end up working in the private sector, which offers better salaries and working conditions. Such movements have been blamed for worsening the crisis in the public health sector.

Data on migration at the health institution level were collected by a questionnaire that was administered to selected health institutions. While a low response rate was achieved (48%), the available information provided useful insights into the staffing levels across the country's health institutions. At the health institution level, the migration of nursing professionals has led to staff shortages. Most of the health institutions studied showed a reduction in the number of nursing professionals employed and consequently an increase in the number of vacant posts. Harare Central Hospital, for instance, had 676 nurses employed in 1998; 594 were remaining by 2000 (Table 3). It should be noted that the dramatic increase in the number of vacant posts at Harare Central Hospital in 2000 was due to the increase in the number of established posts from 794 to 934. Gweru Provincial Hospital as well as Kadoma District Hospital, on the other hand, experienced marginal growth in the number of nurses employed during the period studied. However,

both health institutions recorded an increase in the number of vacant posts owing to the allocation of additional established posts.

On the basis of the survey data, it can be argued that the number of vacant posts is inversely proportional to the population size of an area. Two main reasons may be advanced for the observed large number of vacant posts in large urban areas compared to smaller ones. First, nurses in large urban areas (like Harare) are lured to join the private sector, which offers better returns for labour. These private practices are most prevalent in urban areas. Second, the increased flows of information and easy access to communication networks in metropolitan areas expose the nurses to job opportunities in other developed countries, both regionally and overseas. This may induce their desire to migrate.

Migration intentions

An examination of the migration intentions of the in-country nursing professionals provides a useful indication of the likely future patterns. Information relating to migration intentions was collected at two levels, namely on internal migration (mostly public to private sector movement) and international migration.

As many as 67% of the public sector nurses are considering moving to the private sector. The commonly cited reasons for the intended move are the search for better remuneration and working conditions. Even those who choose to remain in the public sector may be involved in 'moonlighting' in the private health institutions when they are officially not on duty at their public sector employment, in a bid to augment their meagre salaries.

It is worrying to note that as many as 71% of the nurses interviewed are considering leaving the country in the immediate future. Their most likely destination (MLD) is the UK (30%) (Table 4). However, a sizeable number of the respondents (24%) prefer destinations within Africa (mostly South Africa followed by Botswana). Other fairly popular destinations cited by the respondents include Australia (6%), the USA (3%), New Zealand (3%) and Canada (3%). The remaining 29% have not considered moving from the country in the near future.

The findings have important implications for Zimbabwe. Even though intentions do not automatically translate into action, the extent of dissatisfaction in the health sector is clearly massive. This also makes it imperative for policy-makers to implement policies that address the welfare and other concerns of nursing professionals.

Table 3 Nurse staffing patterns at selected public health institutions

	Variable	1995	1996	1997	1998	1999	2000
Harare Central Hospital	Established posts	—	—	—	794	794	934
	Number at post	—	—	—	676	606	594
	Vacant posts	—	—	—	118	188	340
Gweru Provincial Hospital	Established posts	236	242	242	242	242	242
	Number at post	231	230	237	238	232	235
	Vacant posts	5	12	5	4	10	7
Kadoma District Hospital	Established posts	—	108	112	116	119	119
	Number at post	—	105	90	105	113	112
	Vacant posts	—	3	22	11	6	7
Epworth Poly Clinic	Established posts	—	—	—	7	7	7
	Number at post	—	—	—	5	5	4
	Vacant posts	—	—	—	2	2	3
Mutare Provincial Hospital	Established posts	195	195	195	195	195	202
	Number at post	188	190	195	191	185	190
	Vacant posts	7	5	0	4	10	12
Kariba District Hospital	Established posts	34	34	34	34	34	34
	Number at post	24	24	24	24	24	24
	Vacant posts	10	10	10	10	10	10
Nyanga District Hospital	Established posts	—	—	—	—	—	58
	Number at post	—	—	—	—	—	54
	Vacant posts	—	—	—	—	—	4
Waverly Clinic	Established posts	5	5	6	6	6	6
	Number at post	2	2	2	3	2	2
	Vacant posts	3	3	4	3	4	4
Rimuka Maternity Clinic	Established posts	15	15	15	15	20	20
	Number at post	4	4	10	10	11	11
	Vacant posts	11	11	5	5	9	9
Nyameni Clinic	Established posts	16	16	16	16	16	16
	Number at post	11	11	13	13	13	13
	Vacant posts	5	5	3	3	3	3

Table 4 The most likely destinations

	Percentage
<i>Most likely destination</i>	
UK	30
Another country in Africa	24
Australia	6
USA	3
New Zealand	3
Canada	3
Other	2
Not applicable (not thinking of moving)	29
<i>n</i> = 157	

Factors leading to the migration of nursing professionals

The preceding section has shown that health institutions in Zimbabwe are currently understaffed owing to migration. This section examines the causes of nurse migration from the country. First, the survey sought to establish from the in-country nurses the reasons for their intention to migrate. The study results reveal that the reasons for the intention to migrate are varied and can be broadly grouped as economic, political, professional and social factors (Table 5).

Generally, economic factors are largely behind the desire to migrate. Some of the economic factors cited

Table 5 Reason for intention to move

Reason	Percentage
<i>Economic</i>	55.6
To save money quickly in order to buy a car, pay off a home loan, or for a similar reason	56.7
Because of a general decline in the economic situation in this country	56.1
Because I will receive better remuneration in another country	54.1
<i>Political</i>	31.2
Because I see no future in this country	47.8
Because there is a general sense of despondency in this country	24.2
Because of the high levels of violence and crime in this country	21.7
<i>Professional</i>	27.6
Because of a lack of resources and facilities within the healthcare system of this country	47.8
Because there is a general decline in the healthcare services of this country	43.3
Because the workload in the health services of this country is too heavy	42.7
To gain experience abroad	31.8
Because of insufficient opportunities for promotion and self-improvement	29.9
Because of the poor management of the health services in this country	29.9
Because I need to upgrade my professional qualifications due to the unsatisfactory quality of education and training in this country	21.0
Because I can not find a suitable job in this country	11.5
Because an unacceptable work tempo is expected of me in this country	9.6
Because I was recruited to work in the country I intend to move to	8.3
<i>Social</i>	24.8
In order to find better living conditions	47.8
Because the value systems in this country have declined to such an extent that I can no longer see my way clear to remain here	34.4
To ensure a safer environment for my children	25.5
In order to join family/friend abroad	16.6
In order to travel and see the world	15.3
Because of family-related matters	9.6
<i>n = 157</i>	

Note: Multiple factors cited by respondents.

include the desire to save money quickly (56.7%) for later use in the home country or the desire to receive better remuneration in the intended country of destination (54.1%). The existence of a parallel (black) market for foreign currency exchange on the domestic market has made it attractive for professionals to move to countries in the developed world with a view to saving money. They will obtain a windfall when they cash their earnings on the parallel market. For instance, while the official exchange rate between the Zimbabwe dollar and the United States dollar was 1 : 824 in October 2003, the

corresponding rate at the unofficial parallel market was as high as 1 : 6000.

Political factors cited included the general sense of despondency (24.2%) and the high levels of crime and violence in the country (21.7%). Professional factors influencing emigration included lack of resources and facilities within the healthcare system of the country (47.8%), heavy workloads (42.7%) and insufficient opportunities for promotion and self-improvement (29.9%). Lastly, social factors cited included the desire to find better living conditions (47.8%) and family-related reasons (9.6%).

Without question, economic factors have exerted the greatest influence on the migration decisions of health professionals. This is in line with the general decline in the country's economic conditions since the late 1990s. Political factors have also gained greater prominence, as the country's major political parties fought fierce battles, first in the 2000 parliamentary elections, and then in the 2002 presidential elections. The campaigns were associated with widespread violence, which was more severe in rural areas. This saw many professionals fleeing the country for their safety and that of their children. Still other health professionals are migrating because of professional factors. Most of these factors relate to the poor economic conditions prevailing in the country (e.g. general decline of healthcare services in the country).

The working conditions of health professionals are critical in the making of migration decisions. A study by Gaidzanwa (1999) revealed that health professionals in Zimbabwe are disgruntled by their current working conditions. Hence, information was sought regarding indicators of working conditions, such as working hours, client attendance, and quality of services offered at the health institutions. Most nurses in Zimbabwe are officially supposed to be on duty for between 31 and 40 hours a week (that is, about 8 hours a day). However, due to staffing problems, some end up working up to 4 extra hours a day. In the study, a small number of respondents (1.3%) were sometimes on duty for more than 50 hours weekly, 10 hours more than the stipulated national average. Such heavy workloads may consequently lead to their desire to migrate.

The shortage of nurses in the country's public health institutions has increased the workload of those who choose to remain. As many as 78% of the nurses interviewed expressed dissatisfaction over the number of clients they attend to per day, which they regard as extremely high. They blamed emigration for the increase in the number of clients they are attending to. In this case, the migration of nurses is seen as both a cause of ongoing migration (by increasing workload of remaining health professionals) and its effect (due to the reduction of available health professionals).

The shortage of foreign currency in Zimbabwe has affected service delivery in most health institutions, which rely on drugs and equipment that are mostly imported from other countries. Nearly 80% of the respondents indicated that they lack basic equipment at their health institutions, such as injections and thermometers. The absence of such basic equipment makes it difficult for nurses to conduct their duties efficiently and consequently affects their morale. This may also be a further motivational factor to leave.

HIV/AIDS and migration

The impact of HIV/AIDS on health system workers has been a subject of recent research (Stilwell et al. 2003; Tawfik and Kanoti 2003). The Joint Learning Initiative (2004) has identified three potential impacts of the HIV/AIDS pandemic on the health workforce. First, the health sector has lost some of its workers due to the HIV/AIDS pandemic. Many nurses are dying and are not being replaced. Second, health workers are faced with extra workloads, as HIV/AIDS patients comprise a majority of the patients they attend to. Third, fear of exposure may be a source of attrition, especially in developing countries where precautionary measures are not strictly adhered to due to a shortage of protective clothing.

Zimbabwe is one of several sub-Saharan African countries that are badly affected by the HIV/AIDS pandemic, with an estimated 25–30% of the sexually active population affected by the virus. However, the impact of HIV/AIDS on the migration of health professionals is not known.

The interviews that were held with individual nurses revealed that a sizeable number of health institutions were not taking adequate measures to protect them from contracting the virus. It is alarming to note that only 60% of the nurses interviewed indicated that their health institutions are taking adequate precautions against HIV infection. The absence of adequate measures to protect them against HIV/AIDS creates an unsafe environment for professionals, which can be an additional factor motivating them to migrate. Not surprisingly, 64% are constantly worried that they will get infected through an injury at work. Health workers, particularly nurses and midwives, at some public health sector institutions reported a shortage of gloves which increases their risk of contracting the virus, especially when conducting deliveries. Thus, some nurses suggested that a risk allowance be introduced. The disease has increased the workload of health professionals, with 66% indicating that they find caring for HIV/AIDS patients stressful, a factor which might result in the patients getting poor quality care. In sum, the epidemic is clearly having a major impact on the levels of work stress and perceptions of personal risk. To that extent, it may also be a factor prompting people to move to the private sector or out of the country.

Effects of migration of nurse professionals

The shortage of nursing professionals has negatively impacted on the workloads of the staff who choose not to migrate. In Zimbabwe, nurses run most health centres situated in the disadvantaged rural areas. Chasokela (2001) has noted that nurses working in rural areas have, over the years,

Table 6 Nurses' client attendance in selected health institutions in Zimbabwe

	Variable	1995	1996	1997	1998	1999	2000
Gweru Provincial Hospital	No. of patients	143 196	126 369	39 428	40 503	40 819	41 629
	No. at post	231	230	237	238	232	235
	Attendance/nurse	620	549	166	170	176	177
Kadoma District Hospital	No. of patients	192 707	133 509	181 185	182 755	180 087	166 255
	No. at post	112	105	90	105	113	112
	Attendance/nurse	1 721	1 272	2 013	1 741	1 594	1 484
Epworth Poly Clinic	No. of patients	—	—	—	22 440	38 000	42 000
	No. at post	—	—	—	5	5	4
	Attendance/nurse	—	—	—	4 488	7 600	10 500
Mutare Provincial Hospital	No. of patients	—	—	—	—	—	112 562
	No. at post	—	—	—	—	—	190
	Attendance/nurse	—	—	—	—	—	592
Nyanga District Hospital	No. of patients	—	—	—	—	196 297	163 247
	No. at post	—	—	—	—	54	54
	Attendance/nurse	—	—	—	—	3 635	3 023
Waverly Clinic	No. of patients	8 000	9 500	9 500	10 500	11 000	15 000
	No. at post	2	2	2	3	2	2
	Attendance/nurse	4 000	4 750	4 750	3 500	5 500	7 500
Rimuka Maternity Clinic	No. of patients	22 000	22 000	21 000	20 000	20 000	20 000
	No. at post	4	4	10	10	11	11
	Attendance/nurse	5 500	5 500	2 100	2 000	1 818	1 818
Nyameni Clinic	No. of patients	—	20 821	24 009	20 608	17 915	19 243
	No. at post	—	11	13	13	13	13
	Attendance/nurse	—	1 893	1 847	1 585	1 378	1 480

functioned in an increasingly expanded role, taking on the role of pharmacist, doctor, physiotherapist and so forth. This has negatively impacted on the workloads of nurses, particularly those stationed in less attractive regions. According to the MoHCW estimates, the current nurse/patient ratio is one nurse to 700 patients (Republic of Zimbabwe 1999), but the study established that nurses employed at the provincial health institutions investigated have nurse to patient ratios lower than the national average (Table 6). For instance, in 2000 the nurse/patient ratio for Gweru Provincial Hospital was 1 : 177 (below the national average) and 1 : 522 for Mutare Provincial Hospital. This compares to a nurse/patient ratio of 1 : 1484 at Kadoma District Hospital and 1 : 3023 at Nyanga District Hospital. The situation is worse for nurses employed at the health centres where doctor visits are rare. For instance, the nurse to patient attendance ratio in 2000 at Waverly Clinic (a health centre in Kadoma) stood at 1 : 7500 and at 1 : 10 500 for Epworth Poly Clinic (a health centre at the outskirts of Harare). The pattern

that emerges from these data is that nurses employed at health centres endure very heavy workloads and the situation improves significantly as one moves to the district and provincial health institutions. The study also established that less qualified staff (namely nurse aides) are carrying out nursing duties at health centres owing to the shortage of nurse professionals.

Poor job satisfaction and low morale are endemic among health professionals in Southern Africa (Bloom and Standing 2001). The research established that health professionals who remain in public employment increasingly augment their salaries by legal and illegal means. These include moonlighting in private health facilities and attending to non-medical businesses. The extent of such activities and their effects on the quality of care were not intensively investigated and should be a subject for future research. While doctors have been able to establish private surgeries, nurses in Zimbabwe have been hampered from doing so because of the current legal framework. Hence, for most nurses, migrating to the private sector remains the only viable

option. However, some public sector health nurses who choose not to migrate to the private sector are engaged in part-time work in the private sector to augment their salaries.

Hence, it can be observed that the public sector is largely left with individuals who are poorly motivated to perform their work. However, some decide to remain in the public sector for various reasons. Mutizwa-Mangiza (1996) and Cohen and Wheeler (1997) point out that job security, career advancement, and opportunities for further training are better in the public health sector. Particularly with regard to older workers, these factors can be a motivation for them to stay in their countries.

The migration of skilled health professionals from the country has also adversely affected the quality of care offered in the health institutions. This confirms the findings of other studies, which reported falling standards of care, which include 'uncaring and abusive' attitudes towards patients (Mutizwa-Mangiza 1996). This can generally be attributed to a low morale resulting from excessive workload associated with the stress of dealing with so many dying patients. Consequently, the quality of care has been significantly affected, a factor arising directly from the shortage of health professionals due to emigration.

The loss of nurses through migration has led to a reduction in the consultation time available to patients. As a result, diagnosis and prescription of treatment are carried out hurriedly. This obviously affects the quality of health-care offered to patients. Furthermore, the reduction in consultation may lead to a wrong diagnosis, which may endanger the lives of patients. Interviews with nurses revealed that more than half (55%) took less than 10 minutes to attend to a client while only 17% took more than 20 minutes to attend to an individual client. Furthermore, more than half (55%) of the nurses interviewed reported that they are sometimes forced to offer some services that should ideally be offered by another specialised member of the health team. This practice may yield two main consequences: (a) it increases the workload of nurse professionals and (b) the lives of patients may be endangered as general nurses may end up performing more specialised duties.

NURSE MIGRATION FROM ZIMBABWE: TOWARDS A THEORETICAL MODEL

The study has demonstrated the existence of both internal public-to-private sector movement and international migration of nurses. The survey results suggest the existence of step-wise migration in the migration process of Zimbabwean nurses (Fig. 5). In step-wise migration, a move is undertaken in an imaginary horizontal plane with the intention of assisting in the vertical or upward movement. In the case of

Zimbabwean nurses, the 'sideways' internal move is to the private sector, which offers better salaries and good opportunity to migrate to an overseas destination.

It is important to note that there are two distinct channels of nurse migration from Zimbabwe. Some nurses move through recruitment agencies, which also cater for their relocation expenses. Others who fail to move through such channels may move as temporary visitors or 'political refugees' (which, incidentally, has become popular with Zimbabweans). For instance, in the UK they may either be employed in jobs that are not related to nursing or may be employed in nursing homes that do not require them to register with the NMC. To facilitate the latter case, nurses may initially move to the private sector to enable them to save the necessary airfares, which eventually facilitates their move abroad. The private sector therefore provides the necessary launching pad for the eventual move abroad. Besides being paid better, nurses employed in the private sector have better access to information due to their mainly urban location. This eventually influences their migration decisions. When the nurses move to the private sector, they increase their chances of moving abroad. In this way, migration is essentially being undertaken in phases. This also incorporates the target income theory, in which migrants move with the intention of accumulating sufficient income to enable them to move abroad. In this example, the target income represents sufficient money to buy the now-expensive air ticket and visa application fees.

Other complexities can be noted in the movement of health professionals in the public sector. In Zimbabwe, distinct levels of development can be drawn between urban and rural areas. The latter, in particular, often lack basic infrastructure such as all-weather roads, electricity and clean water supplies. In addition, rural health centres in Zimbabwe often lack basic drugs and equipment and are often understaffed. This translates into heavy workload for the few nurses posted in such areas. Because of such factors, rural-urban movement of health professionals within the public sector is common and consequently the staffing situation in rural health institutions continues to worsen. Some nurses in rural areas also move to private health institutions in urban areas, a move that entails changes in both geographical location and employer.

However, in some cases, direct migration of nurses from the public sector (even those based in rural areas) to the UK is occurring. Kinship ties, whereby friends and relatives who reside abroad play the facilitating role, are mostly sustaining this pattern. They purchase the air ticket for the prospective migrant and effectively replace the private sector in the example cited above. In some cases, nurses who are employed in rural

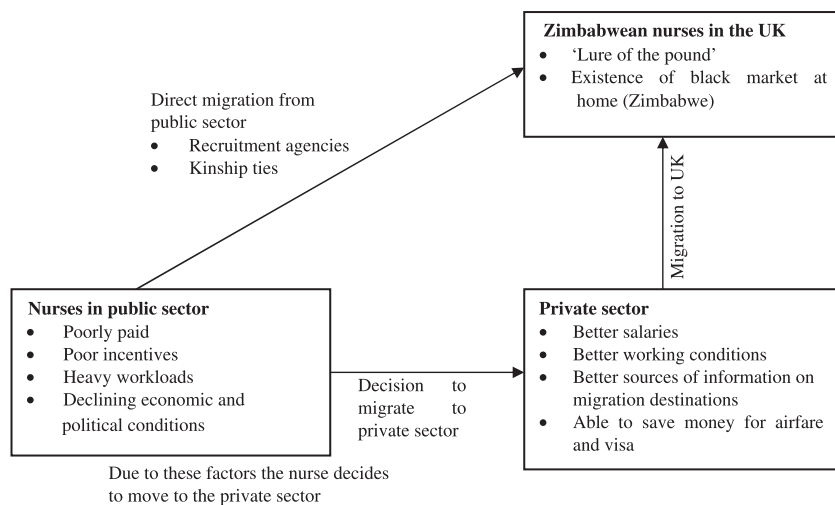


Figure 5 The step-wise migration of Zimbabwean nurse professionals.

areas with good information networks may move directly to an international destination. This concurs with the findings of Montanari (2002) who observed that it is no longer necessary for international migration to have a national prologue, that is, the preliminary transfer to urban areas, the classic launching pad for international migration until a few years ago.

POLICY RESPONSES

The high rate of nurse emigration from Zimbabwe has led the government to adopt several measures to contain the problem. Some of the measures that have been adopted are outlined below.

First, the government has introduced bonding of newly qualified nurse professionals. All the nurses that started training in 1997 are bonded by the government for 3 years. However, it is common practice that the nurses may serve the duration of the bonding period, after which they are free to make their own decisions regarding where they want to work. In this case, it can be observed that bonding only acts as a delaying mechanism to migration and does not address its root causes. The nurses may dutifully serve the period of bonding and migrate to other countries at the expiry of their bonding period.

Second, fellowship and scholarship programmes, as well as advanced training programmes, have been introduced to enhance the capacity of the health professionals in the provision of their services. They are also meant to reduce the migration of nurses who leave to further their studies. An Institute of Continuing Health Education (ICHE) was established to cater for the specialist postgraduate training and continuing education needs of those in the medical field at

the UZ School of Medicine. It was realised that the country was losing its scarce foreign currency by sending health professionals overseas to receive specialist training. ICHE was established in the late 1970s and now provides all forms of continuing medical education to all categories of health professionals in areas such as certified education, and skills advancement, update and renewal.

Third, salary reviews have been introduced to cushion the health professionals from the harmful effects of the country's high cost of living. However, with the current hyperinflation prevailing in the country, the salary reviews are constantly lagging behind thereby negatively affecting the livelihoods of the health professionals.

Lastly, performance management has been introduced in the health sector. While performance management has led to professional acknowledgement, the results are not being implemented because of stiff resistance to the policy within the system. Hence, the implementation of policies aimed at retaining staff will not achieve the desired results as long as the question of low remuneration is not addressed.

CONCLUSIONS

This paper has provided an overview of the trends and effects of the nurse migration from Zimbabwe. Most of the country's public health institutions are grossly understaffed and the skeletal staff remaining is reeling under heavy workloads. Both urban and rural health institutions have been affected by emigration, but the rural areas have been hardest hit and are being served by un- or underqualified health staff. The situation is much better in urban areas, which have alternative sources of medical health-care in the form of

private health institutions. Besides offering better services to patients, albeit at a higher fee, the private health sector also provides an escape route for the disgruntled public health sector nurse professionals who find the salaries offered by the public sector unattractive. In fact, the migration of nurses to the private sector has been viewed as partially responsible for the decline in the quality of healthcare services offered by the public sector. The argument might be made in the context of massive out-migration that this 'safety valve' does at least keep medical professionals in the country. Nurses who have failed to move to the private sector are engaged in part-time work in the private sector and are often exhausted by the time they attend their shifts at their health institutions.

It has been demonstrated that the overall picture of nurses employed nationally has been one of decline. Notwithstanding the fact that nurses have been moving to the private sector, others have chosen to remain in the public sector for a number of reasons. The findings suggest that some nurses who fail to migrate through recruitment agencies are using private sector employment as a stepping stone for an eventual move to an international destination (stepwise migration). It has been observed that the UK is the major destination for nurses from Zimbabwe, and that the favoured destinations within Africa are Botswana and South Africa.

The problem of HIV/AIDS has been highlighted especially in as far as it impacts on the workload of the health professionals. The disease has added to the strain experienced by nurses due to its chronic nature. However, what is particularly worrying is the fact that some nurses, especially those working in rural areas, alleged that their health institutions were not taking adequate measures to protect them from the risk of contracting HIV/AIDS. Hence, a combination of heavy workloads and lack of protective clothing has influenced nurses to migrate from the disadvantaged parts of the country.

The study has assessed the current government policies aimed at retaining nurses in the country and found them to be largely ineffective. For instance, it was observed that initiatives to attract health professionals to marginal (rural) areas are not yielding the desired effects as the professionals consider them to be inadequate. The loopholes in some of the current policies have also been exposed, thereby making the need to draw up policies that are effective in both retaining the current staff and re-attracting the emigrant staff. It is hoped that this research project will positively aid policy-makers in making informed policy decisions thereby alleviating the plight of public sector nurses. It is only after the adoption of a proper human-resource development policy that the country's health sector can be lifted from its current doldrums.

ACKNOWLEDGEMENTS

The author wishes to thank the World Health Organisation (WHO) AFRO Region for funding the study through the Division of Health Systems and Services Development. The author gratefully acknowledges the technical assistance of Professor Jane Mutambirwa in conducting the study.

REFERENCES

- Bach S. 2004. Migration patterns of physicians and nurses: Still the same story. *Bulletin of the World Health Organisation* 82: 625–6.
- Bloom G and H Standing. 2001. Human resources and health personnel. *Africa Policy Development Review* 1: 7–19.
- Buchan J. 2001. Nurse migration and international recruitment. *Nursing Inquiry* 8: 203–4.
- Buchan J and J Sochalski. 2004. The migration of nurses: Trends and policy responses. *Bulletin of the World Health Organisation* 82: 587–94.
- Buchan J, T Parkin and J Sochalski. 2003. *International nurse mobility: Trends and policy implications*. Geneva: World Health Organisation.
- Buerhaus PI, DO Staiger and DI Auerbach. 2000. Implications of an aging registered workforce. *Journal of the American Medical Association* 283: 2948–54.
- Chasokela C. 2001. Policy challenges for the nursing profession. *Africa Policy Development Review* 1: 1–6.
- Cohen JM and JR Wheeler. 1997. Building sustainable professional capacity in African public sectors: Retention constraints in Kenya. *Public Administration and Development* 17: 307–24.
- CSO. 2003. *Zimbabwe — facts and figures 2001/2002*. Harare: CSO.
- De Castella T. 2003. Health workers struggle to provide care in Zimbabwe. *Lancet* 362: 46–7.
- Dovlo DY. 1999. Report on issues affecting the mobility and retention of health workers/professionals in Commonwealth African States. Unpublished report for Commonwealth Secretariat Technical Support Group.
- Gaidzanwa R. 1999. *Voting with their feet: Migrant Zimbabwean nurses and doctors in the era of structural adjustment*. Uppsala: Nordiska Afrikainstitutet.
- Grant H. 2004. From the Transvaal to the Prairies: The migration of South African physicians to Canada. Prairie Centre of Excellence for Research on Immigration and Integration Working Paper No. WP02-04. <http://www.queensu.ca/samp/migrationresources/braindrain/documents/grant.pdf> (last accessed 14 December 2004).

- Hardill I and S McDonald. 2000. Skilled international migration: The experience of nurses in the United Kingdom. *Regional Studies* 34: 681–92.
- Hawthorne L. 2001. The globalisation of the nursing workforce: Barriers confronting overseas qualified nurses in Australia. *Nursing Inquiry* 8: 213–29.
- International Organisation for Migration (IOM). 2000. *World migration report 2000*. Geneva: International Organisation for Migration.
- Johnson JM and M Regets. 1998. International mobility of scientists and engineers to the US-brain drain or brain circulation? *NSF Issue Brief* June: 98–316.
- Joint Learning Initiative. 2004. Combating HIV/AIDS: The global health workforce crisis. <http://www.globalhealth-trust.org> (last accessed 13 December 2004).
- Kline DS. 2003. Push and pull factors in international nurse migration. *Journal of Nursing Scholarship* 35: 107–11.
- Montanari A. 2002. Mass migrations: Relationships between Africa and the European Union. In *Geographical renaissance at the dawn of the new millennium: The Italian perspective*, ed. L Buzzetti, 183–96. Rome: Societa Geografica Italiana.
- Mutizwa-Mangiza D. 1996. The medical profession and the state in Zimbabwe: A sociological study of professional autonomy. PhD Thesis, Department of Sociology, University of Warwick.
- Ndlovu RJ, RV Bakasa, A Munodawafa, N Mhlangu and S Nduna. 2001. The situation of nursing in Zimbabwe. *Africa Policy Development Review* 1: 41–73.
- Nursing and Midwifery Council. 2004. Statistical analysis of the register: 1 April 2002 to 31 March 2003. <http://www.nmc-uk.org> (last accessed 14 December 2004).
- Oyowe A. 1996. Brain drain colossal loss of investment for developing countries. *Courier ACP-EU* 159: 59–60.
- Republic of Zimbabwe. 1999. *Commission of review into the health sector: Key messages report*. Harare: Government of Zimbabwe.
- Saravia NG and JF Miranda. 2004. Plumbing the brain drain. *Bulletin of the World Health Organisation* 82: 608–15.
- Stilwell B. 2001. *Health worker motivation in Zimbabwe — international report*. Geneva: Department of Organisation of Health Care Delivery, WHO.
- Stilwell B, K Diallo, P Zurn, MR Dal Poz, O Adams and J Buchan. 2003. Developing evidence-based ethical policies on the migration of health workers: Conceptual and practical challenges. *Human Resources for Health* 1: <http://www.human-resources-health.com/content/1/1/8> (last accessed 14 December 2004).
- Tawfik L and S Kanoti. 2003. *The impact of HIV/AIDS on the health workforce in Sub-Saharan Africa*. Washington DC: Sara Project, USAID Bureau for Africa.
- WHO. 1997. *Report of the special working group on WHO's constitution and the brain drain problem in Africa*. Brazzaville: WHO/AFRO.
- World Bank. 1995. *World development report: Workers in an integrating world*. Washington DC: World Bank.
- World Bank. 2000. *Entering the 21st century — world development report 1999/2000*. New York: Oxford University Press.