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Skilled health professionals' migration and its impact on health delivery in Zimbabwe

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Abstract

The paper investigates the magnitude of migration of health professionals from Zimbabwe, the causes of such movements and the associated impacts on health care delivery. International migration of health professionals has led to staff shortages and the situation is worse in public compared to private health institutions. The quality of care given to patients has also declined. The research calls for the adoption of an integrated approach in solving the concerns of health professions.

KEYWORDS: BRAIN DRAIN; MIGRATION; HEALTH

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Introduction

The migration of skilled professionals from developing to industrial countries in the North has reached significant proportions, and there is little evidence that these flows will decrease in the near future. There is a general consensus in the discourse on economic development that the migration of skilled workers constitutes a drain on the sending country's human resources because it invests in the human capital development that will be utilised by the recipient country. Although such movements are largely beneficial to the individuals concerned, they have negative socio-economic impacts on the sending country. In Africa, low salaries and poor working conditions stemming from the unsuccessful implementation of Structural Adjustment Programmes (SAPs) have fuelled the brain drain. Recent literature shows that Africa is losing its skilled health workers at an alarming rate (Bloom and Standing 2001; Bundred and Levitt 2000; Ndlovu et al. 2001; WHO 1997). Consequently, health service provision has been adversely affected, especially in remote locations.

The brain drain phenomenon has become topical in Zimbabwe where deteriorating economic, social and political conditions are aggravating the emigration tide. The country's health delivery sector is arguably the worst affected by the phenomenon as health workers are emigrating in search of greener pastures in southern Africa, western Europe, North America and Australia. Poor working conditions and low remuneration are cited as the main push factors. The HIV/AIDS pandemic has increased the workload on the health workers and exposed them to additional risks at a time when the number of available health workers has not been increased to enable adequate staffing of both existing and new health facilities.

In this article I present the findings of a national survey that was conducted in Zimbabwe in July 2002. The research, which was funded by the World Health Organisation (WHO), was also conducted in Cameroon, Ghana, Senegal, South Africa and Uganda. The study sought to assess the magnitude of migration of skilled health personnel, analyse the effects on health care delivery and recommend ways of retaining skilled health personnel.

Background

The brain drain from developing countries has become a subject of policy discussion and academic enquiry in recent years. However, knowledge on the magnitude of the phenomenon is limited because of lack of reliable data sources (see, for example, Adepoju 1995; Gaidzanwa 1999; Meyer and Brown 1999; Russell 1993). Where statistical data are available, they tend to be of poor quality, have numerous gaps and cannot be used as reliable data sources.

Salt (1987) has noted that migration is a response to the spatial diversity in the means of production, a factor resulting from the spatial and temporary inequalities in the levels of economic development. Due to globalisation and recent marked improvements in transport networks and advances in information technology, skilled health professionals are increasingly becoming mobile and the distance between countries in relative terms has shrunk considerably. Both extensive knowledge in developing countries of opportunities available in industrialised countries and widely accessible means of migration exacerbated the potential for migration in the 1980s (Castles 1999; Gould and Findlay 1994).

A report by the ECA/IDRC/IOM (2000) has shown that Africa is losing its 'best and brightest' to the industrialised world. These 'brains' constitute a significant proportion of the human capital necessary to establish a solid foundation for economic growth. Since it is usually the 'best and brightest' professionals who are mostly likely to emigrate, leaving behind the 'weak and less imaginative', the brain drain presents socio-economic challenges for developing countries such as Zimbabwe. In the mid-1990s, Africa was losing about 23,000 qualified academics annually in search of better working conditions in the developed world (World Bank 1995). In response, the continent has been spending nearly $4 billion a year to replace the lost professionals with expatriates from the West, an amount that represents nearly 35 per cent of Africa's total Overseas Development Assistance (ODA) (Oyowe 1996).

However, since the mid-1980s migration patterns have changed because there has been increasing migration of highly skilled Africans to destinations within Africa, although their aggregate numbers remain to be estimated. Gould (1988) has identified three main reasons for this trend, namely (a) a decline in economic opportunities for migration to developed countries; (b) increased economic

differentiation among African countries; and (c) educational output expanded faster than the economies in many African countries, leading to disparities between the supply of and demand for skilled workers and to the emigration of those unable to find work at home.

Research methodology

A questionnaire survey involving face-to-face interviews with stakeholders was used to collect primary data. The seven standard questionnaires were designed, among other things, to collect data relating to the magnitude of the migration situation among skilled health personnel in the country, the factors leading to their decision to migrate and the effects of such movements on health care delivery. The respondents were drawn from the Ministry of Health and Child Welfare (MoHCW), individual health workers, informants in key positions, community users of the health system, migrant health staff and returnee health staff.

One tertiary hospital, five regional and six district hospitals were selected for the study based on the country's agro-ecological regions (see Figure 1). Two schools of nursing (Mpilo and Harare Hospital) were selected as well as the Medical School of the University of Zimbabwe. Numerous problems were encountered during the research process, such as the unavailability of vital data. Data on staffing patterns in public health institutions were sometimes incomplete or even unavailable from the MoHCW and at some health institutions studied.

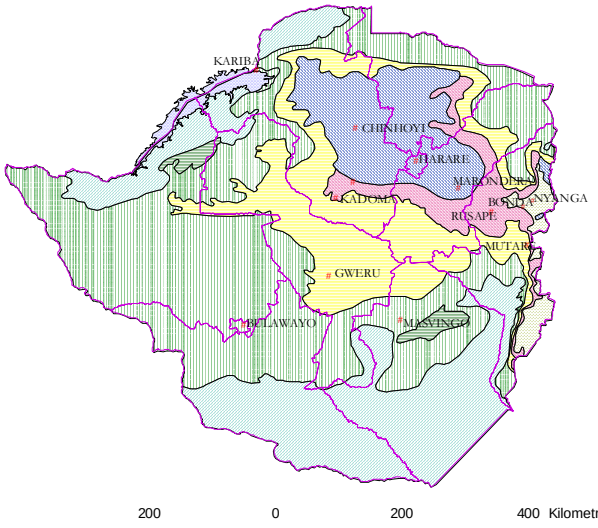

Figure 1. Distribution of study centres

Research findings

Magnitude of migration of skilled health personnel

National level. Data were collected to determine changes in the staffing patterns in public health institutions both at the national and health institution levels. At the national level, information relating to staffing patterns was gathered for nurses and doctors, but since it was unavailable for dentists and pharmacists there were many gaps in the data supplied. This is attributable to the fact that computerisation was introduced recently at most health institutions in the country.

Despite these shortcomings, the Central Statistical Office (CSO) managed to supply complete data on health personnel registered in the country (Table 1) covering the period from 1995 to 1998. The data show that the number of registered medical practitioners countrywide increased slightly from 1575 in 1995 to 1626 in 1998 (3 per cent increase). The Medical School at the University of Zimbabwe trains about 100 doctors every year. However, the fact that there was an increase of only 51 doctors over the four-year period may hint to the extent to which international migration of doctors is occurring. The table also shows a slight increase in the number of nurses during the period under review. It should, however, be noted that even though 15,476 nurses were registered countrywide in 1998, only 12,477 remained registered by December 2001.

The information gathered from the MoHCW on the status of staffing in the country's public health institutions shows a general decline in the number of nurses and doctors employed in that sector (Table 2). The number of doctors decreased from 756 in 1991 to 618 in 1996. The staffing figures oscillated around 700 between 1996 and 1999 and rose to 742 in 2000.

Table 2 shows that nursing is the profession worst affected by the brain drain. The number of nurses employed in the public sector fell by over 1000 from 8662 in 1996 to 7007 in 1999. This decline occurred at a time when the country's training institutions were producing more than 300 trainee nurses annually (Figure 2). While a significant number left for the private sector, many nurses have been leaving for overseas destinations such as the UK where salaries are

much higher than those offered locally.

Table 1. *Health personnel, 1995–1998 (private and public services registered)*

Year	1995	1996	1997	1998
Medical Practitioners	1,575	1,559	1,573	1,626
Nurses	15,096	15,030	15,198	15,476*

* Figure had dropped to 12,477 by December 2001.
Source: CSO 1999

Table 2. *National staffing patterns in the public health sector, 1991–2000*

Year	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Doctors	756	763	756	770	674	618	742	692	711	742
Nurses	8403	8306	8014	8457	8635	8662	7923	–	7007	7795

The staffing crisis in Zimbabwe's public health sector is highlighted by the fact that the sector employed only 28.7 per cent of its national requirements in 1997. Of the 1634 doctors registered in the country in 1997, only 551 (33.7 per cent) were employed in the public sector, with most of the remaining registered doctors employed in the private sector (Table 3). The problem was more severe for pharmacists, as only 18.7 per cent of the posts were filled in the same year. The shortage of pharmacists, in particular, has been worsened by strong recruitment drives in developed countries, notably the United Kingdom. In early 2002 there were media reports of a plane load of pharmacists destined for the UK from Zimbabwe and a further plane load was expected to leave the country for the same destination later that year (Dzirutwe, 2002). Evidence that nurses have been moving to the private sector is also provided by the number of nurses registered nationally, which rose marginally from 15,096 in 1995 to 15,476 in 1998 (an increase of 2.5 per cent), while the number of nurses employed in the public health institutions declined from 8635 in 1995 to 7007 in 1999 (a decline of 19 per cent).

Figure 2. *Nurses trained in Zimbabwe: 1992–2000*

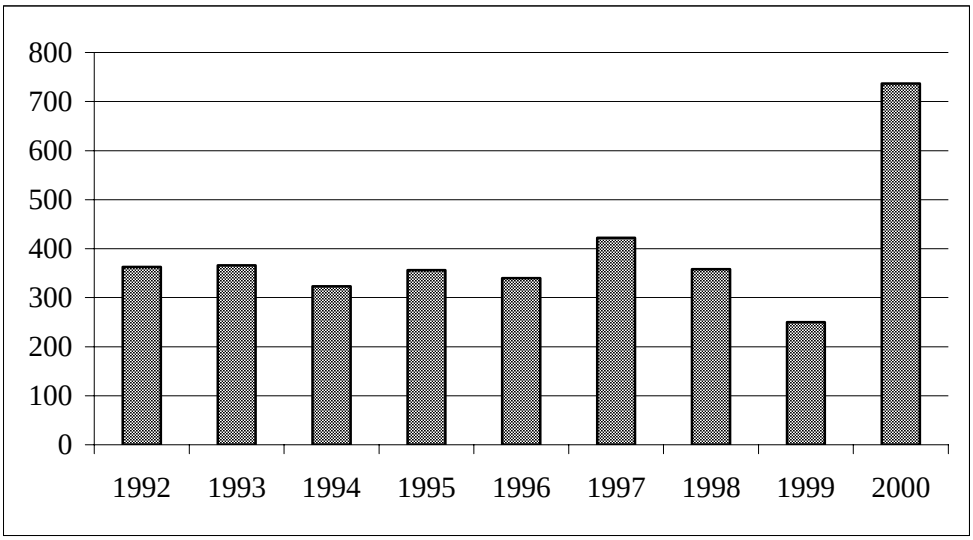

Table 3. *Health professionals employed in the public sector, 1997*

	Number registered in the country*	MoHCW requirement (1997)	Approved Posts	Filled Posts*	% of require-ment filled
Doctors	1,634	1,851	676	551	28.7
Nurses	16,407	14,251	7923	7923	55.6
Pharmacists	524	198	59	37	18.7
Dentists	148	43	14	14	32.6

*Figures are for beginning of the year while those in Tables 1 and 2 are for end of the year. Source: Republic of Zimbabwe, 1999

Health institution level

The shortage of skilled health workers has considerably increased the workloads of those who chose not to migrate. The MoHCW estimates the current doctor to patient ratio at 1:6000, but the research established that this is not common at all levels of health care. The study shows that health institutions located in urban areas are better staffed with health professionals than those located in rural areas. For example, Harare Central Hospital employs an excess of 71 doctors over its established posts. Similarly, provincial hospitals are better staffed than district hospitals. It is also worth noting that in large urban centres the workload

for the doctors at public health institutions is reduced by the existence of private hospitals and clinics.

The shortage of doctors nationally in public health institutions has impacted negatively on the workloads of medical practitioners. An analysis of the data on workloads shows that doctors working at district hospitals have heavier work-loads than their counterparts at provincial and central hospitals. This is related to the number of doctors employed at the health institutions. For instance, while the attendance per doctor at Gweru provincial hospitals was 1:8650 in 2000, the attendance per doctor at Kadoma District Hospital was 1:27,709 (that is three to four times higher than at provincial hospitals). Based on these figures, it can be argued that doctors posted to areas with lower levels of development have a much heavier workload than those employed in more developed city areas.

According to the MoHCW estimates, the current nurse/patient ratio is one nurse to 700 patients. In Zimbabwe, nurses form the backbone of the country's health delivery system and run most of the health centres situated in the economically disadvantaged areas. Chasokela (2001) has noted that nurses working in rural areas have over the years functioned in an increasingly expanded role, taking on the responsibilities of pharmacist, doctor, physiotherapist and so forth. The study established that nurses employed at provincial health institutions have nurse to patient ratios that are lower than the national average (Table 4). For instance, in 2000 the nurse to patient ratios for Mutare and Gweru provincial hospitals were 1:592 and 1:177 respectively. This is considerably lower than the ratios of 1:3023 and 1:1484 at Nyanga and Kadoma district hospitals respectively. The situation is even worse for nurses employed at the health centres where doctor's visits are rare. For instance, in 2000 the nurse to patient attendance ratio at Waverly Clinic (Kadoma) stood at 1:7500 and at 1:3500 for Epworth Poly Clinic. The pattern that emerges from these data is that the workload of nurses becomes significantly lighter as they move from health centres to district and provincial health institutions. It could, therefore, be inferred that the heavy workload the nurses endure at these institutions is one of the main reasons for their movement from health centres to district and provincial health care centres. This has made it necessary for less qualified staff (namely nurse aides) to carry out nursing duties.

The study established that nurses are also migrating to the private sector, which

offers competitive salaries. However, it needs to be pointed out that, unlike doctors, it is difficult for nurses to set up their own private clinics. On the other hand, some public sector health nurses who choose not to migrate to the private sector engage in part-time work at private health institutions to augment their salaries. In the focus group discussions, it emerged that 'nurses in the public sector are engaging in a lot of part time work in private clinics. By the time they come for their normal duties, they will be too tired to work. That is why we get poor service when we visit the clinic.' It can therefore be noted that the public sector is largely left with individuals who are less dedicated and poorly motivated to perform their work.

Migration intentions and causes of migration

The intention to migrate by health professionals was also sought so as to establish the likelihood of them leaving the country in the near future. The survey results indicate that most of the respondents (68.0 per cent) are considering leaving the country to work elsewhere in the world. The likely destination for most of these professionals is the United Kingdom (29.0 per cent). However, a sizeable number of them prefer destinations within Africa (mostly South Africa followed by Botswana). Other fairly popular destinations cited by the respondents include Australia (5.6 per cent), the United States of America (4.8 per cent), New Zealand (2.2 per cent) and Canada (2.2 per cent).

Table 4. *Attendance per health personnel at selected public health institutions*

	Health Institution	1995	1996	1997	1998	1999	2000
Doctors	Gweru Provincial Hospital	28,639	31,592	23,837	23,230	20,858	8,650
	Kadoma District Hospital	27,530	26,702	30,198	26,108	30,015	27,709
	Epworth Poly Clinic	NEP	NEP	NEP	NEP	NEP	NEP
Nurses	Gweru Provincial Hospital	620	549	166	170	176	177
	Kadoma District Hospital	1,721	1,272	2,013	1,741	1,594	1,484
	Epworth Poly Clinic	–	–	–	1,870	3,166	3,500
Midwives	Gweru Provincial Hospital	1,323	1,241	1,260	1,401	1,538	1,579
	Kadoma District Hospital	–	–	–	–	–	–
	Epworth Poly Clinic	–	–	–	1,080	1,796	2,340

NEP = No established post

The study established that the major reasons for the intention to migrate are primarily economic (Table 5). Most of the professionals would like to emigrate so that they can receive better remuneration in the intended country of destination (55.0 per cent), or would like to save money quickly in order to buy a car or pay off a home loan (54.1 per cent). Still others intend to emigrate to achieve better living conditions (47.2 per cent), through lack of resources and facilities within the health care system of Zimbabwe (45 per cent), because they see no future in Zimbabwe (45 per cent), or because of the declining health care services in the country (42.9 per cent).

Furthermore, 87 per cent of the health professionals indicated that the public sector failed to offer competitive salaries, and 68.5 per cent said they found it

difficult to live on their earnings. Even though 86.6 per cent said their salaries were paid on time, the health professionals concurred that it was necessary for them to do two or more jobs to make ends meet. Though 86.6 per cent would prefer to stay in the public sector if they were offered better salaries, 67.5 per cent were considering moving to the private sector, which offers higher salaries. In addition to the above, the private sector offers better fringe benefits compared with the public sector (77.9 per cent).

Table 5. *Reasons for intention to move*

Reason	**(%)**
Because I will receive better remuneration in another country	55.0
Because of a general decline in the economic situation in this country	55.0
To save money quickly in order to buy a car, pay off a home loan, or for a similar reason	54.1
In order to find better living conditions	47.2
Because I see no future in this country	45.0
Because of a lack of resources and facilities within the health care system of this country	45.0
Because there is a general decline in the health care services of this country	42.9
Because the workload in the health services of this country is too heavy	39.4
Because of insufficient opportunities for promotion and self-improvement	34.2
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	32.0
Because of the high levels of violence and crime in this country	22.9
N = 231	

Note: Question is multiple response.

Interviews held with emigrant health staff revealed that most skilled health professionals have emigrated in search of better remuneration (56 per cent) and better living conditions (48 per cent). However, others were fleeing the high levels of political violence in the country (48 per cent), saw no future for their children (48 per cent), and were frustrated by the lack of resources and facilities

in the country. Still others had observed a general decline in the health care services in the country (44 per cent) and some migrated because of the poor management of the health services in the country.

HIV/AIDS and migration

With the deadly virus said to have infected 25–30 per cent of its sexually active population, Zimbabwe is one of several sub-Saharan African countries badly affected by the HIV/AIDS pandemic. A close look at the HIV/AIDS pandemic and the migration nexus reveals that HIV/AIDS has increased the workload of the few remaining health staff, while many are said to have migrated from the country due to lack of preventive measures, which expose them to the risk of contracting the disease. The exposure to the disease has created a stressful environment in which workers become frightened at the thought of contracting it. However, most health professionals (61 per cent) reported that their health institutions take adequate precautions against HIV infection. However, 57.6 per cent are constantly worried that they will get infected from an injury at work. Health workers at some institutions reported a shortage of gloves, which increases their risk of contracting the disease, especially when conducting deliveries. Thus, some nurses suggested that a risk allowance be introduced and paid to the health professionals. The disease has increased the workload of the health professionals and 58.4 per cent indicated that they find caring for HIV/AIDS patients stressful, a factor that might result in patients getting poor quality care. On a positive note, 76.2 per cent are glad to use their professional skills even though they find caring of patients with HIV/AIDS demanding.

Effects/consequences of migration of skilled health personnel

The migration of skilled health workers from the country has adversely affected the quality of health care offered in the health institutions. Mutizwa-Mangiza (1998) reported on falling standards of care, which include ‘uncaring and abusive’ attitudes towards patients. This is largely attributed to low morale resulting from an excessive workload associated with the stress of dealing with so many dying patients. Of much concern, however, are reports of patients being turned away from busy public clinics so that staff can carry on with their private practices. This has an obvious effect on equity of access to care for the poorest

and needs to be investigated further so that corrective measures are implemented.

The decline in the number of skilled health professionals in the public sector has resulted in significant changes in the quality of care provided. For instance, it has led to understaffing of health institutions, which means that patients have to wait longer before they receive medical attention. Patients have to wait for a long time before they receive medical attention (28 per cent), which has resulted in unnecessary deaths (28 per cent), for some patients die from an otherwise curable condition. Experienced personnel have been lost from the system, the quality of care has fallen and the health system of the country has virtually collapsed. Marginal and disadvantaged areas, such as rural districts, have been worst affected because the skilled workers tend to shun such places. In addition, the nurse to patient ratio has increased, making it necessary for cadres who are not professionally qualified to attend to patients. Thus, the quality of care rendered has subsequently been compromised.

The role of traditional medical practitioners

The role of traditional healers in contemporary society has been diminished with the introduction of modern allopathic medicine. However, due to the collapse of the formal health care system in recent years, traditional healers have begun to play an increasingly important role in the health care system. It was pointed out during the FGD that long queues could be observed at the residences of traditional healers. Some traditional healers also claim to cure HIV/AIDS, a claim that has generated brisk business in the face of a growing HIV/AIDS crisis in the country. Thus, the poor are finding themselves without formal health care service and are going to the informal sector where they are attended to by the traditional healers who charge affordable rates.

Implications of study on retention and mitigation of migration

The results of the questionnaire study reveal that the major factors that would influence the professionals to remain in their home country are better salaries (76.6 per cent), better fringe benefits (71.4 per cent), a more pleasant working environment (69.3 per cent), improved facilities and resources in the care system (63.3 per cent) and a reasonable workload (59.7 per cent) (Table 6).

Other factors of note include the presence of a more peaceful social environment (51.5 per cent) and more accessible education and training opportunities (50.6 per cent).

Table 6. *Factors motivating the retention of health care workers in the country*

Factor	**(%)**
Better salaries	76.6
Better fringe benefits	71.4
A more pleasant and caring working environment	69.3
Improved facilities and resources in the health care system	63.6
A more reasonable work load	59.7
A more peaceful social environment in the country	51.5
More accessible education and training opportunities	50.6
Better working relationships in the public health sector	48.9
Better quality education and training in my professional field	45.9
The provision of adequate day care facilities for children of employees	43.7
Better leadership in the health sector	43.3
The appointment of more competent health service managers	42.4
Innovative training opportunities such as Distance Education	34.6
Any other reasons	8.7

Most of the key informants (83.3 per cent) agreed that better salaries could lure skilled personnel back to their country of origin. Better incentives (58.3 per cent) were also cited as a major pull factor for skilled health personnel residing outside the country. Other factors that can influence the return of professionals residing abroad are good working conditions (33.3 per cent), prospects for further education (16.7 per cent), redress of macro-economic environment (16.7 per

cent) and a well-developed human resources policy (16.7 per cent). A stable political climate (41.7 per cent) and the provision of adequate drugs and equipment (25 per cent) were also cited as some of the factors that might influence the return of skilled health personnel.

Policy responses

The government has recruited foreign health professionals to ease staffing shortages, particularly in economically disadvantaged rural areas. The Zimbabwean government has an agreement with the Cuban government and in the year 2002 there were 117 Cuban doctors practicing in the country. While some informants in key positions commented that such foreign skilled health staff eased staffing shortages and improved the quality of care, others argued that language barriers made teamwork difficult and that the relief was only temporary because the workers were on short-term contacts.

The Zimbabwean government has introduced numerous policies and strategies to ensure the retention of skilled health personnel in the public sector. According to the key informants, these policies include the provision of housing and a transport allowance, call and stand-by allowances, a performance management system, salary reviews, fellowship and scholarship programmes, advanced training programmes and bonding of newly trained graduates. These measures were adopted in an effort to retain skilled health professions after realising that service delivery was being compromised by the migration of health professionals. Fellowship and scholarship programmes, together with advanced training programmes are meant to enhance the capacity of the health professionals in the discharge of their services and are also meant to reduce the migration of health professionals for reasons of furthering their studies. Salary reviews were introduced to match the cost of living in an environment of hyperinflation. Call allowances were introduced to allow the professionals to work extra hours due to staff shortage. Currently, there are better call allowances in rural than urban areas. However, the government's policy that call allowances should not exceed the salary of the health professionals has generated antagonism from members of the health team whose extra hours exceed their normal working hours.

The above measures the government has put in place have yielded mixed results. Bonding, for instance, has been effective in retaining staff, while salary

restructuring has helped in limiting the outflow of workers from the public health sector. Call allowances have also helped retain staff, but recently there have been numerous complaints and health professionals have gone on strike over unpaid allowances. Hence, it can be argued that the implementation of policies aimed at retaining staff will not achieve the desirable results as long as the question of low remuneration remain unresolved.

The community respondents indicated that they had not made any concerted efforts to try and retain health staff posted at the clinic. They believe that only the government can make lasting efforts to retain skilled health staff in marginal areas such as theirs. They also lamented the lack of consultation between them and the government, which has sidelined them from making a meaningful contribution to the planning and implementation of developmental activities at rural clinics.

Conclusions and recommendations

The study has revealed the major causes of migration of health workers from Zimbabwe and has shown that the migration of health professionals negatively impacts on health service delivery. Most of the country's health institutions are understaffed and operate with skeleton staffs, which are reeling under their heavy workloads. The shortage of health professionals is most critical in rural areas where most health centres are being served by unqualified health staff. The situation is better in urban areas, where there are alternative sources of medical health care. Besides offering better health care services, albeit at higher fees, the private sector also provides an escape route for the disgruntled public health sector professionals. In fact, the migration of health professionals to the private sector has been viewed as a major factor responsible for the decline in the quality of health care services offered by the public sector.

The study has demonstrated that at the national level the number of health professionals employed is declining. Notwithstanding the fact that some health professionals are moving to the private sector, others have chosen to remain in the public sector for a number of reasons. It can be inferred that a number of health professionals use private sector employment as a stepping stone to secure the necessary funds for purchasing air tickets for moving overseas, a process that is referred to as step wise migration.

The migration of health professionals has negatively impacted on health service delivery. The community respondents complained of declining quality of care in health institutions as well as uncaring attitudes by the health professionals. The crisis in the public health system has benefited traditional healers, who have been able to offer an alternative form of medical care. While it was acknowledged that there are numerous 'bogus' traditional healers, the informal health sector compliments the formal health care system and provides medical care mostly to the poor who cannot afford the high fees charged by private clinics.

HIV/AIDS has added to the strain experienced by health workers and what is particularly worrying is that some professionals alleged that their health institutions were taking inadequate measures to protect them from the risk of contracting the disease. Hence a combination of heavy workloads and lack of protective clothing are pushing health professionals from rural areas.

In this article I have demonstrated the need that government health institutions cultivate a culture of record keeping. It needs to be stressed that proper policy prescriptions can be offered in the presence of reliable data sources. The biggest obstacle in the research process was encountered in collecting quantitative data. The MoHCW did not have up-to-date records, and data for categories such as pharmacists and dentists were unavailable. Hence, a national database has to be set up to provide details of health professionals employed nationally in all health institutions. All health institutions should be required to remit figures annually to be fed into the database. Such information would help policymakers monitor trends in each of the categories of health workers as well as assist in identifying poorly staffed health institutions.

Economic factors were cited as the major reasons for the migration of health workers from the public sector. Within the country, the salaries offered in the public sector are far below those offered in the private sector. This mismatch in salary levels has acted as a pull factor for the professionals employed in the public sector. In this regard, it is recommended that the government should look into the salary structures of the health professionals so as to redress this anomaly. It must be noted that once the professionals have moved from the public to the private sector, it is easier for them to engage in long distance migration. While poor salaries might be one of the factors leading to the migration of health professionals from the public sector, their working conditions

also needs to be improved. It was pointed out during the research that some of the health professionals work in a climate of fear of contracting the deadly HIV/AIDS virus. Hence, more preventive measures should be taken to reduce the stress associated with the fear of exposure of health professionals to HIV/AIDS. Protective clothing has to be made available to health professionals at all times to reduce their risk of contracting the disease.

Public to private sector migration of health workers closely follows the rural–urban drift of skilled health professionals. For a wide range of reasons, health professionals have found conditions in the rural areas unattractive. Thus, conditions need to be improved for health workers employed in rural areas. In this vein, the government should introduce economic (monetary) incentives to help lure health professionals to such locations. Alternatively, a programme could be put in place that would allow newly trained professionals (including nurses) to serve their period of bonding in rural health institutions.

The migration of skilled health workers from the country needs to be addressed as a matter of urgency because it has reached critical levels. There has to be a political will to address the grievances of health workers without confrontations. Arresting the current brain drain from public health institutions should be one of the government's major goals. It needs to be appreciated that a healthy health sector is a prerequisite for economic growth and sustainable development because it ensures the availability of a healthy workforce. Thus, the research shows that there is a call to adopt and implement an integrated policy that will retain skilled health professionals in the country for the benefit of the main users of public health systems, the poor.

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