# **Reasons for doctor migration from South Africa**

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## Abstract

**Background:** The migration of doctors from their home countries is not a new phenomenon. Apart from voluntary migration due to various reasons, medical professionals, often from sub-Saharan Africa, are actively recruited by developed countries. Doctors in South Africa are esteemed for the high standard of training they receive locally, a quality which renders them prime candidates for employment. Various factors are involved in the push-pull theory of migration. It has, however, been reported extensively that push factors usually play a much greater role in doctors' decision to leave their countries of origin, than do pull factors in the host or recipient country. Push factors motivating migration most frequently include dissatisfaction with remuneration packages and working conditions, high levels of crime and violence, political instability, lack of future prospects, HIV/AIDS and a decline in education systems. In addition to a depletion of intellectual resources through losing highly qualified and skilled individuals, source countries also face substantial monetary implications caused by the migration of doctors. Government subsidy of medical students' training could be regarded as a lost investment when young graduates seek permanent employment abroad. The aim of the study was to investigate the profile of South Africa.

**Methods:** The investigation was conducted in 2005 as a descriptive study of participants found primarily by the snowball sampling method. The initial participants were known to the researcher. Participants had to be graduates from South African medical schools/faculties, living abroad and in possession of a permanent work permit in the countries where they were employed. Short-term locum doctors were not included. Information, consent letters and questionnaires were either hand-delivered or e-mailed, and completed forms and questionnaires were returned via these routes. Participation was voluntary.

**Results:** Twenty-nine of 43 potential participants responded, of which 79.3% were male and 20.7% female between the ages of 28 and 64 years (median 47 years). The year of graduation ranged from 1964 to 2000 (median 1985), and the year of leaving the country ranged from 1993 to 2005 (median 2002). The majority (72.4%) were in private practice before they left, 27.5% had public service appointments and 17.3% were employed by private hospitals. Seventy-nine per cent of respondents had postgraduate qualifications. Countries to which migration occurred included New Zealand, United Arab Emirates, Bahrain, United Kingdom, Canada, Yemen and Australia. Forty-one per cent of respondents indicated that they would encourage South African young people to study medicine, although 75% would recommend newly graduated doctors to leave the country. Financial factors were indicated as a reason for leaving by 86.2% of the respondents, better job opportunities by 79.3%, and the high crime rate in South Africa by 75.9%. Only 50% of the respondents said that better schooling opportunities for their children played a role in their decision to leave the country. Approximately one-fifth (17.9%) of the respondents indicated that they already had family abroad by the time they decided to emigrate.

**Conclusions:** Financial reasons were the most important motivating factor in this particular group of doctors who relocated to overseas destinations, followed by working conditions and the rate of crime and violence in the country. In comparison to other investigations published previously, the results presented here clearly indicate a tendency that more doctors offer financial and crime-related reasons for migration from South Africa than before. In order to prevent the loss of medical expertise from a society already in need of quality healthcare, issues compelling doctors to look for greener pastures should be addressed urgently and aggressively by stakeholders.

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## Introduction

During the past couple of decades it has become evident that South African qualified doctors are increasingly leaving the country. As early as 1994 emigration from South Africa in general had been described as "a significant continuous outflow of professional and technical skills."<sup>1</sup> A newspaper reporter in 2004 alleged that by 2006 40% of physicians in South Africa would have left the country to seek employment elsewhere.<sup>2</sup> In a study conducted in 1975 to investigate the migration of the University of the Witwatersrand (Wits) medical school alumni who graduated between 1925 and 1972, it was found that 83.6% of those graduates practised medicine in South Africa.<sup>3</sup> In 1998,

however, a follow-up investigation into the whereabouts of Wits medical school graduates revealed that approximately 45% of physicians who graduated since 1975 were located abroad, with the majority in the USA and Commonwealth countries (United Kingdom, Canada, Australia and New Zealand).<sup>4</sup> A comparison of these findings distinctly supports the opinion that the number of doctors leaving South Africa has increased noticeably.

The trend of doctors leaving their countries of origin is not a new phenomenon, as is evident from papers published in the early 1960s that report on investigations into this matter.<sup>5-8</sup> Apart from voluntary migration for a variety of reasons, medically gualified individuals are also actively recruited for positions in rural and underserved areas in countries like Canada, for example, where locally gualified doctors often prefer not to work due to the remote location and harsh climatic conditions of these areas.<sup>9-12</sup> Grant<sup>11</sup> notes that more than half the physicians practising in Saskatchewan, one of the prairie provinces of Canada notorious for its fierce winters, were foreign-trained, of which 17% to 20% graduated from South African medical schools.<sup>10,11</sup> This practice had been described as "aggressive recruiting of physicians from other countries."9 Peter Barrett, a former president of the Canadian Medical Association, once stated that "provinces like Saskatchewan would be in a desperate shape without foreign doctors."13 It has been reported that the number of South African doctors working in Canada had increased by more than 60% between 1996 and 2006.12

The loss of doctors from South Africa has also been attributed to the high quality and standard of medical education they receive here,<sup>14</sup> a feature that would indisputably render them prime candidates for employment in various developed countries across the world. It has even been suggested that as long as South African medical schools continue to provide students with excellent training their graduates will be sought after by others countries, with the consequent loss of the benefits associated with this level of training.<sup>11</sup>

According to Hagopian et al,<sup>15</sup> approximately 23% of America's more than 770,000 doctors licensed in 2002 were trained outside the USA, of which a total of 5,334 came from sub-Saharan Africa. In an extensive study conducted in 2004 to determine the countries of origin of this specific group of international medical graduates, it was found that nearly 86% of African-trained doctors in the USA originated from three of the 47 sub-Saharan countries, namely Nigeria, South Africa and Ghana. Another striking observation was that 79.4% (4,234/5,334) of these doctors were trained at only 10 out of a total of 87 medical schools in sub-Saharan Africa. Five of these top-ten medical schools were in Nigeria, three in South Africa and one each in Ghana and Ethiopia. With regard to the number of doctors qualifying from each of these medical schools, the University of the Witwatersrand was at the top of the list (1,053 graduates), with the University of Cape Town second (655) and the University of Pretoria tenth (132). These authors suggest that many African-trained medical doctors working in the United States, but without necessarily being licensed to practise as physicians,15 could not be accounted for in this particular investigation.

South African physicians differed from other African doctors with regard to the following features: they were older, the majority of them were male, 94% of them were white and they were more often qualified in a subspecialty,<sup>15</sup> indicative of the fact that many of them had a

postgraduate qualification. Grant<sup>11</sup> confirmed these observations two years later when he reported that 19% of South African doctors in Canada were women, 64% were older than 40 years of age and 32% were specialised as opposed to general practitioners. He argued that the decrease observed in the average age of migrants (in the former study<sup>15</sup> 80% of South African doctors were found to be over 40 years of age) could be an indication that recent graduates from medical schools constituted a more significant portion of the outflow than before. These findings also coincide with the general characteristics of international migrants, namely that the majority are male and tend to have spent longer periods in education.<sup>11</sup>

Various factors contribute to people's decision to migrate from their country of birth, and several authors<sup>10,12,15–17</sup> have addressed the pushpull theory of migration. Oberoi and Lin,<sup>16</sup> for example, conducted a study in Australia to investigate doctors' reasons for leaving South Africa. The 10 participants they interviewed all believed that push factors (from South Africa) played a much greater role than pull factors (to Australia) did. The major push factors most frequently noted in a number of independent investigations were poor remuneration and wages, lack of job satisfaction, lack of future prospects (further education and career development), poor working conditions, HIV/AIDS, lack of quality of life, high levels of crime and violence, civil conflict and political instability,<sup>12–15</sup> and a decline in the quality of the school education system.<sup>12</sup>

The HIV/AIDS situation in South Africa (in addition to crime and violence) as one of the major push forces for medically qualified professionals to leave the country deserves to be noted. The epidemic in South Africa is regarded as one of the worst in the world, with an estimated 5.5 million people (18.8% of adults) being infected with HIV in 2005. Almost one-third of pregnant women attending antenatal clinics were infected with the virus.<sup>18</sup> According to the World Health Organization (WHO), between 2000 and 2003, 57% of mortalities in children under the age of five years could be attributed to HIV/AIDS and its associated diseases. In 2002, HIV/AIDS was reported as the leading cause of death in South Africa, causing 52% of deaths in all age groups.<sup>19</sup>

The United Nations defined the now well-established concept "brain drain" as a one-way movement of highly skilled people from developing countries to developed countries that exclusively benefits the industrialised (host) world. It could therefore also be described as the depletion or loss of intellectual and technical human capacity by the source county.<sup>16,20</sup> Another major disadvantage to source countries, in particular with regard to medical graduates, is what is termed "free riding" - the substantial financial savings in training and education by the host/recipient countries when they obtain highly qualified individuals who migrate to seek employment outside their countries of origin.<sup>16</sup> It costs a government an amount equivalent to approximately US\$100,000 or more to train a medical student.<sup>11</sup> When graduates leave their country of origin to practise medicine abroad, especially at the disturbing rate that migration currently seems to occur, the financial impact on a country's health and/or education budget could amount to a considerable figure. It has been estimated that the total monetary loss by developing countries due to losing healthcare workers they have trained equals approximately US\$500 million annually.10

The aim of the study reported in this paper was to investigate the profile of South African qualified physicians and their reasons for migrating from

South Africa. This new data could be employed to draw a comparison with the findings described in the literature in order to determine whether any changes have occurred in doctors' motivation to leave South Africa to practise medicine abroad.

#### Methods

The study population for this descriptive study, conducted in 2005, was primarily found by the snowball sampling method. All participants had to be South African qualified doctors, living and practising abroad on a permanent basis. Doctors working on a short-term locum basis were not included in the study. Participants had to be in possession of a permanent work permit in the countries where they were employed. The initial participants were known to the researcher and were requested to supply names and e-mail addresses of other possible participants. The researcher sent information about the study to these candidates by e-mail or by hand, depending on their geographical location, and the participants returned the completed questionnaires to the researcher by e-mail or by hand.

The researcher attempted to obtain information from the Health Professions Council of South Africa (HPCSA) as well as the Medical Association of South Africa (MASA), but this effort was unsuccessful because the information was considered confidential.

Informed consent was obtained by means of an information leaflet and an authorisation letter that accompanied the questionnaire. Nonresponders were approached a second time via e-mail. All participation was exclusively voluntary.

Approval to conduct the investigation was granted by the Ethics Committee of the Faculty of Health Sciences, University of the Free State.

#### **Results**

From a total of 43 possible participants whose addresses had been obtained 29 (67%) responded, of whom 79.3% were male and 20.7% female. Their ages ranged from 28 to 64 years, with a median of 47 years. The majority of participants (89.7%) were married and most of them (71.4%) had relocated abroad with their families.

The year of graduation from medical school varied from 1964 up to 2000, with the median being 1985. Degrees had been obtained from medical schools/faculties at the following universities (since underand postgraduate studies had not necessarily been undertaken at the same university respondents could indicate more than one institution,): Free State (24.2%), Pretoria (27.6%), Cape Town (24.1%), Stellenbosch (20.7%) and Witwatersrand (7%). The majority of respondents (79.3%) had postgraduate qualifications.

More than 70% (71.4%) had been working in an urban environment before leaving South Africa, 21.4% in a rural environment and the remaining 7.2% in both. The majority (72.4%) had been in private practice, 27.5% had government (public service) appointments and 17.3% were employed by private hospitals. These doctors had provided jobs for at least one person and at most six people, in addition to themselves, with most of them employing four to six people. The time when the doctors left South Africa ranged from 1993 to 2005, with the median in 2002. Participants were located in seven different countries, namely New Zealand, United Arab Emirates, Bahrain, United Kingdom, Canada, Yemen and Australia. Only 53.6% of the doctors indicated that they wanted to return permanently to South Africa, while 42.9% did not want to return and 3.5% were uncertain of what their future plans were. Seventy-nine per cent of respondents reported active contact with relatives or friends and frequent exposure to South African media.

Of the 13.8% of the doctors with children who were either studying medicine or had already qualified as doctors, 50% indicated that these children had already left or were planning to leave South Africa too. Forty-one per cent of respondents indicated that they would encourage youngsters in South Africa to study medicine. However, 75% said they would recommend newly graduated doctors to leave South Africa for jobs elsewhere.

Table I outlines the reasons selected by participating doctors for leaving South Africa.

#### Table I: Reasons selected for leaving South Africa

Reasons selected (rated 4 or 5 on a scale from 1 to 5)	Responses (%) (n = 29)
Financial reasons	86.2
Better job opportunities	79.3
High crime rate	75.9
Wanted to change immediate circumstances	58.6
Personally wanted to experience something new	58.6
Feeling of restlessness regardless of working conditions	55.2
Extended duty hours	55.2
High prevalence of HIV/AIDS	51.7
South African income tax system	51.7
Better schooling opportunities for children abroad	50.0
Dealing with business aspect of practice	48.3
On-call duties	46.4
Racial discrimination	44.8
Professional development	41.4
New dispensing laws	32.2
Meeting patient demands	31.0
Personal circumstances	20.7
Family abroad	17.9

## Discussion

From the results listed in Table I, it could be concluded that financial reasons were by far the most important motivation for this group of South African doctors to relocate to overseas destinations. As opposed to only 25% of 559 South African healthcare workers who regarded better remuneration as a reason for intended migration in 2002,<sup>21</sup> 86.2% of the respondents in the current study indicated financial reasons as a driving force.

Farham<sup>14</sup> stated unequivocally in a letter to the editor of The Lancet that "while working conditions continue to be as poor as they are, no amount of retention schemes such as salary incentives in the rural

areas will make up for the steady erosion of our public health services." In a stakeholder enquiry into policy options and possible solutions to manage the migration of health professionals from sub-Saharan Africa to Canada, it was decided that migration would carry on as long as strong push factors in source countries continue to persuade people to seek a better life.<sup>12</sup> Furthermore, the option to provide better financial incentives to remain in the country could be an expensive solution, which might redirect substantial monetary resources away from other healthcare priorities.<sup>11</sup>

The high crime rate in South Africa was selected by 75.9% of the respondents as a reason for leaving the country. In a study investigating the migration of healthcare workers from six African countries,<sup>21</sup> violence and crime as a reason for intention to migrate was voted higher by the South African cohort than by participants from three other countries for which data were available (49% of South Africans as opposed to 1% of participants from Uganda, 14% from the Cameroun and 24% from Zimbabwe). In comparison to this 2002 survey,<sup>2</sup> the current investigation indicated that crime as a reason for leaving has increased considerably over the past five to six years.

Many studies have investigated the fear of occupational HIV transmission among doctors.<sup>22–24</sup> As early as 1990, Taylor et al<sup>24</sup> reported that 72% of participants included in their survey on physicians' perceptions of personal risk of HIV infection through occupational exposure believed that doctors were at greater risk of acquiring HIV/AIDS than other healthcare professionals. Sixty-two per cent asserted that fear of infection interfered with their relationship with HIV/AIDS patients. Despite the fact that the risk of contracting HIV through a single accidental exposure is much lower than for hepatitis B, for example, (0.5% versus 10–20%, respectively), 49% were convinced that doctors feared HIV/AIDS more than any other disease. Forty-eight per cent of these respondents also felt that caring for an HIV/AIDS patient was too emotionally demanding to be satisfying.<sup>24</sup> Apart from escalating the workload of healthcare professionals, the growing HIV/AIDS epidemic in South Africa will also become a significant social and economic burden to the country.

Despite the general perception that the standard of South African education in schools is declining sharply,<sup>25,26</sup> only 50% of respondents indicated that better schooling opportunities for their children was a reason for migrating abroad. A reasonable explanation could be that the participating doctors with school-going children were probably in general satisfied with the schools in which their children had been enrolled. Doctors in South Africa are usually regarded as belonging to the upper-middle to high-income group. Their children generally attend first-rate schools serving the upper social layer of the community, where poorly qualified teachers and a lack of financial and other resources are not part of the everyday battles encountered in many schools. This would account for better education abroad being a less significant reason for leaving the country.

Other reasons for migration from South Africa selected by more than half of the participants (Table I) included the desire to change immediate circumstances (58.6%), personally wanting to experience something new (58.6%), feelings of restlessness regardless of working conditions (55.2%), extended duty hours (55.2%) and the South African income tax system (51.7%). Having family who were already living abroad was selected by 17.9% of the respondents as a reason to leave South Africa,

and it probably served as a strong pull force in addition to the various push factors.

Rather than recruit doctors from foreign countries to work in South Africa, South African doctors working abroad should be given the incentive to return by offering them attractive working conditions in a safe environment. A small step in the right direction was the "Buyelekhaya" (return home) initiative<sup>27</sup> proposed by the Health Professions Council of South Africa (HPCSA), which involved amnesty regarding lapsed registration and waiving of severe restoration penalties. Although available for only a limited period of time (1 February – 30 April 2007), its aim was to encourage health professionals, especially those working abroad, to be placed back onto the register.<sup>28</sup> It is, however, not known how many South African doctors practising in other countries, if any, took advantage of this amnesty period.

Bonding, contracting or compulsory service has been proposed as a means of keeping newly qualified doctors in their countries of origin for at least a period of time after graduation.<sup>10,12,29</sup> Weiner et al<sup>4</sup> made a rather provocative suggestion in 1998 when they said, "if medical students were required to pay the full cost of their education so that there was minimal government subsidy, then, to a large extent, the concern about emigration and wasted investment would be eliminated". They proposed that giving loans to medical students which could be cancelled by the government after a predetermined number of years of practice could serve as a measure to keep new medical graduates in the country. The state would then be compensated for the cost of training should the bond or contract be terminated before the period of practice had expired.<sup>4</sup> However, implementing such a strategy could be difficult to manage and is unlikely to be successful unless recipient countries agree to comply with the source country's policies.<sup>10,29</sup> Furthermore, efforts to find employment abroad would only be delayed and not prevented,<sup>10</sup> especially when strong push factors are not addressed and dissatisfaction with salaries and working conditions prevail.

Whilst the loss of expertise and scarce skills is evident considering that the majority of respondents (79.3%) had postgraduate qualifications, it is to some extent encouraging that 53.6% of the respondents indicated that they would like to return to South Africa permanently. However, the reasons given for migration suggest that attention should be given to salaries and fringe benefits, working conditions, exposure to HIV/ AIDS and problems related to the high crime rate in the South African society. If not, doctors – general and family practitioners as well as highly qualified and skilled medical specialists – will continue to migrate abroad in search of a better life for themselves and their families. This will in turn further disadvantage a society already in desperate need of quality medical care.

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