

Effects of Brain Drain on the South African Health Sector; Analysis of the Dynamics of its Push Factors

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Abstract: While there has been a plethora of studies that addresses migration in Africa, many have yet to successfully unpack the effects of brain drain on the South African health sector. Using textual analysis of the available literature relevant to the topic under consideration; this work seeks to identify the major structural and socio-economic push factors that drive the migration of health professionals in South Africa, relying on Revestain's laws of migration and Lee's push/pull theory of migration. The study also looks at explaining other factors that contribute to the migration of health professionals in South Africa. We argue that for South Africa to retain health professionals, the government needs to increase the training of health workers, improve their working conditions and security, upgrade infrastructure and ensure availability of resources as well as develop a more open immigration policy prioritizing skilled immigration.

Keywords: *Immigration, Brain drain, South Africa, Socio-economic Development*

1. Introduction

The effective functioning of any health sector around the world, particularly in South Africa, is highly dependent on the availability of skilled health professionals (World Health Organization, 2014). South Africa is currently at the verge of losing its best health professionals; hence, its efforts at reducing the outflow of its skilled health professionals which may have a debilitating effect on its socio-economic development. Finding ways to reduce the outflow health professionals would greatly help South Africa achieve its present and future developmental objectives. For years, the South African health sector has fallen victim to the brain drain phenomena. Thousands of highly skilled health professionals (nurses, doctors and other paramedical professionals) have left the country in search of better opportunities abroad, which has negatively impacted the efficient functioning of the health sector, thus reducing the overall quality of medical care offered by South African health institutions (Makoni, 2009; Brandsouthafrica, 2002). Whilst one may claim that globalization has somewhat led to the increase in the migration of health workers in South Africa, it has however made it easier for skills mobility (Czaika & de Haas, 2014). Globalization has undoubtedly offered freedom for health workers to offer their services beyond South African borders. For Scheffler et al. (2008), the global shortage of nurses, midwives and doctors has reached a staggering 4.3 million due to opportunities for health workers to work abroad resulting to a complex migration pattern characterised by the outflow of health workers from developing countries to developed countries. South Africa has undoubtedly experienced a net outflow of health workers.

Makoni (2009) asserts that as a result of globalization, the borders and immigration control centres of developed countries have been relaxed to attract highly skilled professionals such as nurses, doctors, engineers, teachers etc. hence, the increase in the migration of health workers. It is on record that Canada has the most liberal immigration system in the world thus enabling inflow of skilled professionals to the country. In South Africa, many health professionals have left for better opportunities abroad which is further fuelled by globalization (Makhubu, 2016). Globalization has resulted in the increased demand for health workers. Unless developing countries invest in their health sector, they will continue to feel the impact of migration of their health workers. For South Africa, it is absolutely clear that this calls for direct intervention from both government and the civil society to ensure that health workers stay in the country, otherwise the South African health sector is at risk of total collapse (Aluttis et al., 2014). One may also reason that as much as globalization has resulted in the easy movement of labour, in the case of South Africa, most of the push factors driving brain drain are a combination of structural and socio-economic dynamics (Chimanikire, 2005, Mahadea & Simson, 2010). Apart from globalization, most of the push factors responsible for brain drain of health professionals from South Africa are located internally.

It seems that the South African Government has not adequately or urgently addressed these push factors thus undermining the country's health sector. With slow economic growth and uncertainty in the country's

political system, the likelihood that more skilled health professionals will consider emigrating is increased, which may cripple South African economic development (Booyesen & Tawanya, 2015). Although the government has over the years developed policies aimed at addressing the development and training of more health professionals; for example, training of medical doctors in Cuba and the construction of new medical colleges, it has not yet dealt with the push factors (Bateman, 2013; Grootes, 2014), hence, the possibility of a continued migration of health workers. Every year, South Africa loses 17 percent of its qualified doctors (Moodie, 2010) and within a period of 4 years since 2005, more than 1000 newly trained medical doctors have not registered to work in the country; a sign that the South African health sector is in total disarray (Makoni, 2009; Mortensen, 2008). For example, Xaga Dlamini, a newly graduated medical student admitted that "The only thing that is keeping me in this country is because of my commitment to serving the government for two years after which I am ready to leave for a better working environment". Despite the resolution stating that no country should actively recruit doctors from a developing country (Motsoaledi, 2017) which is meant to prohibit the plundering of medical practitioners from struggling African countries, the continent continues to lose much of its needed medical doctors. Within the Southern Africa Development Community (SADC), there is an agreement that bars the poaching of medical staff between the countries in the region. Notwithstanding, the health professionals have continued to emigrate. There is also a SADC protocol that says South Africa must not actively recruit doctors from (fellow) SADC countries (Motsoaledi, 2017). The reason perhaps is because South Africa is the strongest economy within SADC and doctors would in all fairness be willing to move to that strong economy.

South Africa, according to Watson et al. (2011), has a ratio of 0.8 doctors per 1000 people. In a country of 54 million, such a low ratio of medical doctors per 1000 people further complicates the effectiveness of providing quality and effective medical care to an ever growing population. UNICEF (2007) mentions that in 2002 alone, more than 300 specialists who left South Africa never returned. Simpson (2010) reiterates that in 2002 alone, more than 5,000 doctors were working in countries such as Canada, USA, New-Zealand and Australia. According to Pieterse (2016), the Democratic Nurses Organization of South Africa (DNOSA) was concerned with the shortage of nurses in South Africa and the working conditions of "loyal" nurses who choose to stay to rescue the health sector. The public health sector is feeling the true effects of brain drain. The-Citizen (2016) reported that 70 percent of South African nurses admitted to moonlighting (supplementing their income sometimes illegally) to make ends meet. Nurses also admitted that they had to shoulder extra work because of the shortage of skilled professionals.

The above statement unequivocally paints a gloomy picture for the South African health sector and unless urgent interventions are implemented to reduce the outflow of skilled health professionals many would leave. Poor salaries and poor working conditions and lack of security have been identified as the major factors behind the migration of health professionals in South Africa (Manyisaa & van Aswegenb, 2017). Therefore, it is very clear that going forward, the government and civil society need to urgently act to deal with the push factors; otherwise, South Africa risks losing all to brain drain. This paper intends to identify the major push factors driving the migration of health workers, determine the implications for South African health sector, and suggest ways to reduce the outflow of health professionals in South Africa while trying to answer the following questions: what are the driving forces behind the migration of health professionals in South Africa? What are the implications for the South African health sector and what can be done to reduce the outflow of skilled health professional from South Africa? The migration of health workers from South Africa no doubt is motivated by a combination of socio-economic forces of globalization.

2. Methodology

The study relied on secondary data as a means of collecting relevant information. It employed strict textual analysis of the available literature relevant to the topic under consideration. Qualitative research method was used in the course of this study. The purpose of this approach was to put into context brain drain in South Africa and engage in the interpretation of the major structural and socio-economic push factors that drive the migration of health professionals in South Africa. Berkwits & Inui (2007) assert that qualitative research uses methods such as participant observation or case studies which result in a narrative descriptive account of a setting or practice. Various scholars have tried to understand the root causes of migration, therefore there are rich sources of information. Though these sources may not speak directly to the causes and implications of

brain drain within African states and South Africa in particular, they nonetheless offer views on the subject matter which will be utilized to further enrich the study.

3. Theoretical explanation

People move from place to place for different reasons. The difference in the migration pattern tends to affect the overall process of migration. Although there is one applicable theory that captures and holistically explains the real reason behind migration, it is nonetheless imperative for sociologists and geographers to study the migration phenomena and try to uncover why people migrate. This paper sheds light on some of the theories that have been developed and how their assumptions aim to explain causes of migration.

Neoclassical theory: The neo-classical theory of migration explains that people migrate mainly because of the difference in terms of wages between two locations. According to this theory, labour usually flows from low wage regions to regions characterized by high wages (Kurekova, 2011). By implication, health workers in South Africa are likely to respond to labour market forces characterised by high wages.

Dual market theory: The dual labour theory assumes that migration is in most cases caused by pull factors in developed countries. The labour market in developed countries is made up of the primary and the secondary market (Cohen, 1996). The primary market requires highly skilled labour, whilst the secondary market is characterised by labour intensity, thus requiring low skilled labour (Kurekova, 2011). This theory therefore assumes that migration from developing nations is a consequence of the demand for low skilled workers in the secondary market within developed countries (Taylor, 2006), and because low skilled labour is less attractive to the natives of developed countries this automatically creates the need for migration.

World system theory: This theory assumes that the continuous interaction between different societies is an important factor as to why people migrate. This theory places emphasis on economy decline of one state as a result of its trade with a particular (developed) country; hence the migration of people from a county with declining economy to the one characterised by economic growth (Jennissen, 2004). In agreement, Motsoaledi (2017) asserts that if a country goes to another (developing) country and actively recruits their doctors, the country where doctors are recruited will be defeated and cannot compete economically. Migration has long been a human phenomenon; hence the various theories trying to explain it. Of importance to this work are the Revestain's laws of migration and Lee's push/pull theory of migration. According to Battistella (2014), Lee's push/pull theory of migration was a reformulation of Ravenstein's laws of migration, but the difference was that Lee's revised theory further placed emphasis on the internal (push) factors that drive people to consider migration.

Revenstein's assumption on the laws of migration is that migration is influenced by unfavourable circumstances at the place of origin. The pull factors for example include high taxes, unemployment and crime. Therefore, the primary cause of migration is to seek better economic opportunities. Migration usually happens in stages and tends to have more females than males if the distance to be travelled is short. More often, it flows from rural areas towards urban places. Everett Lee went further to reformulate Ravenstein's laws of migration. In his analysis, Lee divided the factors that are responsible for migration and categorised them as push and pull factors. He argued that push factors are those things that are unfavourable in one's current living environment, which pushes the individual to migrate whilst pull factors are things that are favourable in another destination (Lee, 1966). Furthermore, there are intervening factors or barriers that are in-between the place of origin and destination that might influence the decision to migrate.

Table 1: showing the intervening factors that might influence the decision to migrate

Push factors	Intervening factors	Pull factors
Crime	Mountains	Better wages
Lawless society	Rivers	Better educational facilities
Famine	Seas	Better political environment
Poor working conditions	Bad terrain	Existence of civil liberties
Corruption	Distance	Better security

Source: Lee (1966).

Undeniably, the assumptions of the above theories have in some way manifested themselves in South Africa. The assumption of the neo-classical theory which assumes that wages are the major reason for people to migrate is applicable to South African health professionals. Krost (2000) explains that more than 3,300 health professionals that left South Africa cited better salaries that were offered in other destinations, for example, in the UK. Mokoka, Oosthuizen and Ehlers (2010) contend that nurses in South Africa are dreadfully paid despite the fact that they are highly skilled and trained. Migrating to other countries with better pay is therefore a huge possibility. Although the assumption of the dual market theory explains that the existence of secondary market in developed countries fuels low skilled migration among developing countries, within the health domain in South Africa, it has been observed that the highly trained and skilled health professionals are always ready to migrate. However, the migration of low skilled labour to developed countries from South Africa has been very rare. Perhaps the developed countries are very specific as to what kind of skilled professionals they require. This is not to say that there has been no low skilled migration to developed countries. With globalization and interconnectedness of the world, interaction with people from different parts of the globe has become a norm. Some South African health professionals have migrated solely on the advice of family members living abroad (Castro et al., 2017), and thus the assumption of world systems theory is applicable in this context. Apart from better wages and poor working conditions, poor security, and better educational-facilities for their children, crime, racism and discrimination have been the major drivers of migration in South Africa; hence the importance of Lee's push/pull theory of migration in explaining the migration of health professionals in South Africa.

The brain drain of Health professionals from South Africa: Unpacking the major push factors:

Globalization has resulted in the interconnectedness of the world thereby making it a global village. It has made the free flow of information, trade and labour across borders much easier (Czaika & de Haas, 2014). One may be tempted to say that the continuous increase in trade and the opening up of economies to allow more investment has benefited the global economy immensely. In fact, the financial benefits of globalization have been noticed where the increase of foreign direct investment has benefited numerous countries around the world. It is therefore clear that developed countries are major beneficiaries of globalization. While it is evident that globalization has played a major role in the creation of one global economy, it has also created a huge demand for skilled workers, with the demand coming especially from developed countries (Duncan, 2012). Globalization has resulted in a situation where developed countries have significantly outpaced their developing counterparts in terms of economic growth and development (The Economist, 2006). Developed countries have continued to demand for more skilled manpower to aid their economic growth, thus increasing the demand for health professionals. This situation unfortunately results in brain drain in developing countries. The South African health sector has been the victim of skills poaching by developed countries. The demand for skilled workers globally, coupled with better salaries, has made South African medical professionals to be more active in seizing such opportunities. This is a part from local socio-economic factors that make it easier for skilled health workers to consider emigrating. Health professionals, according to Dr Margaret Chan (Director-General of WHO), are global citizens in a world that has changed dramatically owing to varying international co-operations where national affairs are intertwined with the forces of international systems that govern economies, financial markets, business relations, and trade (2015). There are numerous push factors that have contributed to the increase in the migration of health professionals from South Africa.

Poor salaries: The remuneration of health workers in South Africa for years has been an issue amongst policy makers. As a matter of fact, health professional in state health institutions are not entirely satisfied with their salaries. The Mail & Guardian (2009) mentioned that to be a doctor in South Africa, one needs to train for 6 years, forgoes almost half a decade of potential earnings, only to find that when they finally graduate, a junior doctor who sacrificed six years of her/his life to study will start with a salary of R8000 (\$615), while some bus drivers earn a salary of R8800 (\$653.8). Cloete (2015) explains that a nurse in South Africa with more than 10 years of working experience is likely to earn more than R25,000 (\$1,923) a month, with water, electricity and a housing allowance all provided. Their medical aid is also mostly covered by the hospital. However, Cloete asserts that countries in the Middle East have started attracting South African health professionals, using the motivation of giving a tax free salary. While being interviewed on Radio702 (2016), Simon Hlungwani, President of the Democratic Nursing Council of South Africa said: the country has witnessed an increase in health professionals, especially nurses, emigrating to countries such as Saudi Arabia

and UAE to mention a few because South African nurses are well trained and their skills are internationally sought after; therefore, prospects of migrating remains high at any given moment.

With a population of 54 million, the migration of health professionals is no doubt the biggest threat to the South African economic development. According to the World Health Organization (2015), India has a ratio of 114 nurses per 100, 000, while Indonesia has a ratio of 115 per 100, 000. This highlights that developing countries are in a constant struggle to deal with the migration of health professionals. The poor working conditions and poor salaries is the biggest problem in the South African health sector. Broomberg (2011) contends that being a nurse in South Africa means being faced with a deluge of patients, as high as 500 per day in hospitals which have inadequate infrastructure and are understaffed. Salaries for health professionals in South Africa have been identified as one of the major push factors driving their migration. The quest for better financial reward in another country has always been at the forefront of migration of professionals, not only in the health sector but also in other sectors across the country. It is clear that the salaries of health professionals in South Africa are a major push factor. Therefore, to ensure development of the health sector, it is imperative that the salaries of health professionals are improved. Although salaries alone will not stop health professionals from migrating, it will nonetheless help motivate them. Structural changes also need to be prioritised to ensure that the conditions in hospitals are conducive enough for health professionals to carry out their duties. Failing to do such, with the South African economy already pushed to junk status, the migration of health professionals is less likely to cease.

Poor working conditions: Conducive working environment contributes immensely to employee productivity and morale. Unfortunately, poor working conditions in the South African health sector have been identified as another major push factor driving migration (Health24, 2011; Pillay, 2017). Nurses and doctors are frequently overwhelmed by patients; the infrastructure is not up to the required accepted standards; paramedics are encumbered with patients to attend to; skilled staff shortage has meant that health professionals have had to work extra hours with an increased number of patients (Sparke, 2012). The migration of health professionals no doubt poses a serious threat to the health sectors of developing nations, and South Africa is certainly no exemption. To highlight the negative impact of the migration of health professionals, the first democratically elected black South African president, Nelson Mandela, in 1997, reprimanded the UK for playing a role in the poaching of skilled South African nurses. According to official statistics, more than 1, 480 nurses left South Africa for UK in 2002 alone, and by late 2003, the number had increased to a staggering 6,739 (Smetherahm & Laurance, 2003). The former Member of the Executive (MEC) for Health in Gauteng Province, Brian Hlongwa, acknowledged that health professionals in the province, especially nurses, were overburdened with work. The MEC further noted that there were many challenges affecting state-run health institutions, with poor working conditions being at the forefront (Mail & Guardian, 2009). Flinkman et al (2013) reports that close 34percent of qualified health professionals are always willing to leave their place of work while almost half of the nurses are burnout.

Owing to limited opportunities for career advancement, work overload and inadequate investment in infrastructure, health professionals are often dissatisfied (Pillay, 2008). The ratio of 39.3 nurses per 10,000 patients, according to the International Council of Nurses, suggests that working conditions are a contributing factor in the migration of skilled South African health professionals. Makhubu (2016) argues that inadequate training facilities, lack of enough qualified staff, poor working conditions and poorly trained health workers produced by poorly equipped medical schools are other reasons why nurses in particular leave South Africa for better environment. It seems that South Africa is struggling to come up with effective policies that would reduce the outflow of skilled health professionals from the country. According to Oosthuizen & Ehlers (2007), besides poor salaries and poor working conditions that facilitate the movement of health professionals, there are a number and combination of other socio-economic factors responsible for the migration of health professionals in South Africa.

Lack of security: South Africa appears to be one of the countries with high levels of crime and insecurity for its workers. Lack of effective security at hospitals has been identified as another factor that encourages health professionals to seek other places of work. Insecurity in the South African health sector has resulted in deaths of medical professionals. A reference was made to a case in 2011 where a patient at Mpumalanga hospital stabbed a doctor to death inside the parameters of the hospital. In another incident, a nurse in Gauteng's

Helene Joseph Hospital was raped, beaten and stabbed in 2014, an incident that took place within the hospital premises (News24, 2014). These isolated security related issues at South African hospitals clearly show that the security of health workers need to be improved.

Infrastructure challenges, resources and skills shortages: There is no denying that the South African health sector is characterised by infrastructure problems. The government has not adequately invested in the upgrading of existing infrastructure, thus contributing to poor working conditions. South African hospitals are characterised by a chronic shortage of vital resources that ensure their effective functionality. Cowen (2017) makes an example of Ngwelezane hospital, in northern KwaZulu-Natal, where the mammogram machine has been out of order since July 2016; as a result, more than 600 women have been denied the opportunity to access lifesaving breast cancer screening. Apart from the issue of broken machinery across South Africa, hospitals are often in short of vital medical supplies. Shortages of skilled health professionals no doubt have negatively affected the functioning of the health sector to such an extent that some hospitals, have had to cancel or postpone certain procedures solely because there are no skilled professionals to undertake them (Section 27, 2010).

Political uncertainty: Unpatriotic and insensitivity to the plight of the masses in the decision making process on the part of political leaders has led to rating agencies (Sygnia Group and Fitch) downgrading the country to junk status, thus scaring off current investors and potential investors (Bisseker, 2017). According to Sygnia Group (SG), the credit rating downgrade basically means the debt of the bonds issued by the government is rated as riskier than they were. It means that both foreign and local investors will require more in terms of interest. It also means the government will have less money to spend on the provision of basic services. The Treasury's ability to withstand departmental demands for increased spending may also weaken (Green, 2017). Political uncertainty has therefore sent shockwaves to concerned skilled professionals in the country who fear not only for the country's future, but also for the future of their children (Fin24, 2014). Bezuidenhout et al. (2009) state that political uncertainty in South Africa has caused feelings of insecurity and anxiety among the country's health professionals, considering the fact that their skills are in demand internationally and are highly mobile. Labonté et al. (2015) comment that political uncertainty has long been identified as cause of migration among health workers in South Africa, yet the government has done little to change this sentiment. Whilst immediately after 1994, political uncertainty lead to mass exodus of mostly white skilled professionals (Aardt, 2006), economic uncertainty has since overtaken political instability among the main causes of migration in South Africa. The argument therefore is that if the current political atmosphere does not change, arguably, South Africa should expect the migration of more health workers.

4. Findings

The migration of skilled health professionals undeniably poses a significant challenge for South Africa. The mass exodus of health workers has greatly jeopardized South African ability to cope with an ever increasing demand for medical care. It has also hindered the effectiveness and efficient functioning of the health sector. This has negatively affected South Africa's global competitiveness. Within the premise of this article, there are four major findings:

Economy: York (2011) opines that Canada has saved roughly \$400 million by poaching qualified health professionals from Africa. More than 22 percent of medical doctors in Canada are foreign trained. South Africa has contributed some of these medical doctors. Also, more than half of the doctors practising in Saskatchewan are foreign trained including hundreds from South Africa. Mwiti (2015) argues that to train a medical doctor in South Africa costs roughly \$58,700. According to Martins in Organization for Economic Cooperation and Development, training a nurse costs R340,000 (\$26,154) (OECD, 2003). Therefore, the emigration of health professionals from South Africa to Canada has been devastating. In New-Zealand alone, there are 600 South African practicing medical doctors, resulting in South Africa incurring a loss of R481 million (\$37 million). In 2001, the South African government demanded that Canada halts the recruitment of South African medical doctors, owing to the fact that South Africa had incurred a loss of \$1.41 billion on returns from its investments on its medical doctors that had emigrated (Pang, 2002; Ehman & Sullivan, 2001). Experienced health professionals command a better income; thus the government gains extensively in the form of collecting taxes and when they migrate, the tax collectable by government decreases significantly,

thus impacting the government's overall budget (Penuel et al, 2013). While the number of emigrating professionals has decreased, especially nurses, it is nonetheless imperative that the push factors that drive brain drain in South Africa are identified and dealt with to prevent further loss of skilled health professionals.

A crumbling health sector: For any health sector to function at optimal levels, it is very important that it has an effective and qualified workforce in place. The health sector is the backbone of any country, and its decay presents numerous challenges not only for the people but the government as well (Smith & Jury, 2017, Kabene et al., 2006). The emigration of South African health professionals meant that the remaining health workers have had to work extra hours, handle more work load which contributes to burn out. The continued migration of health workers may cripple the South African health sector should there be nothing done to try and limit the outflow of skills from the country.

Global competitiveness: The continuous exodus of health professionals negatively impacts on South African global competitiveness. The global competitiveness of a country is characterised by economic growth, level of literacy, GDP levels as well as the provision of quality health care for its citizens. As such, globalization has made it impossible to limit the movement of people, and it is clear that developing nations cannot compete with their developed counterparts in terms of financial incentives for health professionals (Shattuck et al., 2008). It is with this notion that the government needs to ensure that health professionals remain in the country and contribute to the country's economic development; thus guaranteeing the global competitiveness of the country.

Work moral: More than 70% of nurses in South Africa have admitted to moonlighting (The-Citizen, 2016). The migration of health professionals has undoubtedly had an adverse impact on the remaining staff. Govender and Appel (2006) assert that work overload and the skills shortages have contributed to poor morale and dedication among remaining health professionals. According to Dovlo (2005), this poses significant problems in terms of service delivery because low employee moral will result to poor quality service. Answering questions on nurses moonlighting on the 16th of May 2017, Miss Samkelisiwe (not original name for security reason) admitted that she and her colleagues often moonlight to supplement their meagre salary not minding the high number of patients they have to attend to.

The brain drain of health workers: Implications for South Africa

Health Implications: The performance of any health sector in the world is dependent on the availability of skilled medical professionals. In South Africa, the health sector is characterised by substantial amounts of skills shortages (Department of Labour, 2008). According to Money Marketing (2016), 70 percent of nurses in South Africa admitted to working overtime and during holidays because of the shortages of medical personnel in the country. According to the Medical-Chronicle (2016), in 2010 alone, there were approximately 81, 925 vacancies in the South African health sector, most of these vacancies were for nurses. Various causes have been blamed for the shortage of medical experts in South Africa; these include lack of investment in the public health sector, brain drain, inadequate equipment and brain drain. South African nurses and doctors are in demand around the world, owing to the fact they are well-trained in all medical disciplines, thus allowing them to be portable around the world. The loss of South African medical professionals has been devastating for the country's health sector, and will even be more catastrophic for South African economic development if appropriate immigration policy is not put in place. The continuous mass exodus of skills from the South African health sector will have disastrous consequences for the sector as a whole. The brain drain of South African medical professionals has led to substantial decline in the domestic health care delivery capacity, loss of training investment on immigration health professionals, loss of morale and dedication on the part of the remaining staff, increased shortage of skills, increased pressure and workloads on the remaining professionals and reduced efficiency in the functioning of the health sector (Fin24, 2011; Sue, 2005; Mortensen, 2008).

Economic implications: It is usually said that an educated population is a productive population. Therefore, if the population of a country is educated, it is likely going to contribute towards the economic development of that country by applying their skills in different sectors of the economy (Buchanan, 2012). Countries like South Korea, New-Zealand and Switzerland have invested immensely on educating their citizens knowing

well that educated citizens are usually productive. These countries have also suffered from brain drain, but the effects of brain drain have been rarely felt because of the high number of educated individuals who make for lost skills (Mugimu, 2010; McCarthy, 2015). South Africa has one of the highest investment rates in education; contrariwise, a large percentage of the population, particularly the black population, is illiterate and therefore every skilled professional that leaves the country is considered a loss to the country's economy (Vrbicek, 2015). A report by LeMay (2004) found that the migration of South African skilled workers has made it difficult for the country to rise above the 3 percent economic growth that it has been achieving over the years. He further reports that brain drain cost the South African economy over 2.5 billion rand (\$192.31 million) between 2002 and 2003. Brain drain is likely to negatively affect the economic situation of South Africa. Nevertheless, even though, South Africa may be losing some of its skilled professional in the health sector to other developed countries, this shortfall is arguably cushioned by skilled immigrants from other African states. These immigrants contribute to the South African economy. According to the Centre for Development and Enterprise (2000), South Africa is in need of skilled immigrants to drive the economy, as most of these immigrants have skills and immense knowledge in sectors such as IT, entrepreneurship, finance and academics. It is said that more skilled immigrants in South Africa will help enhance the economy, enabling it to grow and become more competitive (Kuznetsov, 2006).

5. Conclusion and Suggestions

With a growing population each year, the health sector cannot afford to lose skilled professionals who render vital services to the public. What this suggests is that the health sector needs to urgently redesign its retention strategy that will ensure that South African skills remain. According to Mokoka, Oosthizen & Ehlers (2010), the following initiatives can be implemented at both general and organizational level to retain medical practitioners in the country. The government must invest in employee professional development and encourage better working relationships and tolerance among professional health workers. Furthermore, retaining skills at organizational level would involve improving safety in the work place, investing in organizational development, ensuring effective resource utilization as well as improving the organizational culture. The South African health sector needs to prioritise retention policies. This will assist in curbing brain drain of health professionals. It is clear that the exodus of health professionals has had a negative effect on South African health sector. Push factors like poor salaries, poor working conditions and lack of security have been identified as the major drivers of migration among health professionals. While the government has acknowledged the horrible conditions under which health professionals work, addressing these challenges has been very slow. With the growth of population in South Africa, it is clear that the demand for medical care will increase over the years. The government together with the civil society must work together to develop and implement policies that would ensure that skilled professionals remain in the country.

Over the years, South Africa has lost thousands of highly skilled health professionals to developed countries. Globalization and the free movement of labourers have contributed to the brain drain of health professionals. Unfortunately, the government has not done enough to deal with the push factors that drive the migration of health workers. Although the educational system in South Africa has been slow in replenishing the skills that have been lost, the immigration of foreign skilled medical professionals (especially from Africa) has aided South Africa. While it is clear that South Africa cannot compete financially with developed nations, it can develop effective policies that will ensure that health workers are satisfied. There are policies which can be implemented to reduce the outflow of health professionals from South Africa. These include increasing the training of health workers, improving working conditions and security, upgrading infrastructure and ensuring availability of resources, and developing a more open immigration policy. It therefore means sustainable socio-economic development cannot be achieved while the country is losing its highly skilled work force; therefore the government needs urgent interventions to reduce brain drain.

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