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# Attitudes of Healthcare Professions Students Towards Practice and Migration to Developed countries

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ABSTRACT

Background: Professionals from several developing countries migrate to developed countries in the quest for greener pastures and healthcare professionals are no exception. The migration of healthcare professionals to developed countries questions the choice of practice for the passion of saving lives despite the challenges that come with it or for better remuneration and comfort. Management of healthcare professionals in developing countries to ensure their retention is a matter of concern. Exploring the attitudes of healthcare students towards their journey to practice and where they intend to practice is paramount to addressing the shortage of healthcare professionals in developing countries that are already resource-constrained.

Methods: In June 2022, 102 students of Sanskriti University studying various healthcare courses from several African countries and India participated in this cross-sectional study by filling out pre-tested questionnaires. Data were presented and summarized by descriptive statistics and relationships between multivariable were established using Excel functions.

Results: A majority of the students, 84.31% preferred to migrate to practice while 15.69% preferred to practice in their home countries. About 27.45% preferred to practice in the United States of America, 24.50% preferred to practice in Canada, 21.57% preferred to practice in any other developed country, 15.69% preferred to practice in the United Kingdom and 8.82% preferred Australia.

Conclusions: Students under training to be healthcare professionals have built attitudes where the majority prefer to practice in developed countries and urban areas. This calls for the governments in developing countries to make huge investments in providing quality training and building a robust healthcare delivery system with policies that ensure the retention of healthcare professionals.

Keywords: emigration, migration, healthcare worker migration, developing countries, developed countries

## 1. INTRODUCTION

### *Background*

Quality healthcare delivery in developing countries has been a matter of concern, especially referencing the global shortage of healthcare professionals was estimated to be 4.3 million as of 2006 by the World Health Organization (WHO) (WHO, 2006). It is therefore imperative for healthcare management in developing countries to retain healthcare professionals considering the already compromised healthcare delivery system with regards to structure and resources. This also poses a challenge to human resource and administrative managers to probe underlying causes leading to the migration of professionals to developed countries. The compromised capacity of healthcare facilities in development if not tackled may also lead to the non-achievement of the Millennium Development Goals proposed for the health sector (WHO, 2006; Mathauer & Imhoff, 2006).

Developed countries have significantly received benefits from highly skilled professionals migrating to seek greener pastures to the detriment of developing nations. This has contributed to doctors, nurses, and allied health professionals from resource-constrained countries abandoning their practice in their home regions (Stilwell et al., 2004). Irrespective of the attempt to build a strong healthcare delivery system in some of these countries, developed countries such as the United States of America (USA) and the United Kingdom (UK) have intensified the recruitment of healthcare professionals from abroad after they anticipated a shortage of healthcare professionals in a decade to two to come (Stilwell et al., 2004). The USA has about 24.8 healthcare professionals per 1000 people as opposed to 2.3 per 1000 people on the African continent which is made up of

57 countries. In 2003, the UK received 13,967 medical doctors from their recruitment program from abroad. These statistics generate a detrimental effect on the healthcare worker-patient ratio in the countries from which the emigration occurred (Naicker et al., 2004).

Results of studies conducted in developing countries such as Nepal and Uganda showed that students may decide on where they wish to practice during their years of training (Naicker et al., 2009; Huntington et al., 2012). During these years they develop attitudes towards their future practice by building perceptions of the state of healthcare delivery and professional needs in their home region be it physical, financial, and/or emotional (Huntington et al., 2012). Technology coupled with social media has made it accessible for students in training to make a comparison between the practice they see in their home region and what it seems to be abroad (Stilwell et al., 2004). This comparison may either be healthy or unhealthy depending on what they see and the conclusions they draw. Also, communication through technology has made it easy for students to be trained for jobs abroad online and remotely to meet the stipulated skills and guidelines required for practising in developed countries. Countries such as the UK and Canada have introduced immigration policies and schemes for international healthcare professionals, especially nurses that make it easy for them to apply for tailor-made visas for healthcare professionals (Stilwell et al., 2004; Naicker et al., 2009; Buchan & Sochalski, 2004).

***Statement of the problem***

The healthcare delivery system in developing countries has greatly suffered from the migration of their professionals to developed countries (Stilwell et al., 2004; Naicker et al., 2009). Several countries in Africa and Asia have greatly suffered a shortage of healthcare professionals increasing their disease burden [5,6]. Developed countries in a quest to tackle the anticipated shortage of healthcare professionals in years to come have resorted to strategically recruiting healthcare professionals from developing countries to the detriment of these countries (Stilwell et al., 2004). Healthcare professionals under training in developing countries may develop perceptions and attitudes towards their future practice and where they would like to practice. Should in case a significant number of these trainees decide to migrate to developed countries, the healthcare delivery system would greatly suffer (Stilwell et al., 2004). The WHO recommends the allotment of 2 physicians to 10000 persons (Naicker et al., 2009). Therefore, trainees who decide to migrate to developed countries contrarily wouldn't satisfy this recommendation generating a vacuum in the number of healthcare professionals battling diseases in healthcare facilities in their home countries.

***Significance of the study***

Treatment of diseases especially infectious diseases such as HIV, Ebola, and tuberculosis has been a great challenge to developing countries (Stilwell et al., 2004; de Lamballerie & Colson, 2006). Treatment of infectious diseases coupled with non-infectious diseases requires a robust healthcare delivery framework from which adequate healthcare professionals are not exempted (de Lamballerie & Colson, 2006). Healthcare management in these countries is therefore burdened with ensuring healthcare facilities are adequately equipped especially with healthcare professionals (Naicker et al., 2009). The migration of healthcare professionals to developed countries further intensifies the burden **of tackling** infectious and non-infectious diseases which may increase mortality (de Lamballerie & Colson, 2006). The purpose of this study is to probe factors that may influence the emigration of students under training as health professionals in developing countries to developed countries. The findings of this may help healthcare management in these countries develop new policies, upgrade old policies and introduce interventions such as financial compensation that may motivate not only students under training **but** may also extend to those already working (Stilwell, 2004; Deressa & Azazh, 2012).

## METHODOLOGY

The study was conducted at Sanskriti University which is a private university located in Mathura, Uttar Pradesh, India. This university is a multicultural university with Indian students and students from over 8 African countries. The university runs three campuses with the first campus running management, education, arts, and science courses. The second campus runs the medical and allied health courses while the third campus is designated for the engineering sciences. The second campus comprises students studying medicine, nursing, medical laboratory science, pharmacy, optometry, physiotherapy, and cardiovascular technology. Training for undergraduate programs excluding medicine typically runs for three years with the fourth year designated for internship. Training for medical students is four years with two post-clinical years. In April 2022, a cross-sectional study based on quantitative data was conducted among undergraduate healthcare (year 1 to final year) students. A self-modified questionnaire used in "Attitudes of undergraduate medical students of Addis Ababa University towards medical practice and migration, Ethiopia'' which was pre-tested was employed for data collection (Naicker et al., 2010). The questionnaire contained closed-ended questions which collected information on socio-demographics and their opinions on migration based on selected factors and future practice based on their experiences as students and knowledge of healthcare professionals in their home countries.

Ethical approval was sought from the Ethical Review Board of the university before the dissemination of the questionnaires. The collected data was extracted from Google Forms and analysed using Microsoft Excel 2019. The data were summarized and presented by descriptive statistics. Frequencies and percentages of responses were calculated and the association between multiple variables was established using Excel's "countifs" function for multiple criteria.

## RESULTS

102 students out of the body of undergraduate student healthcare professionals in the university consented to participate in the study. Responses received were from students from India, Ghana, Nigeria, Zambia, Tanzania, Namibia, Liberia, and Zimbabwe. The students were studying medicine, nursing, optometry, pharmacy, cardiovascular technology, medical laboratory science, and physiotherapy.

Tables 1 and 2 below give a summary of the socio-biographic details and practice preferences. The majority of the students were females with a percentage of 51.96% with 52.17% of the respondents being 21 and above. 58.82% of the students have an urban background while 41.18% have a rural background. 44.15% of the students came from a family that runs their own business, 34.31% come from a family that generates their source of income from government companies, and 21.57% of them receive their family's main source of income from private companies. 60.78% of the fathers of the students were qualified as undergraduate and above. The highest education level of the mothers of 41.00% of the students was elementary or high school against 37.25% for their fathers. Also, 16.67% of the mothers of the students had never attended school against 2.94% of their fathers. 28.43% of these students were studying optometry, 24.51% were studying pharmacy, 11.76% were studying medicine, 10.78% were studying medical laboratory science,9.80% were studying nursing, 8.82% were studying cardiovascular technology, and 5.88% were studying physiotherapy. Years 4,3,2 had 29.41% of each of the student respondents while 11.76% were in year 1. 52.94% preferred to have their initial practice in urban areas, 17.65% in rural areas and 29.41% preferred to migrate. A majority of 84.31% preferred to migrate while 15.69% preferred not to. 27.45% of the students preferred to migrate to the USA, 24.50% to Canada, 15.69% to the UK, 21.57% preferred any other developed country and 8.82% preferred Australia.

**Table 1** Socio-demographic details of students

| **Basis** | **Frequency (n)** | **Percentage (%)** |
|---|---|---|
| Gender | | |
| Female | | **49.04** |
| Male | **49.00** | **51.96** |
| | **53.00** | |
| Age | | |
| 15-20 | **33.00** | **47.83** |
| 21 and above | **69.00** | **52.17** |
| Background | | |
| Rural | **60.00** | **58.8** |
| Urban | **42.00** | **41.18** |
| Mother's education level | | |
| Never attended school | **17.00** | **16.67** |
| Elementary or high school | **47.00** | **46.07** |
| Undergraduate and above | **38.00** | **37.25** |
| Father's education level | | |
| Never attended school | **3.00** | **2.94** |
| Elementary or high school | **37.00** | **36.27** |
| Undergraduate and above | **62.00** | **60.78** |
| Course | | |
| Medicine | **12.00** | **11.76** |
| Nursing | **10.00** | **9.80** |
| Medical Laboratory Science | **11.00** | **10.78** |
| Pharmacy | **25.00** | **24.51** |
| Optometry | **29.00** | **28.43** |
| Physiotherapy | **6.00** | **5.88** |

| **Basis** | **Frequency (n)** | **Percentage (%)** |
|---|---|---|
| Cardiovascular Technology | **9.00** | **8.82** |
| Study Year | | |
| Year 1 | **12.00** | **11.76** |
| Year 2 | **30.00** | **29.41** |
| Year 3 | **30.00** | **29.41** |
| Year 4 and above | **30.00** | **29.41** |

**Table 2** Practice preferences of students

| Basis | Frequency (n) | Percentage (%) |
|---|---|---|
| Location for initial practice | | |
| Urban | **54** | **52.94** |
| Rural | **18** | **17.65** |
| Migrate | **30** | **29.41** |
| Prefer to migrate | | |
| Yes | **86** | **84.31** |
| No | **16** | **15.69** |
| Choice of Developed Country to Migrate | | |
| United States of America | | |
| Canada | **28** | **27.45** |
| United Kingdom | **25** | **24.50** |
| Australia | **16** | **15.69** |
| Any other developed country | **9** | **8.82** |
| | **22** | **21.57** |

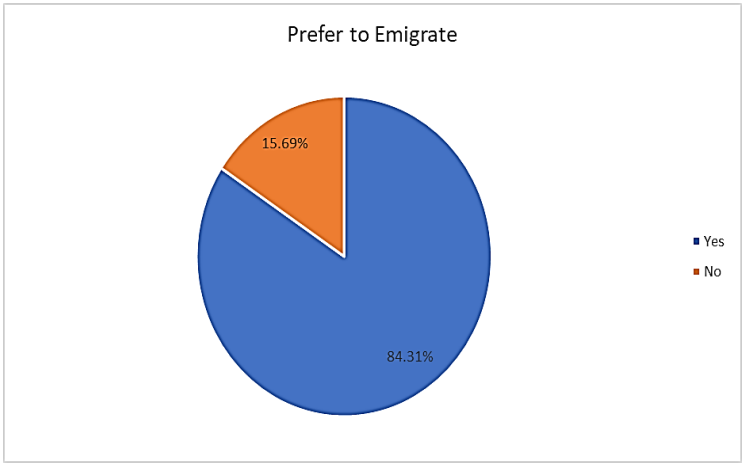


**Figure 1** Student percentages to migrate for practice

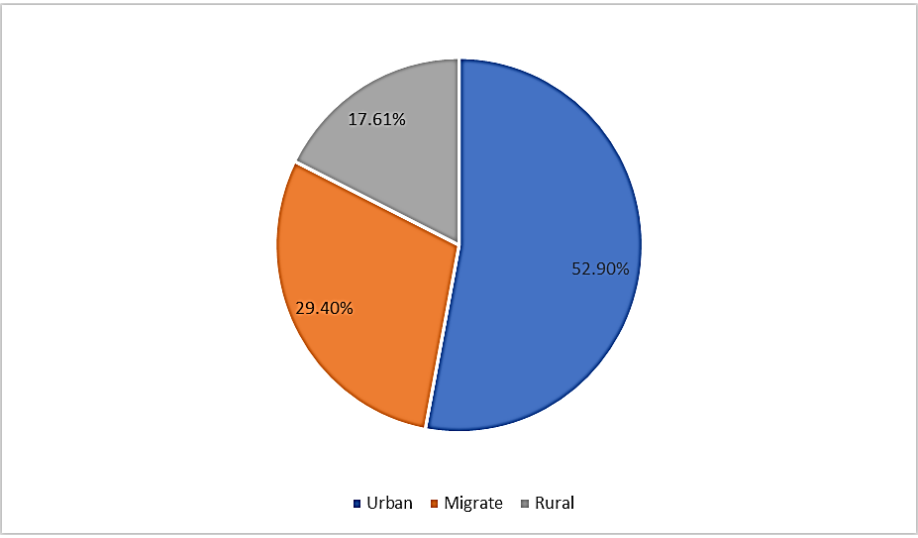


**Figure 2** Student percentages of the initial locations for practice

Table 3 below summarises factors that influence the preference of the students to migrate 38.24% of the students who received their family's income from the family business preferred to migrate. 29.41% whose families received income from government companies preferred to migrate while 16.67% whose families received income from a private company preferred to migrate. Meanwhile, 5.88% of those whose families received income from the family business preferred not to migrate, and 4.90% who received income from government and private companies each preferred not to migrate. 47.06% of the students who were interested in the field of life-saving preferred to migrate while 12.75% preferred not to. 10.78% chose their courses for better income preferred to migrate, 6.82% who chose their courses because of social prestige preferred to migrate, while 5.88% chose their courses because they had no other better choice and therefore preferred to migrate. 5.88% who chose to study their courses because of God's will or childhood dream preferred to migrate while 1.96% preferred not to. Also, 3.92% who chose their course because of family or peer influence preferred to migrate while 0.98 preferred not to. 3.92% who studied their courses because it was assigned or imposed preferred to migrate. 59.80% reported that jobs are scarce for working professionals in their home countries and therefore preferred to migrate. 24.51% of them reported jobs were not scarce but still preferred to migrate. 12.75% of the students reported jobs were not scarce but still preferred not to migrate while 2.94% reported jobs were not scarce and therefore preferred not to migrate. 65.69% of the students thought that salaries were low for working professionals in their home countries and therefore preferred to migrate while 18.63% thought salaries were not low but still preferred not to migrate. 12.75% of them thought salaries were low but preferred not to migrate while 2.94% of them who thought salaries were not low preferred not to migrate. 49.02% of the students said bonuses were given to working professionals in their countries but preferred to migrate while 35.29% said bonuses were not given and preferred to migrate. 9.80% of the students said bonuses were not given but preferred not to migrate while the 5.88% of them who said bonuses were given preferred not to migrate.

**Table 3** Factors that influence preference to migrate

| | Prefer to Migrate | | | |
|---|---|---|---|---|
| Factors | **Yes (n)** | **Percentage (%)** | **No(n)** | **Percentage (%)** |
| Main Source of Family's Income | | | | |
| Government company | **30.00** | **29.41** | **5.00** | **4.90** |
| Private company | **17.00** | **16.67** | **5.00** | **4.90** |
| Family business | **39.00** | **38.24** | **6.00** | **5.88** |
| Reason for choice of course | | | | |
| Interested in the field of life-saving | **48.00** | **47.06** | **13.00** | **12.75** |
| For better income | **11.00** | **10.78** | **0.00** | **0.00** |
| | **7.00** | **6.82** | **0.00** | **0.00** |

| | | | | |
|---|---|---|---|---|
| Social Prestige | **4.00** | **3.92** | **1.00** | **0.98** |
| Family or Peer Influence | **6.00** | **5.88** | **0.00** | **0.00** |
| Had no better choice | **4.00** | **3.92** | **0.00** | **0.00** |
| Assigned or imposed | **6.00** | **5.88** | **2.00** | **1.96** |
| God's will or childhood dream | | | | |
| Low Salary | | | | |
| Yes | **67.00** | **65.69** | **13.00** | **12.75** |
| No | **19** | **18.63** | **3** | **2.94** |
| Bonuses Given | | | | |
| Yes | **50.00** | **49.02** | **6.00** | **5.88** |
| No | **36.00** | **35.29** | **10.00** | **9.80** |

From Table 4 below, 50.00% of the students who reported the working conditions of healthcare professionals were poor preferred to migrate. 34.32% of them who disagreed with poor working conditions preferred to migrate. 8.82% of the students reported that working conditions were poor but preferred not to migrate. 6.68% reported working conditions are not poor and therefore prefer not to migrate. 50.98% of the students thought that working professionals were not poor but still preferred to migrate. 33.33% thought working professionals were poor and therefore preferred to migrate. 7.84% thought working professionals were poor but preferred not to migrate while 7.84% thought healthcare professionals were not poor and therefore preferred not to migrate. 63.73% of the respondents thought that the career progression of working professionals in their home countries was taken seriously but still preferred to migrate while the 20.59% of them who reported career progression was not taken seriously preferred to migrate. 12.75% of the students reported career progression was taken seriously and preferred not to migrate while 2.94% of them reported that career progression was not taken seriously but preferred not to migrate. A majority of 50.98% of the students who had no family or friends working in developed countries preferred to migrate while 33.33% of the students who had family or friends practising abroad preferred to migrate. 11.76% of the students who had no family or friends living abroad preferred not to migrate while the 3.92% of them who had family or friends practising abroad preferred not to migrate. 34.31% of the students who preferred to initially work in a public hospital also preferred to migrate, 32.35% of those who chose to initially work in a private hospital preferred to migrate, 10.78% of the students who chose to have their own practice preferred to migrate and 6.86% of them who chose to initially work for NGOs preferred to migrate. 5.88% chose to initially work in a public hospital and preferred not to migrate, while 3.92% who chose to initially practice in private hospitals preferred not to migrate. Also, 3.92% of those who chose to initially have their personal practice preferred not to migrate while 1.96% of those who chose to work for NGOs preferred not to migrate. 45.10% of the students chose to initially work in the urban areas but preferred to migrate while 25.49% preferred to migrate to a developed country as a location for their initial practice. 13.73% of those who chose to initially practice in rural areas preferred to migrate while 7.84% of them who chose to work in urban areas preferred not to migrate. 3.92% who intend to initially practice in rural areas preferred not to migrate while 3.92% chose to migrate to a developed country as the initial location to practice.

**Table 4** Factors that influence preference to migrate and initial practice preferences that affect the choice to migrate

| | Prefer to Migrate | | | |
|---|---|---|---|---|
| Factors | Yes (n) | Percentage (%) | No (n) | Percentage (%) |
| Poor Working Conditions | | | | |
| Yes | **52.00** | **50.00** | **9.00** | **8.82** |
| No | **35.00** | **34.32** | **7.00** | **6.86** |

| | Prefer to Migrate | | | |
|---|---|---|---|---|
| Factors | Yes (n) | Percentage (%) | No (n) | Percentage (%) |
| Healthcare Professionals are Poor | | | | |
| Yes | **35.00** | **33.33** | **8.00** | **7.84** |
| No | **51.00** | **50.98** | **8.00** | **7.84** |
| Value Attached to Career Progression | | | | |
| Yes | **65.00** | **63.73** | **13.00** | **12.75** |
| No | **21.00** | **20.59** | **3.00** | **2.94** |
| Family/Friends Abroad | | | | |
| Yes | **34.00** | **33.33** | **4.00** | **3.92** |
| No | **52.00** | **50.98** | **12.00** | **11.76** |
| Organization for Initial Practice | | | | |
| Personal practice | **11.00** | **10.78** | **4.00** | **3.92** |
| Private hospital | **33.00** | **32.35** | **4.00** | **3.92** |
| Public hospital | **35.00** | **34.31** | **6.00** | **5.88** |
| NGO | **7.00** | **6.86** | **2.00** | **1.96** |
| Location for Initial Practice | | | | |
| Urban | **46.00** | **45.10** | **8.00** | **7.84** |
| Rural | **14.00** | **13.73** | **4.00** | **3.92** |
| Migrate | **26.00** | **25.49** | **4.00** | **3.92** |

From Figure 3 below, a majority of 72.50% of the students reported jobs are scarce for healthcare professionals in their home countries while 27.50% believe there are not. 78.40% reported that salaries were low while 21.60% thought otherwise. 54.90% reported that bonuses were given to working professionals while 45.10% reported that bonuses were not given. A majority of 57.80% of the students reported that working conditions for working professionals in their home countries were not poor while 42.20% reported that working conditions were poor. A majority of 76.50% reported that career progression for working professionals was taken seriously while 23.50% believed it is not.

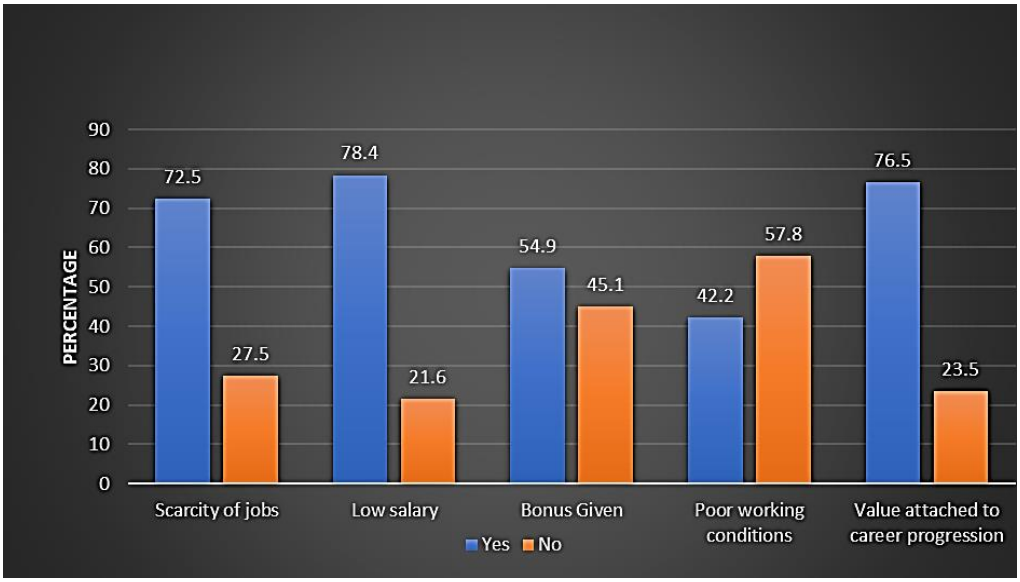


**Figure 3** Student percentages of factors that may influence the intention to migrate

From Table 5 below, 33.33% of the students who have an urban background chose to initially practice in the urban area while 20.59% who have an urban background chose to migrate. 19.60% who had a rural background chose to work in the urban areas as an initial location for practice while 12.75% who had a rural background chose to work in rural areas for their initial practice. 8.82% who have a rural background chose to migrate while 4.90% who had an urban background chose to initially practice in rural areas.

**Table 5** Background and choice of location for initial practice

| | Location for Initial Practice | | | | | |
|---|---|---|---|---|---|---|
| Background | **Rural** | **Percentage (%)** | **Urban** | **Percentage (%)** | **Migrate** | **Percentage (%)** |
| Rural | **13.00** | **12.75** | **20.00** | **19.60** | **9.00** | **8.82** |
| Urban | **5.00** | **4.90** | **34.00** | **33.33** | **21.00** | **20.59** |

From Table 6 below, 33.33% who felt very good about studying their course were motivated by their professors and preferred to migrate while 23.53% who felt excellent were motivated by their professors and preferred to migrate. 16.67% who felt good about studying their course were motivated by their professors and preferred to migrate while 9.80% who had a fair feeling were motivated by their professors and preferred to migrate. 0.98% who felt bad about studying their course were motivated by their professors and preferred to migrate while 7.84% who felt good were not motivated by professors and preferred not to migrate. 3.92% who felt very good about studying their course were not motivated by their professors and preferred not to migrate. 2.94% who felt excellent about studying their course were not motivated and preferred not to migrate while 0.98% who had a fair feeling were not motivated by their professors and preferred not to migrate.

**Table 6** Relationship between current feelings about the choice of the study course, motivation by professors, and preference to migrate.

| | Motivated by Professors and Prefer to Migrate | | | |
|---|---|---|---|---|
| Current Feeling | **Yes** | **Percentage %** | **No (n)** | **Percentage %** |
| Excellent | **24.00** | **23.53** | **3.00** | **2.94** |
| Very Good | **34.00** | **33.33** | **4.00** | **3.92** |
| Good | **17.00** | **16.67** | **8.00** | **7.84** |

| | | | | |
|---|---|---|---|---|
| Fair | **10.00** | **9.80** | **1.00** | **0.98** |
| Bad | **1.00** | **0.98** | **0.00** | **0.00** |

## DISCUSSION

Healthcare professionals over the years have migrated from their home countries to other countries several miles apart due to globalisation (Naicker et al., 2010). The shortage of healthcare professionals globally has been a major concern and the WHO has expressed concern about the migration of healthcare professionals (WHO, 2006; WHO, 2016). This is so because developed countries have greatly benefited to the detriment of developing countries which are already struggling to achieve quality healthcare for their citizens (Mathauer, 2006; Naicker et al., 2009). The healthcare delivery system would suffer greatly if a significant number of trainees decided to migrate to developed countries (Mathauer, 2006). Sub-Saharan Africa alone has a gap of doctors and nurses numbering about 2.4 million (Naicker et al., 2010). This is consistent with the findings of this study where 84.31% of the students preferred to migrate to practice. Developing countries such as Canada, Australia, the UK, and the USA especially have received healthcare professionals from developing countries over the years. This study also identified that 27.40% of the respondents preferred to practice in the USA, followed by Canada (21.57%) and other developed countries (21.57%) with the UK and Australia being preferred least (15.59% and 8.82% respectively). The students preferred the USA because it makes it easier for professionals to migrate and also gives commendable wages to employees (Lancet, 2006).

Several factors have been identified to influence the migration of healthcare professionals (Nguyen et al., 2009). This study identified three main factors that are scarcity of jobs (72.50%), low salary (78.40%), and absence of bonuses (45.10%) that influence migration in developed countries. Due to the anticipated shortage of healthcare professionals in developed countries, numerous job opportunities with higher wages are available to the above-mentioned healthcare professionals struggling to gain employment in developing countries (Stilwell et al., 2004; Serour, 2009). Consistently, a majority of the students preferred to migrate because of low salaries (65.69%) and the scarcity of jobs (59.80%). Trainees in countries like Uganda, India, the Philippines, and Nepal are likely to have negative perceptions about where to practice due to the existing low wages and poor working environments in the health sector (Huntington et al., 2012; Nguyen et al., 2009; Walton-Roberts et al., 2017). Findings from this study showed that 50.00% preferred to migrate because of poor working conditions. Also, 38.24% of students whose families receive income from family businesses preferred to migrate followed by 29.41% of those families that receive income from government companies. This can be attributed to minimum wages being low in Sub-Saharan Africa (Bhorat et al., 2017) and India resulting in mass migration (Oda, 2018). Although several developing countries do not have stipulated policies that contribute to career development (Syed, 2008), 63.73% who thought otherwise still preferred to migrate. Findings from this study showed that 34.31% of the students who initially wanted to work in the public hospital preferred to migrate, followed by those in private hospitals (32.35%) and personal practice (10.78%). The majority of working professionals prefer to work in the hospitals because of training for career progression to subsequently join the private hospitals (Price & Weiner, 2005) making the public hospitals a detriment of having well-trained working professionals (Deressa & Azazh, 2012). Other factors such as love and dedication for the profession and the mental health of healthcare professionals affect their choice of where to practice (Makasa, 2005). Findings from this study revealed that 47.06% who were interested in the field of life-saving still preferred to migrate. Therefore, in the case of these students, dedication to saving lives was not enough to prevent them from migrating. Healthcare professionals are pulled by lucrative offers coupled with a safe and conducive working environment (Buchan & Sochalski, 2004). It is the opinion of certain experts that physicians migrate to developed countries not only because they want higher wages and better working conditions but because they have a better chance to pursue higher education (Sabde et al., 2014).

Rural areas in most developing countries are mostly affected by diseases such as tuberculosis, coupled with inadequate infrastructure and healthcare professionals (USAID, 2015). Unfortunately, only 17.60% of the students preferred to initially work in rural areas. 52.90% chose to initially work in urban areas. Several studies reveal that healthcare professionals who avoid rural areas to work in urban areas are enticed to migrate abroad (Stilwell et al., 2004; Naicker et. al., 2009; Huntington et al., 2012; Deressa & Azazh, 2012). Consistently, 45.10% who chose urban areas for initial practice preferred to migrate. Also, 33.33% of the students with urban backgrounds preferred to still practice in urban areas while 20.59% preferred to migrate.

Student healthcare professionals in developing countries are likely to develop perceptions and attitudes toward where and how they would like to practice during their training (Deressa & Azazh, 2012; Nguyen et al., 2009). Therefore, to successfully train well-dedicated and quality healthcare professionals, universities and training institutions are to make a conscious effort to provide sound education and career guidance that will augment the interest of students to practice in developing countries (Deressa & Azazh, 2012). Contrarily, a majority of 33.33% who were feeling very good about their course preferred to migrate, followed by those who felt excellent (23.53%) and then those who felt good (16.67%). The rapid increase in private training centres for healthcare workers in India has questioned the production of healthcare professionals who are likely to be enticed by job opportunities abroad instead of serving their home countries (Walton-Roberts et al., 2017; Makasa, 2005). Until a stringent intervention is developed by developing countries, healthcare professionals will continue to migrate to developed countries (McDonald & Kippen, 2001). Governments of developing countries are to take the migration of their health professionals seriously because estimates by the United Nations Conference on Trade and Development show that in Africa, $ 184,000 of revenue is lost when just one professional migrates (Oyowe, 1996).

The limitation of this study is that respondents of the study are from a single university and their responses may not represent the majority of student trainees in the various developing countries. Nevertheless, this limitation does not affect the validity of the data and results of this study which can help develop policies geared at curbing health professional migration.

## Conclusion

This paper demonstrates that the migration of healthcare professionals in developing countries goes back to the attitudes they build during their training years. Students build perceptions through their experiences in their training institutions and the knowledge they have about the experiences of working professionals. Several factors, therefore, influence the decisions student trainees in developing countries make to either practice in their home countries or migrate. More than two-thirds of the students prefer to practice in developed countries and more than half prefer to work in urban areas. This demonstrates how the students are attracted to development and good structures. Therefore, this study suggests that just like developed countries, developing countries should make huge investments in providing quality training, infrastructure, and benefits that ensure a comfortable career for healthcare professionals (Bach, 2003; Fox, 2007). Therefore, healthcare regulatory agencies and governments in developing countries should take seriously the disease burden that has arisen due to health worker migration and develop stringent policies and interventions that seek to regulate the outflow of healthcare workers (Stilwell et al., 2004; Kanchanachitra et al.,2011).

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