BMJ Open

Perceptions of medical doctors living in Ethiopia about physician migration: a qualitative study

Ephrem Tadele Sedeta [ID] ,[1] Temesgen Beyene Abicho [ID] ,[2] Bilain Yilma Jobre[1]

[1]Department of Medicine, Addis Ababa University College of Health Sciences, Addis Ababa, Ethiopia
[2]Department of Emergency Medicine, Addis Ababa University College of Health Sciences, Addis Ababa, Ethiopia

Correspondence to
Dr Ephrem Tadele Sedeta; ephremsedeta@gmail.com

ABSTRACT

Objectives Migration of physicians is one of the most pressing global health problems of our time with the greatest implications in sub-Saharan African countries. Although other studies have explored and produced important quantitative data about the impact of medical migration in the health sector of Ethiopia, the motive behind Ethiopian physician migration have been explored less thoroughly. This article explores the perceptions of a group of physicians about the complicated and continuously evolving driving forces of physician migration in Ethiopia.

Design Qualitative study using in-depth, virtual semistructured interviews.

Participants Using purposive sampling, 12 physicians participated.

Setting Skype interviews with 12 participants working in Tikur Anbessa Specialised Hospital in Addis Ababa, Ethiopia.

Results Four themes emerged reflecting the perceptions of Ethiopian medical doctors on the driving forces of physician migration: (1) Economic push and pull factors; (2) Professional push and pull factors; (3) Social and Political push and pull factors and (4) Medical migration governance.

Conclusion The emigration of Ethiopian physicians is made after weighing the push and pull factors. Push factors are more crucial than pull factors, and financial reasons play the leading role. Junior physician unemployment, politicisation of hospital administration, and poor medical migration governance are growing problems. Junior physician unemployment is a recent phenomenon in Ethiopia and with a potential to be a leading push factor if appropriate intervention is not taken. The findings of this study are worrying and urge for comprehensive solutions to be devised by policy-makers to deal with physician migration in Ethiopia.

STRENGTHS AND LIMITATIONS OF THIS STUDY

⇒ To our knowledge, this article is the first to explore the motivation behind migration of Ethiopian physicians using a qualitative approach.
⇒ The study design enabled in-depth inquiry of current experiences of Ethiopian physicians in a heterogeneous sample.
⇒ As the interviews were conducted in the participants' native language, namely Amharic, the constructed meaning of the original language may be affected during translation into English.
⇒ Another limitation is selection bias as physicians working in one tertiary hospital were invited.

2017, the Netherlands had 61368 physicians in total.[3] Comparatively, as of 2018, there was a total of 8395 physicians in Ethiopia, 168 in Liberia, 165 in Sierra Leone, 6400 in Angola, 5832 in Democratic Republic Congo and 3026 in Zimbabwe.[3] Put in perspective, this indicates that the aggregate stock of physicians in these six SSA countries is less than half of the doctors in the Netherlands. It should be noted that the combined population of these six countries (N=252 million) is nearly 15 folds larger than the Netherlands. This makes the Netherlands have close to 38 folds more proportionate physicians than the six SSA countries combined.

Several theories have evolved about international migration in general. The push-pull theory which was initially introduced by Ravenstein in 1889 and expanded on by Lee in 1966 is the most frequently cited explanation for migration.[4] Lee conceptualised the factors related with the decision to migrate and the migration process into four categories: (1) Factors related with the place of origin; (2) Factors related with the place of destination; (3) Intervening obstacles and (4) Individual factors. In each area, there are different factors that either drive people away (push factors) or attract and hold people to it (pull factors). This 'push/pull' dichotomy is a frequently employed research model to

INTRODUCTION

Physician migration from low-income countries (LICs) to high-income countries (HICs) has been a pressing global issue in recent decades.[1] The greatest health workforce shortage is in sub-Saharan African (SSA) countries which bear a quarter of the world's disease burden but have only 3% of health workers and less than 1% of the global financial resources to address the burden.[2] In

evaluate causes of health professionals' emigration. These are factors that 'push' health professionals to leave, and 'pull' factors that make emigration a worthy and workable option. Particularly, the concept of push and pull factors has emerged as a practical framework to explore the inherent driving forces of physician migration in diverse contexts across the world.[5]

Current global social and economic forces compel movement of health professionals from LICs to HICs. The push-pull framework has been utilised to analyse and identify such forces in SSA countries. Studies that were conducted to assess the extent of flow of physicians and nurses from African countries pointed to forces such as: Structural Adjustment Programmes, low remuneration, weak healthcare systems, inadequate training and limited career advancement, economic and political instabilities and security issues.[4 6] Furthermore, other identified push factors include low quality education, lack of housing and transport, gender discrimination, poor job security, and work stress.

One SSA country particularly affected by this health problem is Ethiopia. In 2016, the physician-to-patient ratio in Ethiopia was 1:20,000, which is below the WHO recommended minimum density of 2.3 doctors per 1000 population needed to achieve the minimum levels of key health interventions.[7] Ethiopia primarily losses its physicians to migration ranking as one of the leading countries in Africa in aggregate loss following Egypt, Nigeria, South Africa and Ghana.[8] Ethiopia implements compulsory service programmes as a way to deploy and retain physicians as a compensation for the state funded medical education for all students except those who graduate from private medical schools. Despite this, the level of physician emigration in Ethiopia is alarming because the country has not been able to train sufficient number of physicians to provide adequate medical services for its ever-growing population. Between 1987 and 2006, close to 75% of physicians in Ethiopia left the public sector to emigrate overseas or join the local Non-Governmental Organisations or private sector, making them less accessible to the ordinary Ethiopian.[7] According to a World Bank report from 2011, about 26.4% of physicians trained in Ethiopia were living and practicing abroad.[9] A study by the Migration Policy Institute found that 531 Ethiopian physicians were practicing in the US in 2011, of which 78 graduated between 2000 and 2008.[10]

The Ethiopian Federal Ministry of Health has drafted a Human resources for Health (HRH) strategic plan to address the recruitment, training, deployment and management of HRH. However, given the high emigration of physicians, it touches the issue very lightly and reviews the push factors inadequately.[11] Although studies have explored and produced important quantitative data about the impact of medical migration in the health sector of Ethiopia, the motive behind Ethiopian physician migration have been explored less thoroughly.[12] The aim of this qualitative study is to explore the driving forces of physician emigration in a cohort of Ethiopian medial

doctors. A series of online interviews was done, and the data is analysed using a framework based on push and pull factors.

METHODS

Study design and setting

We used a descriptive qualitative research design. We explored the perception of Ethiopian physicians about medical migration as 'being constructed through the contexts of events and situations and the placement of experiences within wider social environment'.[13]

Data for this study were collected from physicians working in Tikur Anbessa Specialised Hospital (TASH): the main teaching hospital for Addis Ababa University and the largest referral hospital in the country. Qualitative approach was used for two reasons: (1) Perception about migration, personal experiences and accounts that lead to emigration are expected to be diverse; (2) Existing motives for migration of physicians are relatively unexplored. Employing a qualitative approach opens a ground in which all personal opinions, experiences, and perceptions would be brought forward for further analysis that cannot be captured using quantitative studies.[14]

Participants

Participants were selected with the following inclusion criteria: (1) Completed their professional training in medicine; (2) carrying out their postgraduate training or completed their training in various specialty fields in Addis Ababa University School of Medicine; and (3) Living in Ethiopia at the time of the interview and actively practicing medicine.

Purposive sampling was used to recruit potential participants. The researchers aimed to compose a heterogeneous sample by sex, geographic location of origin, academic position, income and specialty to allow the study of a wide range of experiences and increase chances to elicit data.[15] One round of invites was sent by email. A total of 18 physicians were invited to participate; 15 responded to indicate interest and 3 physicians opted not to participate due to time restraints. Participants were provided with full details about the research and invited to an informal skype discussion with the interviewer (ETS) to discuss the research objectives and procedures.

Data collection

The primary researcher (ETS) was responsible for data collection, an experienced male qualitative researcher in Medicine and Global Health. He established contacts with potential participants and conducted the interviews. Data for this study was collected from physicians working in TASH: the main teaching hospital for Addis Ababa University and the largest referral hospital in the country. Informed written consent to participate was obtained in all cases.

Semistructured interview with open-ended questions and discussion guideline was developed for the proposed

study using a review of available literature on migration motives of physicians from sub-Saharan Africa countries and other LICs. There were no pilot interviews nor question changes. The topics included driving factors for migration, changes felt crucial in Ethiopia to retain physicians, and perceptions about how medical migration is governed.

This study presents data collected virtually through semistructured interviews in Ethiopia. The qualitative technique used was virtual interview using Skype. Sessions were held until no new topics or findings emerged from conversations. The language used for the interviews was Amharic, the working language of Ethiopia. Interviews were digitally recorded after consent was obtained for audio recording; It was transcribed verbatim along with the interviewer's notes immediately following each meeting. Participants chose the interview timing. All interviews were conducted in May 2020. The in-depth interviews lasted between 35 and 73 min.

Data analysis

After data collection was complete, data analysis was carried out in a deductive process. The data were transcribed and translated into English by the principal researcher (ETS). Translated transcripts were analysed employing 'framework analysis involving familiarisation, identifying a thematic framework, indexing, charting, mapping and interpretation'.[16] Microsoft word and manual indexing was employed for transcript analysis.

The principal researcher identified themes and made the first coding based on twelve interviews, after which data saturation was reached. In accordance with data analysis methods as instructed by,[16] the data from the interviews was coded in a first round of analysis. This generated eight subthemes. The subthemes were categorised according to the main theoretical model used in the study namely the push/pull factors. TBA and BYJ revised the coding to reflect the data.

Patient and public involvement

Patients or the public were not involved in the design, or conduct, or reporting, or dissemination plans of this research.

RESULTS

This study's main purpose was to explore the complex reasons that push Ethiopian physicians to emigrate and to determine what is important for them to stay in Ethiopia. There were twelve in-depth interviews. All doctors (n=12) were between 27 and 35 years old. There were eight male and four female interviewees. The in-depth interviews lasted between 35 and 73 min. All interviewees have served in public hospitals across the country for 2 to 4 years, as a requirement to compensate for the state funded medical education. All interviewees were state funded for their medical degrees and are currently practicing medicine in TASH. Table 1 provides an overview of

Table 1 Demographic characteristics of study participants (n=12)

Category	Resident physicians	
Sex	Male/female=8/4	
Hospital	TASH	
Department/specialty	Otolaryngology: 2	
	Orthopaedic surgery: 2	
	Emergency medicine and critical care specialist: 1	
	Pathology: 1	
	General practice: 2	
	Paediatric surgery: 1	
	Paediatrics: 1	
	Radiology: 1	
	General surgery: 1	
Age range	27–35 years	

TASH, Tikur Anbessa Specialised Hospital.

the demographic characteristics of the respondents and table 2 presents the themes identified from the in-depth interviews.

The push/pull factors framework was used to categorise the issues brought forward by all participants in relation to medical migration. During the interview process, four distinct themes emerged: (1) Economic push and pull factors; (2) Professional push and pull factors; (3) Social and Political push and pull factors; and (4) Medical migration governance.

Economic push and pull factors

This theme examines the economic factors driving the international emigration of Ethiopian physicians. Financial reason was perceived as the main determinant influencing the decision for migration. Two subthemes were identified: remuneration structure and living conditions. Most respondents acknowledged that their wage was very low for the services they provide. There was a strong sense of unfair compensation considering the 'making of a doctor', workload, and the physical and mental stress experienced along the line of work.

> The salary is very low…everyone that joins medicine had the highest grade in high school and works hard in med school; The government then gives you a ridiculously low salary. (Respondent 4)

It was felt that the salary is unacceptably low even to the standards of other LICs. Respondents were frustrated about unmet basic needs and difficulties to support their families. Another participant added that the financial limitations were serious enough to prevent access to better private settings if they fall ill.

> We are not asking for luxury; we just want something for our basic needs. We can't look for rent with what

Table 2 The four themes of the coding framework

Theme	Theme title
1	Economic push and pull factors
2	Professional push and pull factors
3	Social and political push and pull factors
4	Medical migration governance

we get, let alone own a house or a car…We cannot cover our medical bills if something serious happens. (Respondent 12)

It is worth mentioning that access to a house and a car was more important than salary for all participants. Respondents believed that these non-salary instruments were probably the most important factors that would have convinced physicians against emigration. The growing unaffordability of owning a property in the capital city (Addis Ababa), and a tax of close to 200% makes owning a car very difficult for many young physicians.

…the living conditions including housing and transportation must be given priority than salary … the government can facilitate these with long term payment (respondent 9)

Consequent to financial constraints, physicians are subjected to extra working hours compromising their small free time.

…because the pay from a single setup is not enough, you are obliged to work night shifts and weekends at other clinics, therefore you basically will not rest; you won't have a life (respondent 4)

The economic situation gets better after postgraduate training depending on the type of specialty, employer, and region. Inadequate remuneration and poor living conditions were perceived push factors from Ethiopia while better compensation and lifestyle were pull factors from other countries.

Professional push and pull factors

This theme explores the professional factors that drive the international migration of Ethiopian physicians. Data analysis revealed that it was perceived to be one of the central reasons that influences the decision to migrate. Three subthemes where identified: Job security, Quality of education and Quality of healthcare system. The health system infrastructure, advanced medical technologies, and scientific environment in HICs was perceived as a strong attraction, and their absence created a push factor from Ethiopia.

Respondents expressed a major concern regarding recent job insecurity for young medical graduates. This was perceived to be consequent to the 'flood and retain' initiative Ethiopia implements to rapidly increase the quantity of physicians. In response to physician shortage, this policy produced more than 20 new medical schools and led to 3–4 folds increment in student enrolment in existing public medical universities. Participants voiced that the government is training more physicians than what the system can hire. This particular issue stirred anger and frustration among the respondents in the government for causing 'brain waste'.

…There are many junior medical doctors who are jobless and are giving free service in private hospitals in hopes of getting hired later. If you don't see a future, why will you stay? (Respondent 11)

…the system has a problem; you can see this by the hundreds of unemployed doctors out there while there are numerous underserved areas in the country (respondent 6)

Participants indicated that the already deteriorating quality of education was made worse consequent to the same 'flood and retain' policy. Most respondents believed the quality of education failed to match their potential; hence, affecting their ability to give the best possible care for their patients. The policy allows training of non-physician healthcare workers to become medical doctors in 4 years compared with the typical 6 years training. Furthermore, understaffing and lack of resources in new medical schools, and overstretched existing medical teaching centres were perceived to have worsened the situation.

Some of us migrate because of our academic ambition, to maximize our potential, and to provide evidence-based medicine for better patient outcomes. The medical education in Ethiopia has stagnated. For instance, in a world where laparoscopic surgery is a standard, we have clung to invasive laparotomies (Respondent 2)

…I am thankful I finished medicine earlier. The new students learn in new hospitals which are already understaffed. Their lecturers are General Practitioners … It looks like the government is working hard to put white coat on everyone … It is terrible. (Respondent 4)

The availability of quality postgraduate training, research opportunities and stable employment offers in HICs were perceived as strong pull factors, and their absence created a push factor from Ethiopia.

Because of the increasing number of medical graduates and limited spots for specialisation training, the competition to get these postgraduate study opportunities has become increasingly difficult. Moreover, a medical graduate may not get a region of his/her choice in the national residency matching process: a centrally managed postgraduate study placement system. There are also specialisation trainings which are not given in Ethiopia.

…It is hard to practice what you don't like for the rest of your life…From my own experience, I studied anatomic pathology, which is a very small part of pathology. I can't get any more specialized because

the other subspecialties of pathology are unavailable. (Respondent 3)

Another major reason that caused dissatisfaction among these young physicians is the poor quality of healthcare, commonly mentioned as working conditions. This included the healthcare facilities/resources and their administration. Working conditions were of most significance to respondents because it directly related to the lives of patients. Lack of essential infrastructure, medical supplies and equipment was perceived to be a major contributor to most deaths in public settings. This was one of the most discouraging push factors for respondents because it rendered them unable to help their patients: the very reason they work.

Some of the reasons why patients die is unacceptable. My cousin who was a pediatric patient died of a neck mass that was diagnosed to be rhabdomyosarcoma. She needed sedation and there was no anesthesia machine in the radiotherapy unit. Her neck mass grew 3–4 folds in a month, and she finally passed away. This is not uncommon (Respondent 5)

In cases of hospital administration, respondents unanimously disapproved the political motives in the hierarchical structure. This is to mean that ruling party members and political affiliates were given hospital leadership position irrespective of their hospital management experience or background in health sciences. This was perceived to be the most common cause of management incompetence and negative working relationship between management and health workers.

…My rural service years were the hardest because of the administrative people who were political appointees and cadres: people that have no clue what a hospital is or how it should run … There was a constant clash between us and them. We had no resources, and this was not the issue they were concerned about. (Respondent 4)

The availability of better working conditions and professional work environment in HICs were perceived as strong pull factors, and their absence created a driving force from Ethiopia.

Social and political push and pull factors
This theme examines the political and sociological elements that determine physician migration from Ethiopia. Three subthemes emerged during data analysis: Political environment, negative attitude towards health professionals and better prospects for family.

The current ethnic rivalry and political instability in Ethiopia is perceived to contribute to internal and external physician migration. One respondent stated that it is almost impossible to feel secure working in some regions of the country due to frequent upheavals. Interestingly, some respondents thought it was an important reason for migration because it threatens freedom and

security while others thought it does not account for most emigration decisions. A female physician said:

…some communities prefer physicians from their own ethnicity. It is hard to feel safe in such environment. I had two friends that were told they don't belong there because of their ethnicity. This happened two years ago during the turmoil before the current prime minister came to power. (Respondent 1)

Personal recognition or appreciation from the government, community, and hospital administration was an important issue for the respondents. Most respondents felt that the sacrifices the profession requires is undervalued. Proper recognition was presented in terms of verbal appreciation, respect, and adequate financial compensation. Although participants acknowledged that the quality of healthcare service provided is deteriorating and patients' loss of trust is justified, they agree that the problem is multifactorial. Therefore, stripping physicians of their credit and sacrifices was seen as demotivating and unfair.

…Medicine is a very consuming field; it takes all your youth and adulthood. The government should recognize that (Respondent 8)

What we hear is that the public has a negative attitude towards us. They think we are greedy and disrespectful. Some believe we kill more than we heal. (Respondent 3).

Other sociological reasons that cause emigration include family reunification and better prospect for children. The political instability, ethnic political dynamics and inadequate recognition are worthy to mention in their repelling powers, while political freedom, stability and better life standards for family are the pull factors affecting the migration decision of physicians. Respondents stated mixed perspectives regarding the duration of migration; some considered migration as a temporary decision while others saw it as a permanent move.

Medical migration governance
This theme explores perceptions about what the government and partners are doing to manage health workers migration and improve the retention of physicians. Issues such as national policies on human resources for health and the role civic societies in promoting the welfare of health professionals were discussed. Participants were often bitter about the 'flood and retain' policy the Ethiopian government implements. One participant criticised the 'short-sightedness' of this policy by mentioning the current 'hundreds' of unemployed medical doctors that regional governments do not have the budget to hire . He stated that this showed how the government was unprepared for the outcome.

They worked on the flooding part but not on the retention. They don't seem to be concerned … They simply want to replace those who left. It gives the

impression that everyone is replaceable; you don't feel you are valued. (Respondent 3)

Similarly, the politically motivated appointment of managers in hospital administration was criticised by all participants. Non-medically qualified executives or lower-level medical staff are positioned to control over how resources are used in hospitals, influencing physician-led decision making, and creating friction in the work environment. One physician who is in the process of migrating to Dubai complained about how the government turned a blind eye to these problems.

…The saddest part was that the CEO of my hospital was a guy who was dismissed from zonal health bureau due to corruption. Because he was a cadre, the regional government placed him as a CEO in the new hospital I worked at. He was an incompetent corrupt person. This political appointment is paralyzing the system. (Respondent 4)

Poor healthcare financing was perceived to be another major problem in the governance of medical migration. The government's lack of commitment to implement various financing schemes and low health sector budget allocation was seen by some as the root problem for financially crippled hospitals. Respondents believed two of their most important questions (salary and working conditions) would have been partially solved if the government financed the sector more.

…you have to budget enough money for the health sector. Ethiopia is not doing that. We annually budget very less than the 15% we signed in the Abuja declaration. (Respondent 7)

Others stated that stakeholders especially professional associations are not playing their part in mobilising professionals and advocating for their welfare. Questionable policy choices regarding medical migration governance, politicisation of the healthcare facilities, and weak government commitment towards solving raised issues were perceived pushed factors. In contrast, the growing need for health professionals in HICs and their policies to attract physicians were perceived strong pull factors.

DISCUSSION

Migration of physicians illustrate a global problem and evolves in response to changing communities and healthcare systems across the world. This study—exploring a group of Ethiopian physicians—determines the push and pull factors which drive their intent to migrate to other countries. Regarding our cohort, male physicians made two third of our interviewees which represents the male-to-female ratio of medical students in Addis Ababa University.[7]

Even though a combination of factors usually mounts to the decision to migrate, four main driving factors were identified: (1) Financial purposes; (2) Professional factors; (3) Social and political reasons and (4) Governance of this health problem.

The reason for potential migration among physicians in Ethiopia were similar to those reported in other SSA countries. These include low remuneration, poor healthcare systems, limited career advancement, and political instabilities and security issues.[4] On the other side, available jobs, reasonable remuneration, career opportunities, better working condition, safety and good quality of life have been important pull factors.[1] Generally, push factors to leave Ethiopia seemed more crucial than the pull factors attracting a move to other countries. In our group of participants, the most common factor cited for emigration was low remuneration. Although migration decisions are mostly a result of a combination of factors, this dominance of economic motives in personal decisions to migrate was comparable to previous studies from Romania,[17] South Africa,[18] Uganda and Zimbabwe.[19] It is nonetheless in contrast to studies from Pakistan[20] and Egypt,[5] where the most crucial pull and push factors were associated to better healthcare facilities and better quality of training in the destination countries. This suggests that national policies and retention strategies should be country and context specific.

The amount of salary offered for Ethiopian doctors is barely enough to meet their basic needs. Remuneration differences between source and destination countries are currently so wide that minimising them by small amounts is unlikely to affect migration.[21] Bridget Farham in her letter to the Lancet about migration of health professionals said, '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'.[22] Small increase in compensation has been found not enough to keep physicians in most cases, however, there are few countries where policies addressing compensation have proven successful to a certain extent such as Malawi and Ghana.[23 24] The Ethiopian government can explore such forms of compensations such as salary top-ups, retirement packages, mortgage loans, and tax waivers to buy a house or a car to incentivise more physicians.

Although the primary reason for migration was directly related to financial prospects and living condition, there was a common desire by physicians to escape the inferior working conditions, and to continue their studies in an advanced healthcare setup where hospitals and teaching centres have the latest equipment and well-supplied libraries. One important attraction to HICs is the opportunity for health workers to experience professional advancement and job mobility in occupation where emphasis is given to training and supervision.[25] Improving continued medical educational opportunities and creating transparent professional growth opportunities is important. Social factors such as family reunification and political environment played a role for some of our respondents, but they were not identified as the main drivers.

The governance of medical migration was a significant theme in this study. In our cohort, the main governance problems that directly or indirectly became push factors were the human resource policies, low healthcare budget, political appointment in hospital administration, and weak involvement of civic societies in advocating for health professionals. This corresponds to results of a study by,[25] which concluded that another significant attraction in HICs is the attention given to human resource policies, supervision and monitoring, and visa policies which encourage migration. In addition, the investment in healthcare, benefit packages for healthcare providers including life insurance, and generous retirement are important pull factors.

Although the WHO has initiated a code of practice and implemented agreements to discourage the migration of HRH from LIC, the genuine implementation of the code is questionable. Sager argues that the reality is opposite to the agreements, as there is lack of unanimous implementation schemes.[26] Furthermore, due to the voluntary nature of the agreement, compliance is barely monitored and enforced.

The public service is inherently a political creation and therefore essentially involved in politics; therefore, some level of political involvement in personnel matters is expected to be normal in all civil service systems.[27] This politicisation of public service delivery has been known to be a problem for many countries, with ramifications for efficiency and performance.[27] Politicisation is defined as 'the substitution of political criteria for merit-based criteria in the selection, retention, promotion, rewards, and disciplining of members of the public service'.[27] In Ethiopia, a country with more than 83 ethnicities, politics and ethnic representation plays a prominent role in local power dynamics and personnel recruitment for public sector administrative positions. This politicisation may be the reason why some CEOs are appointed non-meritocratically to lead hospitals. Moreover, favouritism grounded on kinship (nepotism) or friendship (cronyism) in the recruitment of personnel is common, especially in the health sector of many countries.[28]

Currently, policy initiatives to address medical migration in Ethiopia continue to emphasise on rapid scale-up of physician number in the country by the 'flood and retain' initiative.[29] Through the introduction of these initiatives, the medical schools in Ethiopia has more than doubled from 11 to 24, and the annual number of medical graduates in Ethiopia has steadily increased from 336 in 2010 to more than 3000 per year since 2018.[30] This policy has been criticised for contributing to deterioration of quality of medical education in Ethiopia because the expansion in enrolment of medical students is unmatched to the capacity of existing medical schools, patient flow, available teaching staff, and medical education quality assurance protocols. Moreover, it has led to junior physician unemployment because the health system was unable to accommodate all the new graduates. This policy gap should be bridged because the 'flooding' might have done more to flood the needs of other countries, and unintentionally negate the very reason it was established for.

To bring a sustainable result, it is essential to hear the voice of professionals and include them in the solution making. Neither legislation nor punitive actions have been effective in limiting medical migration.[31] It is timely that the government and stakeholders engage to investigate the fundamental factors that drive migration and address the underlying issues. This can only change by a strong political will and adequate budget allocation for the health sector. So far, the healthcare sector in Ethiopia has never been given the funds it requires. Until now, the health sector budget of Ethiopia as a share of total government budget lies between 8% and 9%.[32] Ethiopia can budget 15% of total government spending to be devoted to the health sector according to the 'Abuja Target'.[33] Another domain requiring special attention is the quality of medical education programmes. Quality control mechanisms should be in place to monitor institutional standards. Furthermore, national, and international monitoring bodies should assist institutions keep and advance the quality of training.

Migration is an expression of freedom and personal choice. As a policy, the state can choose to retain its medical personnel by addressing their basic needs. Until now, measures taken by the government include slight raise in remuneration. The current salary for specialist physicians in public hospitals is on average one-third of the minimum salary the interviewees recommended for a general practitioner. In addition, even though the financial problem is satisfied, the government will need to invest in medical equipment, hospital infrastructure, quality medical education, and hospital administration by qualified personnel as a commitment to the public such that working conditions cannot fail to retain doctors. Similarly, further steps could also include facilitating the integration of health professionals that work abroad into the national healthcare system.

The ethical dimensions of medical migration constitute a sensitive topic. Importing health professionals from LICs to HICs is not consistent with rational human resource policy that is based in the values of social justice. It hinders the development of these countries healthcare system, education, and research.

In general, the decision to leave Ethiopia was made irrespective of the choice of the destination country; the attractive force of the pull factors was felt much weakly than the driving force of the push factors. The cohort of Ethiopian medical doctors interviewed in the study preferred to go to USA where financial and professional pull factors played an upper hand. The middle east and Europe were back-up plans or transition destinations.

Using qualitative research, this study provided a richer understanding of the complex process of Ethiopian physicians' decision to migrate. Push factors identified in this research such as physician unemployment (in a country with already established shortage of medical doctors) and politicisation of hospital administration can extend

existing knowledge and the theoretical background used to inform this type of research. Future large scale quantitative scientific research would help to better comprehend the existing reasons for emigration, how it is related to the policies, and other possible interventions.

This research study has few limitations. One is language, as the interviews were conducted in the participants' native language, namely Amharic. The constructed meaning of the original language may be affected during translation into English.[34] Another limitation is selection bias, as physicians working in TASH only were invited. Finally, as a qualitative study, this work is exploratory in nature and conclusions are not meant to be generalised.

CONCLUSIONS

The emigration of Ethiopian physicians is made after weighing the push and pull factors. Push factors are more crucial than pull factors, and financial reasons play the leading role. Rapid scale-up of medical education and physician number is the chosen policy to address medical migration in Ethiopia. However, based on the results of this study, the government should equally focus on the retention of available HRH. There should be a strong and genuine emphasis in financing the health workforce exploring a range of salary and incentive mechanisms. Human resource development should be less doctor-dependent, and it should focus more on system-strengthening. LICs like Ethiopia can improve their physician retention by respecting the individual rights of health workers to migrate while improving working conditions. Junior physician unemployment is a recent phenomenon in Ethiopia causing physician emigration and with a potential to be a leading push factor if appropriate intervention is not taken. In addition, politicisation in the health sector combined with ethnic politics presents a setback in professionalism and competency in the healthcare management in Ethiopia. Local, national, and international systematic monitoring of migratory flows is crucial to evaluate causes, effective policies, and strategies to solve this global health problem. Moreover, high-income self-interested states should take responsibility to acknowledge and join fights against this gross global health inequity. More research is needed to explore the evolving dynamics of physician migration and to shape policies for a timely and effective intervention.

ORCID iDs
Ephrem Tadele Sedeta http://orcid.org/0000-0003-3397-0591
Temesgen Beyene Abicho http://orcid.org/0000-0002-5345-5952

REFERENCES

1. Labonté R, Ruckert A. *Health equity in a globalizing era: past challenges, future prospects*. Oxford University Press, 2019: 163–91p.
2. Siyam A, Dal Poz MR. *Migration of health workers: who code of practice and the global economic crisis*. World Health Organization, 2014.
3. World Health Organization. Global health data Observatory, 2020. Available: https://apps.who.int/gho/data/view.main.HWFMEDv
4. Kalipeni E, Semu LL, Mbilizi MA. The brain drain of health care professionals from sub-Saharan Africa: a geographic perspective. *Prog Dev Stud* 2012;12:153–71.
5. Schumann M, Maaz A, Peters H. Doctors on the move: a qualitative study on the driving factors in a group of Egyptian physicians migrating to Germany. *Global Health* 2019;15:2.
6. Chen PG, Nunez-Smith M, Berg D, *et al*. International medical graduates in the USA: a qualitative study on perceptions of physician migration. *BMJ Open* 2011;1:e000138.
7. Deressa W, Azazh A. Attitudes of undergraduate medical students of Addis Ababa university towards medical practice and migration, Ethiopia. *BMC Med Educ* 2012;12:68.
8. Duvivier RJ, Burch VC, Boulet JR. A comparison of physician emigration from Africa to the United States of America between 2005 and 2015. *Hum Resour Health* 2017;15:41.
9. Ratha D, Mohapatra S, Silwal A. *Migration and remittances factbook 2011*. World Bank Publications, 2010.
10. Jembere F. *The exodus of medical professionals from Ethiopia*. University of Chicago, 2020.
11. Geresu T, Shiferaw M, Mitike G. Commentary: a brief review of the draft human resources for health strategic plan, Ethiopia; 2009-2020. *Ethiopian Journal of Health Development* 2013;27:41–8.
12. Balaker BB. *The need for public policy initiatives to retain medical doctors in Ethiopia*, 2018.
13. Liamputtong P. *Public health: local and global perspectives*. Cambridge University Press, 2019.
14. Creswell JW, Creswell JD. *Research design: qualitative, quantitative, and mixed methods approaches*. Sage publications, 2017.
15. Dicicco-Bloom B, Crabtree BF. The qualitative research interview. *Med Educ* 2006;40:314–21.
16. Ritchie J, Spencer L. Qualitative data analysis for applied policy research. *The qualitative researcher's companion* 2002;2002:305–29.
17. Suciu Șoimita Mihaela, Popescu CA, Ciumageanu MD, *et al*. Physician migration at its roots: a study on the emigration preferences and plans among medical students in Romania. *Hum Resour Health* 2017;15:6.
18. Bezuidenhout MM, Joubert G, Hiemstra LA, *et al*. Reasons for doctor migration from South Africa. *South African Family Practice* 2009;51:211–5.

19 Stilwell B, Diallo K, Zurn P, *et al*. Migration of health-care workers from developing countries: strategic approaches to its management. *Bull World Health Organ* 2004;82:595–600.

20 Syed NA, Khimani F, Andrades M, *et al*. Reasons for migration among medical students from Karachi. *Med Educ* 2008;42:61–8.

21 Vujicic M, Zurn P, Diallo K, *et al*. The role of wages in the migration of health care professionals from developing countries. *Hum Resour Health* 2004;2:3.

22 Howie S, Adegbola R, Corrah T. Migration of health professionals. *The Lancet* 2005;366:199–200.

23 Palmer D. Tackling Malawi's human resources crisis. *Reprod Health Matters* 2006;14:27–39.

24 Ruwoldt P, Perry S, Yumkella F. *Assessment of the additional duties hours allowance (ADHA) scheme: final report. capacity project*. NC: IntraHealth International, Chapel Hill, 2007.

25 Clemens MA. What do we know about skilled migration and development? *Policy Brief* 2013;3.

26 Sager A. Reframing the brain drain. *Crit Rev Int Soc Political Philos* 2014;17:560–79.

27 Peters BG, Pierre J. *The politicization of the civil service in comparative perspective: a quest for control*. Routledge, 2004.

28 Ellis A, Manuel C, Cutura J. *Working in health: financing and managing the public sector health workforce*. The World Bank, 2009.

29 Mengistu BS, Vins H, Kelly CM, *et al*. Student and faculty perceptions on the rapid scale-up of medical students in Ethiopia. *BMC Med Educ* 2017;17:11.

30 Alebachew A, Waddington C. *Improving health system efficiency: Ethiopia: human resources for health reforms*. World Health Organization, 2015.

31 Stilwell B, Diallo K, Zurn P, *et al*. Developing evidence-based ethical policies on the migration of health workers: conceptual and practical challenges. *Hum Resour Health* 2003;1:8.

32 Alebachew A, Yusuf Y, Mann C. *Ethiopia's Progress in health financing and the contribution of the 1998 health care and financing strategy in Ethiopia*. MA, Addis Ababa: Harvard TH Chan School of Public Health and Breakthrough International Consultancy, PLC, 2015.

33 Govender V, McIntyre D, Loewenson R. *Progress towards the Abuja target for government spending on health care in East and southern Africa*. Cape Town, SA: EQUINET, 2008.

34 Riessman CK. *Narrative methods for the human sciences*. Sage, 2008.