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The Need for Public Policy Initiatives to Retain Medical Doctors in Ethiopia

Berhanu Bankashe Balaker
Walden University

Walden University

College of Social and Behavioral Sciences

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Berhanu Bankashe Balaker

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Review Committee
Dr. Paul Rutledge, Committee Chairperson,
Public Policy and Administration Faculty

Dr. Raj Singh, Committee Member,
Public Policy and Administration Faculty

Dr. Steven Matarelli, University Reviewer,
Public Policy and Administration Faculty

Chief Academic Officer
Eric Riedel, Ph.D.

Walden University
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Abstract

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MPA, American University in Cairo, 1989

B Ed, Addis Ababa University, 1982

Dissertation Submitted in Partial Fulfillment

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Abstract

Ethiopia suffers from a medical shortage or *brain drain*that has severely affected its already fragile health care system. The country has a very low physician-to-population ratio,whilemany in the medical community continue to leave in great numbers. Aphenomenological approach was used in this study to explore the lived experiences of medical doctors who have left Ethiopia, with contemporary migration theory serving as the conceptual framework. The central research question focused onwhy Ethiopian medical doctors leave their country and what can be done to retain them. Participants were 10 medical doctors of Ethiopian origin who live and practice medicine in the Washington, DC metropolitan area. Participantswere purposively selected, and in-depth interviews and a focus group discussion were used to collect data from them. The study followed Moustakas' recommendations for phenomenological analysis, which representeda modification of the Stevick-Colaizzi-Keen method. The themes that emerged during data analysis have economic, political, professional, and personal dimensions. The findings includelow pay, lack of professional development, poor working conditions, the threat of political persecution, fear of contracting HIV, and inability to participate in health care decision-making. Recommendations accordingly include offering pay raises and fringe benefits, creating opportunities for professional development, improving working conditions, and limiting political interference in the health care system. Implications for positive social change include the fact that stemming the outflow of medical doctors could help save the lives of thousands of Ethiopians threatenedby preventable and curable diseases.

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Dedication

I would like to dedicate my dissertation to my parents, who lived by high moral standardsand became role models forthe people in their community. They understood the value of education early on and sent their children to school even though they were not themselves educated. In anunderdeveloped countryside without electric lighting, running water, transportation services, ormedical facilities,wherehunger was pervasive, my parents cared for the sick, consoled the grieving, welcomed guests, and shared their meager resources. They were indeed the epitome of goodness. May God rest their souls in peace.

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Embarking on a PhD journey is a tough choice. There were times I asked myself,why am I doing a PhD? However, with God's grace and kindness, I have almost arrived at the finish line. I would like to take this opportunity to extend mysincerest thanks and appreciation to allof those who contributed in different ways to bring this work to an end.

First and foremost, I would like to express my utmost gratitude to my dissertation chair, Dr. Paul Rutledge, whose intellectual heftand able leadership inspired me, especially when I doubted my ability to complete the dissertation. His thorough revision and fruitful comments were invaluable. This work would not have come to fruition without his generous support and apt guidance. It is indeed a great privilege to have worked under his supervision,and I am so grateful for his immeasurable contributions.

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Finally, I would like to extend my sincere thanks to my family, my son Kaleb Berhanu, my daughter SefanitBerhanu,and mywife Ashley Kedir, for their incredible support throughout the duration of my study.

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Chapter1: Introduction to the Study

Background

Many of the world's poorest countries are losing a significant number of skilled professionals to Western countries(Lowell &Findlay, 2001). These professionals are the people most in demand to initiate and to carry forward economic, social, scientific, and technological developments in their home countries(Balakrishnan &Man, 2007). The reduction in professionals hampers these countries' ability to recover from cycles of poverty. Balakrishnan and Man (2007) pointed out that, in 2004 alone, developing countries lost about 1 million skilled professionals out of a total of 6.6 million. A host of forces drive out professionals from their countries of origin anddraws them to destination countries(Dzvimbo, 2003). At the same time, African countries spend nearly $4 billion a year hiring non-African expatriate staff to fill the gap created by the departure of skilled African professionals (Tebeje, 2005). Investment in human capital will notproduce the desired results unless appropriate policies accompany itto minimize the outflow of skilled labor.

In many developing countries, the health sectorsuffers from the loss of professionals. The emigration of medical doctors cripples the delivery of health services and strains scarce resources as governments strive to recruitand train new health workers to replace those who leave. The situation is especially gravein this time of the HIV/AIDS pandemic, as health institutions are manned by small teams that cannot absorb the ever-increasing workloads(Marchal, Brouwere, &Kegels, 2005).

Ethiopia, like other developing countries, suffers from a shortage of medical doctors andhas some of the worst health indicators in the world(Merlin U.S.A., 2007). Merlin observed, “Each year, half a million children there die from diarrhea and one in six do not survive beyond their fifth birthday” (p. 1). Nevertheless, medical doctors continue to leave the country in great numbers, a problem that demands careful investigation. In this study, Ihave explored the causes for the flight of medical doctors from Ethiopia and recommendedpolicy solutions that can help decisionmakers develop policies for reducing Ethiopia’s medical shortage.

Problem Statement

Ethiopia suffers from a medical shortagethat, as discussed, has severely affected its already fragile health system. The country has a very low physician-to-population ratio, approximately of1: 21,000 (Ethiopian Ministry of Health: Factsheet, 2015).To compound the problem, many individuals in the medical community continue to leave the country in great numbers. At a conference in Uganda, Were (2008), the head of the African Medical and Research Foundation, drew attention to the insufficient number of health workers in developing countries as a consequence of medical migration, notingthatat the time, there were more native Ethiopian medical doctors practicing on the East Coast of the United States than in all of Ethiopia.

Government officials also acknowledge the seriousness of the situation. Ethiopia’s assistant health minister, Hussein, notedthat there aremany Ethiopian medical doctors at work in the United States and that Ethiopia needed to train 9,000 doctors within 4yearsin order to fill the gap (Wasswa, 2008). This problem affects the health of

millions of people and thus demands the urgent attention of all stakeholders. There are several contributing factors to the flight of medical doctors, including low pay, unsatisfactory living and working conditions, low prospects for professional advancement, political persecution, and instability(Dodani&LaPorte, 2005). Although other studieshave explored the health sector crisis in Ethiopia that the medical migrationhas caused(Berhan, 2008; Girma, Kitaw, Ye-ebiyo, Seyoum,&Desta, 2007; Shinn, 2002;Woldetensae, 2007), this studyisdistinct in that it addressesthe root causes of medical migration based on the perceptions of Ethiopian doctors who have migrated to the United States. Iemployeda qualitative approach to explore the causes of Ethiopia's medical shortage and have proposed policy alternatives for health policy makers based on my findings.

Purpose

In undertaking this research, my purpose was to explore the reasons for migration of Ethiopian medical doctors to the United States. As a poor country with a very low physician-to-population ratio, Ethiopia cannot afford to lose medical doctors, whose services are critical and urgently needed. My research involved exploring the factors behind medical migration and proposing policy options for reducing the scale of the migration.

Research Question

The research question addresses the causes of medical migration, specifically why Ethiopian medical doctors leave their country and what can be done to reduce the outflow.

Nature of the Study

My study employed a qualitative research design. In a broad sense, qualitative research is suited to investigating the perspectives of individuals and their subjective experiences of situations or events and to gaining insights into their motives and actions (Creswell, 2007). A qualitative approach is thus appropriate for obtaining information regarding the personal experiences of Ethiopian medical doctors and their feelingsabout having migrated to the United States. In order to explore pushand pull factors, I conducted interviews and held a focus group discussion that yielded detailed information as to why participating Ethiopian doctors hadleft their home country.

The interview method allowed me, as the interviewer,to interact with the interviewees in the effort to answer complex questions related to medical migration. I alsoorganizedthe participants into a focus groupin order to explore attitudes and feelings not expressed during individual interview sessions. The combined use of individual interviews and the focus group discussionallowed for a more nuanced understanding of the phenomenon and its central characteristics than would have been possible using either method alone. Chapter 3 includes a detailed discussion of the research methods and tools used for this research.

Theoretical Framework

Contemporary MigrationTheory

Near the beginning of the 21st century, migration flowsbegan to become increasingly global (Massey, 2003). Massey indicated that as the number of migrant-receiving and sending countries increased, the primaryorigin of migrants shifted from

Europe to less developed countries. In fact, low-income countries became the major source of skilled migrants for industrialized countries, and in this context the phrase *brain drain*became associated with the flight of skilled professionals from less-developed to industrialized countries (Baptiste, 2014).

Less-developed countries continue to suffer this brain drain especially acutely. According to neoclassical theories of migration,economic disparities among countries are the major cause of brain drain, in thatpeople move from poorer to richer countries(Kurekova, 2011). Thus, the Organization for Economic Cooperation and Development (OECD) countries have attracted a quarter of international migrants, and even within the OECDbloc, individuals tend to move to richer countries (Sriskandarajah, 2005). In 2000, approximately 20% of university-educated citizens and natives of developing countries had emigrated (Kanbur&Spence, 2010). From Africa, many migrants move to industrialized countries; within the continent, they move in order to take advantage of the better economies, such as those of Botswana and South Africa (Yumkella, 2006).

Recognizingthe importance of a skilled workforce fordevelopment, less-developed countries have begun to emphasizeon human resource development. Such investment, however,may fail to stimulate economic growth if highly educated people emigrate. The migrationof highly skilled professionals, such as medical doctors, engineers, professors, and managers, deprives poor countries of the human resources that they need for development. It is also important to consider the sectoral composition of emigration and the educational level of migrants, since the loss of thosefrom certain

critical sectors, such as health and engineering, and those with tertiary education have a particularly strong impact on source countries (Sriskandarajah, 2005). There is therefore a need to devise policies that minimize the outflow of skilled professionals necessary for capacity building and development in less-developed countries.

Operational Definitions

The following terms are operationally defined as they are used in this study:

- *Brain drain:*The departure of educated or professional individuals from one country, economic sector, or field for another, usually in order to enjoy better pay or living conditions (Merriam Webster Dictionary, 1997);
- *Emigration:*To leave one's place of residence or country to live elsewhere(Webster's New Pocket Dictionary, 2000);
- *Medical migration*: The international movement of workers employed in the health and medical sectors, most notably doctors (physicians) and nurses,the skilled professionalscrucial to the delivery of health services(Rutten, 2009).
- *Phenomenology*: Aschool of thought that emphasizes the subjective experiences of individuals and their interpretations of the world (Trochim, 2006).

Significance of the Study

My studymakes a potentially valuable contribution to the medical literature because it sheds light on the causes of medical migration in Ethiopia and proposes ways to mitigate the problem. Researchon medical migration in Ethiopia has not thus far included migrant medical doctors as studysubjects. My study isdistinct in that the aim is to understand medical migration from the perspectives of medical doctors who

arethemselves migrants. It provides information and perspectives on personal,lived experiences of migrant medical doctors and helps to fill this gap in existing literature. Moreover, while previous work has been limited to a quantitative approach, my study utilized a qualitative approach in order to obtain a more in-depth understanding of why medical doctors leave less-developed countries.

Reversing this trendhasthe potential to bring about positive social change, most obviouslyby fosteringthe well-being of the population. Thousands at risk ofcurable diseases could be saved, andinfections and other complications associated with childbirth could be treated, if native doctors could be convinced to remain in less-developed countries. Medical migration has financial implications as well. According toHamilton and Yau (2004), it could cost a developing country some $500 million a year. Hence, stemming the outflow of medical doctors could free up funds forinvestment to create employment opportunities and otherwise spur economic growth.

Assumptions

In carrying out this research, Iassumedthat the participants were providing accurate answers to the questions posed and were in general being candid and cooperative. I also assumedthat an exploration of the reasons for which Ethiopian medical doctors had migrated to the United States would provideinsights into their reasoning and would make it possible to identify common motivations for migration that could apply to other contexts.

Limitations

My study was limited to exploring the causes for the migration of medical doctors from Ethiopia to the United States. Owing to resource and time constraints, Ididnot interview any Ethiopian medical doctors who had emigrated to other countries. Moreover, I didnotaddress issues relating to the migration of medical doctors between rural and urban areas, lower-income to moreaffluent areas, or the public to the private sector, thoughI did discuss these issues during interviews. As a further limitation, I focused on medical doctors to the exclusion of nurses, technicians, and other health professionals.

Scope and Delimitations

My study focused on motivations for the migration of medical doctors from Ethiopia to the United States. Iconducted the research over a roughly 3-month period. The target population consistedof 10 Ethiopian medical doctors living and practicingmedicine in the Washington, DC metropolitan area. Iused convenience sampling,selecting the subjects based on their availability and proximity. My goalwasnot to generalize but to "elucidate the particular" (Creswell, 2007, p. 126). From their perspectives as migrant medical doctors, the subjects in my study provided insights into the causes of the medical brain drain and what can be done to stem it.

Summary

An ongoing medical brain drain represents a serious threat to the healthcare delivery systemsof developing countries. The departure of native medical doctors hinders these countries' capacity to fight diseases and to respond to other new and recurring

health challenges. There is thus a need to understand thoroughly the causes of the medical brain drain and to identify possible remedial measures.

Ethiopia is a country characterized by some of the poorest health indicators in the world (Wamai, 2009). At the same time, many Ethiopian medical doctors migrate to other countries, leaving behind a health care system in disarray(Berhan, 2008). My study explored why these professionals leave their native country and possible means to arrest medical migration. In what follows, Chapter 2 presents a review of the literature on the medical brain drain relating to its history, advantages and disadvantages, and significance for developing countries like Ethiopia. Chapter 3 details the research methods chosen for data collection and analysis. Chapter 4 presents the results of the study. Finally, in Chapter 5, Idrewconclusions based on the findings of the research and offeredrecommendations thatmaybe helpful to Ethiopian health policy makers.

Chapter 2: Literature Review

Introduction

Throughout history, and even prehistory, such events as natural disasters, war, deprivation, economic development, and trade have motivatedhuman migration. Thus, for example, archaeologists argue that early humans left the African continent owing to the effects of climate change (Dell'Amore, 2011). Although long distance trade has occurred for millennia, the opening of trade routes by European merchants and mariners around the beginning in the 16thcentury played a particularly crucial role in linking people living on different continents by creating and maintaining the flow of such commodities as spices, furs, and precious metals as well as of merchants and settlers (Cohen, 1995). The mercantile period, from roughly 1500 to 1800, drastically transformed the moresporadic contacts that had long taken placeamong distant cultures (Bosma, 2011). Great Britain, the Netherlands, Portugal, France, and other Western nations conquered lands and transported people to colonies founded there(Spielvogel, 2011).

Amongearly settlers of North and South America, those involved with plantations had an enormous impact on the demography of the Americas through forced large-scale population movements in the form of slavery (Massey, 2003). Massey stated that labor-intensive plantations producing such commodities as sugar, cotton, and tobacco demanded cheap labor, somillions of slaves were brought to the Americas. The magnitude of this process wascaptured by Eltis (2000), "In the 1820s, just prior to a movement from Europe that saw over fifty million Europeans relocate to the Americas in

less than a century, 90 percent of those coming across the Atlantic were African, not European" (p. 14).

Economic, technological, political, and demographic changes during the Industrial Revolution also brought about large-scale human migration (Martinelli, 2009). During the first stage of industrialization, Europe sent out huge numbers of migrants to former colonies, around 60% of which the United States absorbed (Massey, 2003).In sum, big events in human history such as natural disasters, burgeoning trade, colonization, slavery and industrial revolution were the major causes of human migration.

The rise of the United States as an industrial power toward the end of the 19thcentury was thus a primary driver ofthe surge in migration(Hirschman &Mogford, 2009). The pace of this development is reflected in the fact that thecountry's share of world manufacturing rose from 14.7% in 1880 to 39.3% in 1928 (Kennedy, 1988). Immigrantsseeking employment opportunities flocked to the United States, especially from stagnant economies in Europe and today, the country attracts hundreds of thousands of people from all over the globe each year(Kennedy, as cited in Cohen, 1995). The United Nations estimates that there are approximately 214 million total migrants worldwide, having increased in the last 20 years by 37% overall and by 41% in Europe and by 80% in North America (DeParle, 2010). The international migration of health professionals has also increased in recent years. In the United States, the number of migrant doctors who sat for Step 3 of the USMLE exam (which qualifies individuals to work as medical doctors in the United States) increased by 70% from 2001 to 2008 (WHO, 2010). Although immigration has occurred throughout the history of the United

States, the transformation of the economy from agriculture to industry gave rise to large scale immigration. Today, globalization has accelerated the movement of people across national boundaries. Thanks to the Internet and other communication media, people can easily access information and see what opportunities are available in developed countries.The migration of health workers from less-developed to developed countries has also increased as a result of advances in communication technology.

Literature Search Strategy

The literature search strategy basically followed the contents of the literature, which falls into three major categories. The first deals with the history of human migration. In this area, I obtained most of the literature by searching databases that I accessed through the Walden University online library, such as Sage Premier, Policy and Administration, Lexis Nexis, Political Science Complete, Academic Search Complete, ProQuest Central, Business Source Complete, and Multidisciplinary Database. The second category of literature concernsthe medical brain drain in the developing world. In addition to scholarly databases, I obtained much of this literature from the websites of the World Health Organization (WHO), International Migration Organization (IOM), United Nations Development Program (UNDP), World Bank (WB), and other relevant organizations. The third category of literature deals with medical brain drain in Ethiopia for whichI obtained information from the websites of Ethiopian Ministry of Health, Addis Ababa University, Jimma University, and suchpublicationsas the*Ethiopian Medical Journal* and *Ethiopian Journal of Health Sciences*. Google Scholar, Bing, Yahoo, and Mywebsearch were also used in literature search. Keywords for all search

methods included *brain drain, medical brain drain, medical migration, health professionals, medical doctors, flight of medical doctors, migration, emigration, contemporary theory of migration, consequences of brain drain, remittance, retention, brain circulation, return option, and circular migration.*

Migration Theories

Migration is a complex phenomenon that cannot be explained by any single theory. Kumpikaite and Zickute (2012) have drawn attention to the difficulty of developing a migration theory that can explain the multiple aspects of and reasons for migration. Here discussion is limited tothe major migration theories.

Neoclassical Theories of Migration

At the macrolevel, neoclassical theories of migration posit that international migration is the result of differentials in wages between migrant-sending andreceiving countries. Wage differentials are the result of labor abundance in one region and scarcity in another (Kurekova, 2011): Wages are higher in regions where labor is scarce and lower in regions where it is abundant. From this perspective, migration is an equalizing mechanism that reduces labor disparities among regions (Massey, 2003). Seeking to maximize income, workers in low-wage countries move to high-wage countries; the absence of wage differentials, on the other hand, removes the motivation for the movement of labor and hence for international migration (Hass, 2008). Belton and Morales (2009) are among those who have argued that migration is stimulated by the availability of high-paying jobs and other employment opportunities in developed countries and, conversely, by poverty and economic hardship in developing countries.

At the microlevel, neoclassical theories of migration focus on individuals as rational actors who decide to migrate based on calculations of a positive net return (Massey et al., 1994). Ifthe expected return is larger in the destination country than in the source country, the flow of migration will increase (Erf &Heering, 1994). Critics of this approach argue, however, that, while wage differentials are important, other factors, such as age (with older people being less likely to migrate than younger ones), educational level (with level of education correlating with propensity to migrate), and costs and risks should be taken into consideration when modeling migration (Hass, 2008). Neoclassical theory of migration at a macro level claims that migration is the result of wage differences between migrant sending and migrant receiving countries whereas, the micro version of the theory views migration as the choice of individuals based on cost benefit analysis. Individuals choose to move if the cost of moving is less than the expected benefit. However, its critics argue that the theory misses some key elements that should be considered such as age, educational level, costs and risks of migration.

The Household Theory of Migration

Contrary to the neoclassical theory of migration, the household theory places the family at the center of decision-making regarding migration(Massey, 1993). From this perspective, the family, rather than the individual, determines whether to migrate, with the effect being particularly pronounced in developing countries (Massey, 1993). Thus, according to Massey, it is neither an individual's motivation to maximize personal gains nor wage differentials that influence decisions to migrate but rather the desire to minimize risk to the family and to maximize family income. The natural and man-made

disasters that families in the developing world face, then, induce them to send their members to various geographic regions in order to diversify income and thus secure economic stability and minimize risks.

The Push-Pull Theory ofMigration

The push factors such as oppressive political systems, abject poverty, high unemployment, war, and human rights violations which are embedded in the economic, political, and social environments of developing countries, compel individuals to go elsewhere (Stanojbska, 2012). Pull factors, on the other hand, attract migrants and are often the antithesis of push factors (Shinn, 2002). Thus countries with advanced economies, political stability, democratic cultures, employment opportunities, and respect for human rights attract migrants (Stanojbska, 2012). The assumption is that the more disadvantaged a country or a region is, the more likely it is to produce migrants (Franchet&Gierveld, 2000).

Migration Network Theory

This approachemphasizes the importance of social networks in international migration(Kurekova, 2001). Once networks are formed, migration becomes a self-perpetuating and sustaining phenomenon (Kurekova, 2001). Migration networks help potential migrants by providing information on and opportunities available in destination countries, aiding in socialization and integration into the host society, and helping to defray thecosts of immigration (Dolfin&Genicot, 2006). In short, migration networks support migration and play a significant role in the lives of migrants.

TheGlobalization Theory of Migration.

According to globalization theorists, the world has become increasingly interdependent and interconnected and,as a consequence,economic, cultural, social, and political differences are decreasingamong countries and continents (Stalker, 2000). The interdependence and interconnectedness has been achieved through advances in communication and transportation technologies that enable a constant and multidirectional flow of people and ideas (Stalker, 2000). Simply put, technology has diminished distances and differences so that the world is becoming more compact (Belton &Morales, 2009). Thanks to the Internet and other communication media, what happens in one part of the world quickly reaches other parts; people can thus easily access information regardingopportunities available in developed countries. These forces are fosteringmigration on an unprecedented scale (Li, 2011), as can be seen inTable 1.

Table 1

World Migrant Population

Year	Number of Migrants in Millions	Percentage of World Population
1980	100 Million	2%
2005	190 Million	2.9%
2010	214 Million	3.1 %

*Source:*Li (2011).

The Historical-Structural Theory of Migration.

This approach, which is rooted in Marxist thinking, views migration as the result of the unequal distribution of political and economic power among countries and regions of the world (Tomanek, 2011). It has been applied to the frequent instances in which individuals migrate to richer countries in search of employment opportunities only

toenter exploitative relationships with employers(Belton &Morales, 2009).According to Belton and Morales “Employers derive value from labor and the commodities that workers produce but remunerate workers unfairly retaining most of the profits, thereby exploiting labor” (p. 189). As described by these researchers, the exploitative relationship created by the capitalist system occurs on two levels. On the global level, nations that wield economic and political power dominate and exploit weaker and underdeveloped nations, whetherdirectly or indirectly; on the individual level,migrant workers enter into exploitative relationships with employers. From this perspective, then, migration is the consequence of economic and political power imbalancesamong developed and less-developed countries. Hence,poor countries lose their better educated professionals to resource rich countries. Like other skilled migrants, health professionals move from less developed to developed countries in order to further their career, or improve their economic and social situation.

The Medical Brain Drain in the Third World

As discussed, one of the most serious problems facing the health sector in developing countries is the exodus of medical doctors to developed countries, which creates a deficit in skillsand thus places further stress on already fragile health care systems(Balakrishnan &Man, 2007). Whether temporary or permanent, the migration of medical doctors is an enormous burden for developing countries with a high incidence of diseases. According to the World Bank report by Mathers, Lopez, and Murray (2001), approximately84% of the world’s population lives in developing countries, which account for only 20% of the global GDP but are home to 90% of disease sufferers

worldwide but account for only 12% of global health expenditures. Developed countries, on the other hand, seek to attract medical professionals to meet increasing demand for health care services for their aging populations.

Thus,Astor et al. (2005) found that 23% of medical doctors who were practicing in Canada had been trained abroad, andPang, Lansang, and Haines (2002) found that 31% of doctors in the United Kingdom were foreign born. A significant number of medical professionals in the United States also come from developing countries. Shinn (2002) reported that 20% of medical professionals working in the United States had earned their diplomas outside the United States, and the Federation of American Immigration Reform (2002) reported that approximately 21,000 Nigerian doctors were working in the United States and thatmore Sierra Leonean medical doctors were practicing in Chicago than in all oftheir native country. The British Broadcasting Corporation (BBC), under the title "Plugging the 'brain drain'," (2005), citing an African Commission Report, indicated that Zimbabwe loses 75% of its medical doctors within a few years of graduation from medical schools and that the number of medical doctors trained in Ghana but practicing in the United Kingdom doubled between 1999 to 2004. Regarding specifically the brain drain in Ethiopia, the *Sudan Tribune* (2011) has reported that the country lost 75% of its skilled workers in the last 10 years. As mentioned, decisions concerning migration are influenced by an array of economic, social, professional, and political factors thatcanbe categorized as push or pull factors.

Push Factors

People may be compelled to migrate to other places for various reasons, among which economic factors are often cited (Chappell &Glennie, 2010). Theexodus of African migrants to Europe and Latin Americans crossing or attempting to cross the border into the United States are generally motivated by the desire to escape poverty in the face of the lack of economic opportunities in migrants' native countries. Economic factors are not always, however, the primary driversof migration, since the propensity to migrate may increase with risinglevels of income (Campbell, 2007). When people can afford to cover the costs of migration, they tend to fulfill their aspirations to do so (Campbell, 2007). Noneconomic factors, such as political repression, ethnic tension, crime, corruption, and political instabilitymay also as noted earlier contribute to medical brain drain. The following factors are considered by researchers to be among the major causes of migration.

Low pay.Medical doctors in developing countries are paid far less than their counterparts in developed countries (Campbell, 2007;Sriskandarajah, 2005;Yumkella, 2005). In a survey of medical professionals by Astor, et al. (2005),over 90% of respondents expressed the desire for a higher income as their main reason for their decision to migrate. The desire for a higher standard of living is of course common across countries and cultures, but low pay is not the only, or even necessarily the primaryfactor in migration decisions by individuals living in countries characterized by high levels of instability, corruption, war, and crime.

Lack of peace and stability.Many less-developed countriessuffer from wars or conflicts of one sort or another; indeed, most armed conflicts today take place in less-developed countries(Brown &Stewart 2015). In Eastern Africa, for instance, there are ongoing conflicts between Ethiopia and Eritrea, Djibouti and Eritrea, Kenya and Somalia,while the genocidal war in Sudan's Darfur region and a fratricidal conflict in Somalia continue to rage. In addition to these conflicts, religious and ethnic tensions plague most of the countries in the Horn of Africa.By some estimates, Africa accounts for more than half of all conflicts in the world (Tessema, 2010). The absence of peace and stability naturally increases the desirability of migration to a more stable and developed country.

Political persecution.Authoritarian regimes rulemany less-developed countries, in which there is little freedom becauserulers tend to be ruthless when responding tocitizen's demands for rights and more democratic forms of government(Diamond, 2008). Leaders arecontemptuous of the rule of law and accountable to only themselves (Diamond, 2008). Autocrats, mistrusting and hatingintellectuals as potential threats to their power, dismiss them from government jobs and imprisonthem (Diamond, 2008).

After the Ethiopian People's Revolutionary Democratic Front (EPRDF) came to power in 1991, the new regime dismissed intellectuals from universities and other government institutions under the pretext of structural adjustment and civil service reform. Atthe Addis AbabaUniversity alone, the government summarily dismissed 41 professors in April 1993 for criticizing its policies, thereby seriouslydiminishing the quality of education there (Levin, 2002). Worse, the government quickly moved to

replace the dismissed professors with party loyalists without any consideration for academic credentials(Berhe&Atsbeha, 2017). Human Rights Watch (2003) predicted that this action would have a chilling effect on academic freedom in Ethiopia. The same anti-intellectual atmosphere is apparent in several African countries. Under the rule of anti-intellectual regimes, civil servants must either yieldto the dictates of the rulers or flee their country(Diamond, 2008). Without significant improvement in governance, medical doctors, like other educated individuals who appreciate freedom, will continue to consider leaving their native countries in which their political rights are denied.

Unsatisfactory living and working conditions.Lindelow, Serneels, and Lemma (2005) identified a number offactors that createdissatisfaction among medical professionals, includinglack of housing, transportation, and quality schools for children and the prevalence of crime. Other sources of frustration include the lack of essential equipment and materials in the workplace, excessive workloads, insufficientcareer advancement and development opportunities, rigid bureaucracies, lack of leadership, and the unavailability of research facilities. A further significant concern for doctors has been the difficulty of addressing safety issues, in particularthe risk of contracting HIV/AIDS(Lindelow, Serneels, &Lemma, 2005).

Globalization.The effects of globalization on migration can hardly be overestimated. As discussed earlier, the world is now increasingly connected thanks to technological advances that facilitate the exchange of information and expedite travel (Lawlor &Glass, 2007). In deciding whether to migrate, skilled individuals can find

information on the Internet and in other sources regarding wages, living and working conditions,and training opportunities in developed economies.

Pull Factors

For the most part, the pull factors represent the inverse of the push factors. Countries experiencing a brain drain have no control over the pull factors, since their economies are weaker and their wages lower than those of the countries that are attracting medical professionals (Shinn, 2002). Moreover, people in developed countries enjoy greater politicalstability and freedom than they do in the countries that are losing skilled professionals (Shinn, 2002). As LaPorte (2005) pointed out, countries that are the net beneficiaries in the brain-drain equation offerrelatively more opportunities for career advancement, job mobility, advanced training, better-equipped libraries, research facilities, and generous life and health insurance and retirement benefits.

Many developed countries face labor shortages that act as a pull factor for migration, whether owing to economic development, low rates of population growth,aging populations, or some combination thereof (Campbell, 2007). In many cases, migrants are happy to fill menial jobs that domestic workers refuse to take. Fluency in the language of a destination country acts as another significant pull factor (Rutten, 2009). Physicians from French-speaking countries havetendedto migrate to France and those from English-speaking countries to the United States, the United Kingdom, Canada, and Australia (Rutten, 2009).

Industrialized countries have made their immigration criteria more skill selective and thus become magnets for the migration of physicians from less-developed countries.

Visas offered by the United States such as the H-1B and O-1, have targetedindividuals with extraordinary abilities or achievements in the sciences, arts, education, business, and athletics (Shinn, 2005). Working in concert with these factors, the presence of family members living abroad could also act as a pull factor by providing information about living standards and job opportunities in industrialized countries (Hagen-Zanker, 2008).

As long as imbalances between push and pull factors persist, it remains difficult for developing countries to stem the outflow of health professionals. Such an effort requires cooperation between source and destination countries, and since developed countries benefit fromthe medical brain drain, it stands to reason that they should in some way compensate the often-impoverished source countries with dysfunctional health care systems (Bomba, 2009). In an interview for aBBC report ("Why doctors trained in Ethiopia are leaving in their hundreds to work abroad," 2011), the dean of the Black Lion Medical School in Addis Ababa, Ethiopia voiced the opinion that, since it costs $200,000 to train a doctor in the United States, the American government saves $200,000 every time an Ethiopian doctor emigrates to its shores. Because this tide of medical migration adds up to an enormous burden for less-developed countries like Ethiopia,the U.S. government should, it can be argued, offer reimbursement for that whichit has taken, in the form of either financial assistance or efforts to encourage return migration.

The Impact of the Brain Drain on Developing Countries

Two divergent views exist regarding the impact of the brain drain on economic development in poorer countries. Some scholars argue that the loss ofthe very people most needed for economic, social, scientific, and technological development liesat the

root of the dismal performance of the economies of developing countries(Kigotho, 2002; Mutume, 2003; Tebeje, 2005). Focusing on the dire situation in Africa and the financial cost for the continent, Kigotho(2002), for example,citing the highlights of discussion at the World Submit on Sustainable Development in South Africa, stated that Africa was spending $4 billion a year on expatriate staff to fill the gaps caused by the brain drain.

Leaving aside the social and political ramifications of medical migration, the financial resources necessary to hire expatriate staff, which could have been spent on development projects, represent one example of the ways in which it hasimpededeconomic progress in source countries. The exodus of highly skilled professionals, by slowingeconomic development, has contributed to an increase in poverty and income inequality as wages increasefor the remaining skilled workers (Lowell &Findlay, 2001). Sriskandarajah (2005) has further observed that the migration of skilled workers impedesthe ability of source countries to solve domestic problems. To compound the inequity, skilled migrants contribute to the economic dynamism of the destination countries, further widening the gap between rich and poor nations.

Remittance could be considered a positive side of the migration equation, but the problem here is that poor countries lack the well-organized economic and financial structures necessary to tap into the investment potential of their diaspora communities (Sriskandarajah, 2005). Siar (2011) and Logan (2009), however, argued that migration can have a positive impact on sending countries, for instance by stimulating the pursuit of higher education in anticipation of migration abroadin search of high-paying employment. In the words ofLowell and Findlay (2001), “As enrollment increases

spurred by the chance of emigration, average human capital increases and, therefore, overall source country growth can be stimulated" (p. 7).

More importantly, the funds that migrants send home maybenefit their countries of origineven in the absence of aWestern-style financial system (World Bank, 2011). According to World Bank, India is a good example in that it has received the greatest amount of remittances, some $55 billion. The impact of this influx of capital wasnowhere more visible than in the southern state of Kerala, where per capita income was 60% above than the national average and from which the volume of emigration was correspondingly higher (Chishti, 2007). The World Bank's report (2011) listed the Philippines as the recipient of the fourth largest amount of remittances, totaling some $21.3 billion, and tied this large volume to the fact that around 8million Filipinos, roughly one-eighth of the entire population,work abroad. Africa also greatly benefits from remittances. By way of comparison, the top 10 remittance-recipient countries in Africa in 2010 listed in the World Bank (2011) report wereNigeria, $10 billion; Sudan, $3.2 billion; Kenya, $1.8 billion; Senegal, $1.2 billion; South Africa, $1 billion; Uganda, $0.8 billion; Lesotho, $0.5 billion; Ethiopia, $0.4 billion; Mali, $0.4 billion; and Togo, $0.3 billion.

In addition, migration can also alleviateunemployment problems in a source country (Sriskandarajah, 2005)and may not have any effect if the country has a surplus of skilled professionals. Individuals who cannot find work in domestic labor markets may find gainful employment when they migrate, thus benefittingthemselves, the destination country, and the source country, the latter through remittance. Further, return migration

mayincrease both skills and investment; perhaps more importantly, migrants are able toplay key roles in linking companies in their adopted countries with investment opportunities in their home countries. In so doing, they create new markets for investors and facilitate the flow of financial resources, information, and technology to source countries (Lewis, 2011). Migrants can also assist in the development of their home countries through direct investment.

Looking at migration from the vantage point of remittances, Lewis (2011) and Ghosh (2006) havelikewiseargued that the migration of skilled people should not be treated as a challenge to development but rather as a potential means to promote it. As noted, migrants who return home with new skills acquired during their time abroadhave the potential tocontribute significantly to the development of their countries of origin, while those whodo not return may boost local economies through remittances, trade, networking, and foreign direct investment (Gibson &McKenzie, 2010).

The Medical Brain Drain in Ethiopia

Ethiopia has a poor health care system even by the standards of sub-Saharan Africa(Wamai, 2009). Grinding poverty, illiteracy, lack of sanitation services, and unbridled population growthare among the challenges faced by the health care delivery system, and the migration of medical professionals to developed countries further exacerbates the situation (WHO, 2004). Over the last decade in particular, more and more medical professionals have been leaving the country. The physician-to-population ratio in the country is extremely low (Girma, Kitaw,Ye-ebiyo, Seyoum, & Desta,2007), and its representative at the International Organization for Migration (IOM), Sethi (2002),

reported that Ethiopia ranked first in Africa in the loss of health professionals.The following table illustrates the magnitude of the problem.

Table 2

Aggregate Loss of Ethiopian Doctors from the Public Sector from 1987 to 2006

	Total Number of Doctors Graduated			Status as of 2006	
	Ethiopia	Abroad	Total	Available	Lost
Specialist	929	224	1153	394	759
General	2944	532	3476	538	2938
Total	3873	756	4629	932	3704

Source: Ethiopian Medical Journal (2008).

The steadyloss of medical doctors in Ethiopia has multiple causes. Four of five Ethiopian medical students recently surveyed by theBBC,("Why doctors trained in Ethiopia are leaving in their hundreds to work abroad," 2011)expressed a desireto leave the country after graduation. These students cited three major reasons for their intention to emigrate: lack of training opportunities, poor pay, and unfavorable working conditions. They were concerned that the salaries they would receive aftergraduation would not be enough to live on, and they were not exaggerating, since beginning doctors in Ethiopiaearn less than $5,000 a year, compared with as much as $120,000-$180,000 earned by their counterparts in the United States (BBC, 2011).Furthermore, the BBC report indicates thatthe lack of adequate beds, medicines,and equipmentin the government-run hospitals is responsible for the deaths of not a few patients.

Equally vexing for the national health system is the problem of internal migration, which results in an unequal geographical distribution of health workers within Ethiopia. While 85% of the population lives in rural areas, physicians tend to migrateto urban

areas, and from public to private health institutions, leavinglarge segments of the population without access to any meaningful health services (Assefa, Hailemariam, Mekonnen, Derbew,&Enbiale, 2016). The reasons for thismigration from rural practices echo those just mentioned,including lack of medicines, equipment, and infrastructure and other facilities, as well as of opportunities for professional advancement and for setting up a private practice (Sriskandarajah, 2005). Migration of physicians to the private sector is motivated by a desire for better pay and working conditions—including greater availability of medicines and equipment—than are found in the public sector (Lindelow, Serneels, & Lemma, 2005).

Returning now to international medical migration, the United States and European countries are attracting the bulk ofEthiopian medical graduates, though there is also demand from countries in the Middle East and some of the wealthier African countries, such as Botswana, South Africa, Namibia, and Swaziland (Shinn, 2002). In the aforementioned BBCstory, the dean of the Black Lion Medical School in Addis Ababasaid that, during a visit to Swaziland, he observed that six out of seven doctors working in one of the small nation's two hospitals were Ethiopians. The government's response to this threat to the Ethiopian health care systemhas been to train as many doctors as possible, an approach that Dr. Tewodros Adhanom, the former health minister, calleda "flooding strategy" during an interview for the BBC story. It remains to be seen whether the flooding strategy will work and, if not, what other policy options remain open for Ethiopia.

Retaining Doctors in Ethiopia and Attracting Those Lost to the Diaspora

Retention

Medical doctors working in their less-developed home countries are, as has been seen, dissatisfied that they are paid considerably less than their similarly qualified expatriate peers. Thus, when asked about the high attrition in the health sector, one professional in the field said:

> No physician would leave the public sector if he or she was paid well. The reason for the attrition is purely financial—the salary in the public sector is like a tip. The average salary for a physician in the government is 980 Birr [118 USD] of which 300 Birr [36 USD] is for tax. (Lindelow et al., 2005, p. 7)

Commitment to improve the living conditions of medical doctors in their home countries through salary increases, coupled with other incentives, such as housing or interest-freeautomobile loans,could entice themto remain and serve their fellow citizens(Woldetensae, 2007). Also as has been seen, a lack of basic facilities in hospitals and other health facilities frustrates doctors and calls for a radical improvement in their working conditions. Even in the face of the scarcity of resources in thecountry, the government would be justified in increasing funds toimprove the health care infrastructure, particularly in terms of the availability of drugs, equipment, and materials(Lindelow et al., 2005).

Return Option

Various strategies are available to governments in source countries for engaging theirdiaspora populations in national development endeavors. One such strategy is a

return option, which involves enticing expatriates to return home on a temporary or permanent basis through such incentives as tax- and duty-free import of personal property, tax incentives for investments, and loans and salary supplements (Shinn, 2002).Returnees could be provided with airfare and other relocation allowances and assigned to positions in their areas of expertise (Woldetensae, 2007).

Circular Migration

Circular migration occurs when migrantsreturn to their country of origin on a temporary basis to work in areas where their services are particularly in short supply (Woldetensae, 2007). This form of migration benefits source countries in two ways. First, migrants bring back to their countries of origin new skills beneficial for economic growth. Second, those who establish close links with their countries of origin tend to remit more readily than those who do not (Sriskandarajah, 2005). By working to guarantee more favorable working conditions, governments could thus tap into additional resources and expertise.

VirtualParticipation

Virtual participation refers to the involvement of the diaspora community in nation-building efforts through virtual networks without physical relocation (Woldetensae, 2007). Expatriatescanshare information and knowledge by taking part in online teaching and collaborating with local institutions on research and development projects (Adefusika, 2010).

Review of Research Methods

Qualitative researchers use a variety of methods, the most common being interviews, focus groups, and observation (Remenyi, 2013).

Interviews

The interview is a systematic method of collecting data. The intimacy of a face-to-face interview helps the researcher to capture the experience of the respondent in all its richness (Liedtka, 1992). The interviewer has the opportunity to observe the interviewee's behavior, personality, opinion, way of thinking, and beliefs (Sachan, Singh, &Sachan, 2012). By observing reactions to the questions and allowing interviewees expresstheir ideas, researchers can gauge the accuracy of responses and detect any contradictions (Opdenakker, 2006).

Interviews conducted face-to-face or over the telephone may be structured or unstructured. Structured interviews follow specific formats, within the context of which the interviewer asks a defined set of questionsin order to elicit specific answerswhereas unstructured interviews are more casual, takingthe form of conversations between friends (McNabb, 2008). This approach allows researchers to adjust questions, ask follow-up questions,and change direction as the interview progresses. For this study, Iconductedunstructured in-depth interviews so thatparticipants wouldhave the opportunity to provide as much detail as possible in responding to the set of questions. The interview method involves challenges, especially thoserelated to what Creswell (2007) called the "mechanics of conducting the interview" (p. 140). Roulstone, deMarrais, and Lewis (2003) identified the challenges as "unexpected participant

behaviors, consequences of the researchers' own actions and subjectivities, phrasing and negotiating questions, and dealing with sensitive issues" (p. 648). Nevertheless, the interview method remains important in phenomenological studies because it gives interviewees a chance to reflect on the essence of their experiences (Rudestam&Newton, 2007). Gay and Diehl (1992) identified the advantages and disadvantagesof interview as stated below. An interview can produce in-depth data when it is well conducted; the interviewer can adapt to interviewees' particular situations; and, by establishing a trust relationship. In such a situation, the interviewer can uncover information that subjects couldnot provide on questionnaires. By explaining the goal of a study and building a rapport, the researcher canelicit relatively more accurate and honest responses from interviewees. A further advantage is that the interviewer can follow-up on unclear or incomplete responses and could ask additional probing questions. Major disadvantages of interviews highlighted by Gay and Diehl (1992) are that interviews are time-consuming and that interviewees' responses may be affected by their reaction to the interviewer, being uncooperative or even hostile. Compared with questionnaires, fewer subjects are reached through interviews and interpersonal and communication skills not common among beginning researchers are necessary.

Focus Groups

The focus group is a meansof collecting data from members of a particular group. The group interaction inherent in this method can generate information and insights that may not be accessed during one-on-one interview sessions (O'hEocha, Wang, &Conboy, 2012). When used in combination with other methods, such as interviews and participant

observation, focus groups help to maximize the researcher's understanding of the phenomenon under study (Morgan, 1997). Morgan and Spanish (1984) pointed out that focus groups, unlike other qualitative methods,"offer the chance to observe participants engaging in interaction that is concentrated on activities and experiences which are of interest to the researcher" (p.259). However, the researcher must make sure that the discussion is not dominated by a particular participant andmust encourage every member of the group to share his or her own ideas (Gill, Stewart, Treasure,&Chadwick, 2008).

Observation

Through observation, the researcher describes the status of a particular phenomenon (McNabb, 2008). There are two types of observation,participant and non-participant. In a participant observation, the researcher learns about the activities of the subjects under study by observing and directly participating in their activities whereas in non-participant observation, the researcher observes and records the activities of the subjects but doesnot participate directly (McNabb, 2008). Unlike interviews and surveys, during which information is self-reported, the researcher collects informationfirst hand.

The observation method thus provides direct access to the subjects under study, affords the researcher the flexibility to focus on any given variable, and fosters the development of a long-term relationship between the observer and observed so that the characteristics of a phenomenon may be studied in detail (Bailey, 1994). Among the disadvantages of this method are the lack of control over extraneous variables in natural settings,the need for significant time and resources, and the potential for producing a

surfeit of data that complicates coding and organizing information in a systematic fashion (Holmes &Bloxham, 2007).

Choice of Research Method

For this study, then, I chose the interview and focus group methods to collect data. The research requiredexploration of the lived experiences of individuals and the meaning they developed from those experiences. The interview method, as just discussed, generates rich and in-depth information on individual experiences and perspectives on a given issue, centering as it does on the interviewee's life-world (Kvale& Brinkmann, 2009). And again, the focus group is useful for exploring knowledge and experiences of members of a group on an issue or issues thatthey hold in common. Rather than concentrating on a single individual, the focus group provides the opportunity to explore commonalities across individuals. In this study, Iexplored the causes for the migration of Ethiopian medical doctors, their experiences as migrant medical doctors, and the meaningthey derivedfrom their experiences, all of which were well suited to investigation through interviews and focus groupdiscussion.

Conclusion

Many of the world's developing countries are losing a substantial number of skilled medical professionals to Western industrialized nations. This situation has created a serious challenge for the delivery of health care services to their citizens. The management of human resources in the health sector has accordingly become a serious public policy concern. As one of the world's poorest nations, Ethiopia is suffering under a heavy burden of diseases, in particularthe increasing prevalence of communicable

infections. Under such circumstances, the migration of physicians has had a severe and lasting impact on the Ethiopian health care system as more and more medical doctors leave each year.

The Ethiopian government has devised what it called a “flooding strategy” in an attempt to overcome the mismatch between supply and demand by training more doctors. The number of students enrolled in medical schools has accordingly increased from around 300 in 2005 to some 3100 in 2012 (Public Radio International,2012) and the number of universities and colleges from 5 in 2003 to 23 in 2009 (Derbew, Animut, Talib, Mehtsun, &Hamburger, 2015). This strategy may remain ineffective, however, as long as the underlying forces that push medical doctors out of the country are not addressed. Mystudywas designedto explore why medical doctors leaveEthiopia and to provide policy options that may help reduce the outflow. To do so, it is necessary to gain a better understanding of the causes of the brain drain, and a combination offace-to-face interviews and a focus group discussion with expatriate Ethiopian medical doctors were identified as suitable approaches. Inthe next chapter, I further discussed the collection of data using interviews and focus groupdiscussion.

Chapter 3: Methodology

Introduction

The medical brain drain hasbecome a serious problem in many less-developed countries which invest time and money to train medical doctors who go on to work in developed countries. Ethiopia has been particularly affected, having lost 75% of its highly-educated professionals in all fields within the space of 10 years (Tekle, 2011). As discussed in the previous chapter, the medical brain drainexacerbates problems in the already unstableheath care system. As indicatedin the 2011 BBC report, four of five Ethiopian medical students expressed a desire to emigrate as soon as they completed their studies from a country plagued by TB, HIV/AIDS, and malaria (WHO, 2005).

My research on the migration of physicians from Ethiopia to the United States is unique in that it exploredthe causes of this migration through the eyes of those who have themselves been a part to it. This study shed light on the causes of the medical brain drain in Ethiopia and proposedways of reducing it.

Research Design

Qualitative research is appropriate when an investigator explores a problem or attempts to develop a detailed understanding of a specific issue (Creswell, 2007). My research projectwas designed to explore and develop a broad and in-depth understanding of medical doctors' reasons for leavingEthiopia. I determined that this goal could be achieved by encouraging doctors to tell their stories freely regarding the forces thatpushed them out of their country and to reflect on what could be done to minimize the medical brain drain in the future.

I used a phenomenological approach to study the research problem, focusing on individuals' lived experiences. According toMoustakas (1994), "the empirical phenomenological approach involves a return to experience in order to obtain comprehensive descriptions that provide the basis for a reflective structural analysis that portrays the essences of the experience" (p.13). A phenomenological study describes the experiences and perceptions of individuals regarding a concept or phenomenon and looks for that which all participants have in common, an approach that can be of use in developingpolicies that address the problem under investigation (Creswell, 2007). This approach helped me to understand the individual and the shared experiences of medical doctors relating to the medical brain drain. My research thus involved studying the lived experiences of medical doctors who had left Ethiopiain order to understand their perceptions of those experiences and to identify commonalities among their experiences.

Research Population and Sample

The population in this study consisted of 10 Ethiopian medical doctors living and working in the Washington D.C. metropolitan area. Iused convenience sampling to selectparticipants based on availability and accessibility with the assumptionthat they could provide information about and insights into the research problem.

This sample size wasnotsmall for this kind of research. As Rudestam and Newton (2007) have stated, "most phenomenological studies engage a relatively small number of participants (10 or fewer might be appropriate) for a relatively long period of time" (p.107). Thus, the sample size chosen for this study, in combination with the roughlythreemonths dedicated to the thoroughinvestigation of doctors'lived

experiences,wasappropriate for this type of study. I also placed on a reserve list five additional medical doctorsin case any of the 10 subjects were to drop out of the study at any time. As a small number of physicians in a single geographic location, this sample is notrepresentative of all Ethiopian medical doctors living and working in the United States. Nevertheless, having left their country, the chosen subjects had the capacityto provide perspectives on and insights relevant to the research question.

Data-Gathering Methods

Iused an interview method to gather dataovera two-month period. When properly conducted, interviews provide a deep understanding of a phenomenon under study.One-on-one interviewsprovide respondents with the opportunity to reflect in detail on their personal experiences and the interviewer with opportunities to ask spontaneous follow-up questions(DiCicco-Bloom &Crabtree, 2006). In general, the purpose of conducting interview is to explore the views, motives and experiences of interviewees. The interview method provides a way of entering into the world of the lived experiences of the subjects being studied.

For a phenomenological inquiry, interview questions should be designed to generate in-depth and detailed descriptions of the respondents' feelings, understandings, and experiences(Rudestam&Newton, 2007). Questions should be open-ended so that the respondents can provide multiple ideas and insights (Roulstone, 2010). The set of questions to be developed for the interview depends on the nature of the study but should also mirror the research question in narrow and specific ways. Questions should cover the major areas of the study ina logical order.

It proved useful to begin interviews with some introductory questions somewhat tangential to the research question (Jacob &Furgerson, 2012). In this case, interviewees might be asked what motivated them to study medicinein order to start conversation and build a rapport. In cases in which interviewees failedto understand or refused to answer a question, it was rephrased in order to overcome misunderstanding and serve as a basis forfurther probing questions. The overall design followed Creswell's (2007) suggestion that an interview protocol should consist of five or so open-ended questions and should allow sufficient time for respondents to answer each. I asked the following questions to each interviewee:

1. How would you describe working in Ethiopian hospitals or other health facilities?
2. What do you think are the most common problems facing medical doctors in Ethiopia?
3. Think of the time you decided to leave Ethiopia. Was there a specific incident/factor that led you to think about leaving the country?
4. Why did you come to the United States? Why not Europe or other regions?
5. The Ethiopian Government has come up with what is called "flooding strategy" which entails producing more medical doctors to offset the loss in brain drain. Do you think the strategy will work? If not, why?
6. How would you compare your medical practice in the United States vs. Ethiopia?
7. Have you ever thought of returning to Ethiopia to practice medicine?

8. What would you recommend to the Ethiopian Government to slow down medical brain drain?

The participants received information about the purpose of the research, who stood to benefit from it, potential risks, and what wouldbe done with the information gathered from the interviews. Once the interviewees clearly understoodthe purpose of the research, they werereminded that their participation wasvoluntary and that they could either agree or refuse to participate in the studyinitially and could withdraw at any time. Iprepared consent forms and distributedthem to the participants. I made it clear that the identities of the participants and the informationthey provided would not be shared with any party without their permission. To protect the identities of the respondents, they were assigned pseudonyms and other identifiers weredisguised.

As far as possible, Iavoided soliciting identifying information from the participants. This measure was importantbecause a breach of confidentiality could have serious consequences for the participants; for while they were not subject to the kinds of intimidation that they would have encountered living and working in Ethiopia, they might still face criticisms from friends and family members living in the United States or back in Ethiopia. In order to eliminate, or at least minimizethis risk and to encourage honest responses to the questions, the identities of the subjects were kept strictly confidential.

During interviews, Itook notes and audio-recorded the interviews. I latertranscribed the interviews to ensure confidentiality. In cases where clarifications were needed, Iconducted one to two follow-up interviews within 2 months after the initial

interviews. Each successive interview session incorporated more in-depth questioning based on analyses of previous interviews. The interviewees received a transcript of their interviews along with myinterpretationsso that they would have the opportunity to correct any errors; a process known as member checking (Harper &Cole, 2012).

I also gatheredinformation using a focus group discussionin order to validate the data collected through the one-on-one and follow-up interviews. The advantage of focus group discussionis the opportunity to observeinteractionsamong the participants (McNabb, 2008). When group members interact, they raise issues that might not have been discussed during the one-on-one interview sessions. The subjects who had been interviewed one-on-one were included in the focus group discussion session. The attempt was made to ensure that this session waswell managed so that no one dominated the proceedingsand the less articulate participants would have the chance to share their views (Robinsone, 1999). Afterward, Ireviewed, summarized, analyzed, and interpretedthe interviews and focus group session. Significant statements were organized into categories and themes in preparation for data analysis.

Data Analysis Procedures

This section deals with the analysis, interpretation, and organization of the raw data obtained from the interviews. Qualitative research has two phases (McNabb, 2008). The first involves collection and organization of data in a systematic manner, designing a system to store the collected data, and devising a data retrieval system for comparative analysis(McNabb, 2008).The second phase includes data reduction;the researcher identifies and selects significant patterns and themes, displaysdata, and presents findings

in an organized and meaningful manner so that relevant conclusions can be drawn from the data and the outcomes interpreted(McNabb, 2008).In this study, Ifollowed the stepsjust outlined in order to organize and interpret the information provided by the interviewees and thereby derive meaning from the data.

Storing, Protecting, and Destroying Data

Data storage is a crucial aspect of a research project. The data needs to be accessible to the researcher and others who would like to use it for further work. It is therefore important to store the data along with audio-recordings and field notes in a secure location, such asa locked filing cabinet to which only authorized individuals have access. Data in electronic format should be saved using various devices, such as desktop and laptop computers, flash drives, CDs, and DVDs. Backup copies should be made and data should be saved in password protected computers and other devices. The data for this study will be stored for a minimum of 5years and longer if the need arises. After the time limit for data storage expires, I will destroy the data by shredding hard copies and using Apple's secure empty trash functionto destroy digital copies.

Conclusion

This chapter has described the research design, which was intended to facilitate exploration of why Ethiopian medical doctors leave their country and what can be done to slow the outflow. A qualitative research design was selected that employed a phenomenological approach. Specifically, Iuseda convenience sampling technique, recruiting 10 medical doctors chosen based on access to them and five additionaldoctors to be kept in reserve in the event thatany of the participants were to withdraw from the

study before its completion. One-on-one interviews and a focus group discussionwereconducted to gather data. Iorganized and analyzedthe collecteddata using coding and categorization and then examined the coded and categorized data for patterns and themes so that conclusions could be drawn. Finally,I have stored the data in a secure location and in password-protected computers with the intent of destroying it when the storage period expires.

Chapter 4: Results

Introduction

In this chapter, the results of the data analysis are presented. The first section of the chapter describes how thedata werecollected and the second deals with the organization of the data after collection. The third section presents data analysis, including the coding and construction of themes. The last section provides a description of strategies used to maintain trustworthiness inthe study.

Data Collection

The data collection was undertaken after Walden University's Institutional Review Board (IRB) approved the study(approval # 08-25-16-0132050). The data were collected from 10 participants selected by convenience sampling. Before meeting face-to-face for the actual interviews, I contacted each participant by phone. The phone conversations provided the opportunity to introduce myselfand to explain the goal of the study, the confidential nature of the interviews, and the opportunity that the participants would have to review interview transcriptsand check for misrepresentations or mistranslations of their responses.

Selection of Participants

Ten medical doctors were selected for participation in this study based on the following four criteria.

- Theywere medical doctors of Ethiopian origin.
- They had migrated from Ethiopia to the United States to work as doctors.

- They were residing and practicing medicine in the Washington, DC metropolitan area (in the United States).
- They were willing to participate in the study.

After initial contact with the participants,suitable timesand places for conducting the interviews were arranged by telephone. To preserve the confidentiality of the participants, a letter-number combination was assigned to each participant, who were thus designated P1, P2, P3, P4, P5, P6, P7, P8, P9, and P10.

Interviews

Interviews took place in private rooms in public libraries, businesses, and,in two cases, in medical facilities owned by the interviewees themselves. The interviews averaged an1.5 hours in length. Follow-up interviews were conducted with four of the participants and eachlasted around 30-40 minutes. The focus group discussion,in which eight of the interviewees took part,was conducted in a conference room in a public library and lasted around two hours. The interviews and focus group discussion were recorded on a digital tape recorder.

Open-ended interviews were used in order to obtain detailed information and insights. This format provides respondents with the opportunity to express their viewpoints and experiences in detail (Turner, 2010). I asked probing follow-up questions throughout the interviews. Mindful of the concerns voiced by McNabb (2008), Iwas careful not to ask leading questions or to make any kind of value-laden statement. The following are examples of the probing questions.

- Then what happened?

- What was your reaction?
- Would you please elaborate on that point?
- Can you give me an example?

In addition to probing questions, I used such nonverbal probesas raising my eyebrows, tilting my head, silence, and nodding in order toencourage the interviewees to open up and clarify issues. I also asked for clarification whenthe issues under discussion were poorly defined.

Data Organization

After I transcribed the interviews, I created a file for each interviewee, for a total of 10 files labeled P1Intfor the first participant, P2Int for the second, and so on. These files were thenplaced in a folder labeled Master Folder. This way of organizing the data allowed for easy access to and comparison of responses for each question. A separate data file was created for the focus group discussion.

Analysis of Data from Interview and Focus Group Discussion

Analysis of interview data. The interview and focus group data were analyzed using Moustakas' modification of the Stevick-Colaizzi-Keen method for handling phenomenological data (Moustakas 1994, pp. 121-122). The steps of this process are as follows:

- Obtain a full description of the researcher's experience of the phenomenon.
- From the verbatim transcript, consider each statement with respect to its significance as a description of the interviewee's experience.
- Record all relevant statements.

- List each nonrepetitive, nonoverlappingstatement, which represents an invariant horizon or meaning unit of the experience.
- Combine the invariant meaning units into themes.
- Synthesize the invariant meaning units and themes into a description of the textures of the experience. Include verbatim examples.
- Reflect on the researcher's textural description of his or her own experience. Through imaginative variation, construct a description of the structures of the researcher's experience.
- Construct a textural-structural description of the meanings and essences of the researcher's experience.
- From the verbatim transcript of the experience of each of the co-researchers, complete the steps mentioned above.
- From the individual textural-structural descriptions of all co-researchers' experiences, construct a composite textural-structural description of the meanings and essences of the experience that integrates all of the individual textural-structural descriptions into a universal description of the experiences of the group as a whole.

These steps were followed in reviewing and re-reviewing the participants' interview transcripts and the transcript of the focus group discussion. The data obtained from each transcript were coded by hand. While combing through the data, I marked important sections and assigned codes. Thus, for instance, the statement that "With the salary I used

to get, I could only cover my basic needs" was coded as *low pay*. Similarly, "Medical doctors do not have a say in the system" wascoded as *lack of participation* and "There were no infrastructure, no materials, and no support staff who could help in making medical decisions" was coded as *poor working conditions*.I followed the coding methods recommended by Saldana (2013), which include value coding to capture and label subjective values and perspectives,in vivo coding by placing direct verbatim quotations from the data and in quotation marks, and pattern coding for initial categorization of coded data.

The first interview questionasked, "What is your assessment of the health care system in Ethiopia?" In response to this question, P1 stated:

> A health care system basically refers to the coordination of manpower, institutions, and resources to achieve the health needs of a given society. When I started medical practice, there was shortage of manpower. I was assigned to a health center and I was the only doctor in that area. Therefore, I had to cover the entire district. Since there were a lot of patients, I was overwhelmed. The other problem was that there was a wide gap between what students studied in medical schools and what they saw in the practical world after they started medical practice. In medical schools, we studied in detail, at least theoretically. It was a seven-year training program. When wecompleted our studies and began to practice, we found health institutions woefully below our expectation. We could not find basic medical equipment, medicines, well-trained support staff such as lab technicians and nurses. Medical practice is not done by a physician alone.

> There must be adequate infrastructure and support staff. Since there was no such infrastructure and support staff, the health care system in Ethiopia wasin bad shape. Actually, the low level of development of the country has significant impact on the health care system. If an individual is sick, he/shehas to come to the health facility but there is transportation problem. When I was working in western part of the country, Malaria was killing a lot of people. Malaria is a treatable disease and it should not kill people. If patients come to the health facility early, they could be given three tablets and that could save their lives but, because of lack of transportation, they don't come to health facilities and die at home. Besides, most people are poor. They cannot cover their medical expenses. Although there has been steady improvement in the preventive aspect of the health care system in Ethiopia over the last decade, the country is way behind in the curative aspect. (P1)

P2 stated that the Ethiopian health care system was very much underfunded and pointed out its strengths and weaknesses.

> Many countries, especially European countries, allocate 6-7% of their GDP to health care, but in Ethiopia health budget mainly comes from foreign aid. Although aid flow has grown bigger over time, it, however, lacks prioritization. Some of the aid money is returned to donors due to inability to effectively and efficiently utilize the resources because of lack of skilled and committed leadership. However, there is progress on the preventative aspect of the health care system in Ethiopia. Initiatives taken by the Ministry of Health on the

> preventive side, like sanitation, clean water, immunization, health education, training thousands of village-level health extension workers to improve access and coverage for the rural poor are commendable measures. Yet what is most worrisome is that there are no highly-skilled health care professionals in the country. Moreover, many hospitals lack basic medical equipment and there is lack of coordination at every level of the health care system.(P2)

According to P3, the Ethiopian health care system is plagued by many problems, butthe government's emphasis is rightly on preventive services. P3 described the situation stating:

> I think a focus on the preventive side of health care is the right policy in developing countries like Ethiopia. Preventive care focuses on medical activities that occur before people get sick, and in this regard a major achievement has been registered. Hundreds of health centers were built and thousands of health extension workers were trained and deployed at village level. The government's emphasis on environmental health and teaching communities about hygiene, nutrition, family planning, etc., brought a lot of positive changes and its impact is reflected in reduction of infant and under-5mortality. Infant health could be maintained through breast feeding, vaccination and keeping the environment clean. Moreover, access to family planning has increased but the progress made so far is not flawless. The newly built health centers lack well-trained professionals and medical equipment, which undercut progress. On the other hand, maternal health requires higher-level infrastructure like emergency obstetric

> care. Hospital expansion is quite limited.Only a few hospitals were built over a long period of time, which shows that the curative side is neglected. Moreover, lack of medical equipment and well-trained health professionals compound the problem and that is the reason the country could not bring down maternal mortality like infant mortality. (P3)

P4 argued that health care should continue to improve because international, local, and professional bodies were working toward that goal. This respondent viewed government as an evolving entity that would become more effective over time,except in cases of failed states, and emphasized the importance of measurement criteria andthe use ofthe United Nation's Millennium Development Goals as a yardstick.

> The measures included in the Millennium Development Goals are a decrease in infant mortality, maternal mortality, reduction in malaria incidences, increase in health coverage, etc. These are the issues that should be raised and discussed when we talk about improvement. We should also ask how satisfied the consumers are and how do health professionals see the improvement. No one doubts there is improvement, but is there enough improvement? Different governments in Ethiopia have tried to improve the health care system but the question is which government has effectively and efficiently utilized the resources and provided better services. Given population increase, rapid urbanization, and the rising demand for services, what strategies should we pursue to further improve the system is the issue that should be discussed by stake holders?(P4)

P5 noted that the Ethiopian health care system isbackward in terms of the rate of infant and maternal mortality, immunization, life expectancy, and other key indices. This respondent did acknowledge, however, that there had been notable progress over the past 20 years in that Ethiopia was among the countries that had met the Millennium Development Goals on time. P5 cautioned that,for a country with an annual population growth of over 2.5% and a population size of 100,000,000 million, the current number of health professionals was entirely insufficient. The measures being taken to address health challenges have their own shortcomings, but progress has been made to some degree, especially in the preventive aspect of health care.

P6 offered a similar assessment regarding preventive care:

> The Ministry of Health has trained thousands of health care workers and built health centers throughout the country, thus making heath care accessible to poor people even in remote areas. The government's goal in spreading preventive health care services throughout the country is in part for political consumption, i.e. to gain support from the peasantry which makes the bulk of the population. However, the government didn't work at the tertiary level, like referral hospitals. The hospital I worked in was a tertiary teaching hospital and there was no support system from the government. The government has built hospitals at zonal level, but they are not well-equipped and lack well-trained medical professionals. Although the government has increased the number of trainees with the goal of producing more doctors, the quality of training is extremely low. (P6)

P7 indicated that the health care system had improved over the last decade on the preventive front. From this respondent's perspective, the building of health care posts and thetraining and dispatching of thousands of health extension workers to the peripheries in an effort toextend health care coverage throughout the country represented a positive development, but the governmental effort had been lacking in terms of tertiary-referral hospitals.

> I was working in a referral hospital where there was a dearth of medical equipmentandwell-trained health workers. There was shortage of medicine and at times even gloves. Hospital beds were woefully inadequate. A patient who needed urgent care had to wait six months to get a hospital bed.(P7)

P8 highlighted the limitations of health care delivery, particularlywith regard tospecialized care, and stated that a very low physician-to-population ratio, lack of basic medical equipment, and political interference in health care administration had seriouslyimpeded progress.

> Sadly, politics has permeated the health care system. In the zone I worked in, the individual who was in charge of the zonal health administration was a health officer who was a political appointee. There were medical doctors who were more educated and experienced than the health officer but the system favors the ruling party cadres. To lead a zone health department, to be a section head in a hospital, or even to participate in a seminar, especially when there is per diem, one has tobe a member of the ruling party. Politics has done a lot of damage to health care as a profession. Although I was in my own country, I was treated as a second-class

> citizen simply because I was not a member or supporter of the ruling party. At the time I graduated, I expected to work anywhere in the country, serve the people, and be happy. That was, however, not the case, as political affiliation has taken precedence over professional competence,which was extremely frustrating to me. (P8)

P9 stated that there had been improvement in terms of accessibility after new centers were built to provide basic health care services in places where such services had been unavailable. On the other hand, this respondent indicated that the quality of health care was low because of a lack of well-trained medical professionals and basic medical equipment in hospitals and other health facilities.

For P10, the most serious problem in the Ethiopian health care system was political interference.

> In the hospital I was working, the EPRDF assigned an individual as hospital administrator who was a health officer long time ago. The administrator did not fully comprehend what doctors talk about. He interpreted everything politically and his only concern was saving money. When I was working in the night shift, a patient came with a fractured leg. The fracture could be fixed by an orthopedic doctor because I am a general practitioner and I could not fix the patient's leg. Therefore I called an orthopedist. However, the administrator screamed at me asking why I called orthopedist saying the patient could have been treated when the orthopedist reports to work in his regular schedule. I tried to explain to him that the patient had femoral fracture, that he was bleeding and needed immediate

treatment. The administrator was not ready to listen because he did not want to pay overtime to the orthopedist. (P10)

At one point, there was shortage of bed in our hospital but some beds were available in the infection room. The purpose of infection room is to control infection by separating infected individuals and putting them in that room. However, the administrator ordered me to put patients in the infection room where beds were available. I argued that if we put patients in the infection room, they will be infected and we do more harm than good. The administrator was not interested in my explanation and he bluntly told me to put the patients in the infection room. The administrator has made similar harmful decisions at different times and pushed me and other medical doctors to do unethical things because he is a politician and he does not understand medical ethics. It was not only this particular administrator that was a cause for concern. The system is filled with cadres and it was impossible to do our job without the interference of politicians. What has exacerbated the problem was the introduction of the so-called Business Process Reengineering (BPR). In this program, the government brought in people who have no knowledge of medical practice and yet made major decisions. Since it was too much to bear, four out of eight medical doctors, including me, left the hospital at the same time. What has also affected medical doctors was that the government trained nurses in the so-called accelerated program. After giving them additional training, the government empowered them by giving them additional responsibilities. The rationale was that they could be dispatched to rural

areas where medical doctors show reluctance to serve. However, they did not have adequate training to handle medical issues which could be handled by medical doctors. (P10)

What exacerbates the health sector problem is the extremely low public awareness of diseases. People do not have adequate knowledge of diseases, how they are transmitted and could be prevented. Most patients come to health facilities at a point where doctors could do nothing to help them because the damage has already been done.(P10)

Moreover, there is a general tendency on the part of the government not to give due consideration and respect medical doctors deserve. The former Prime Minister, Mr. Meles Zenawi, and the former Health Minister, Dr. TewdorsAdhanom, said there are many health professionals who could administer syringe and the treatment of diseases in Ethiopia does not require medical doctors. They were heard in different occasions saying if medical doctors want to leave the country, let them go. Such attitude which persists at the higher echelon of government explains why medical doctors are not respected, paid very low and no effort is exerted to retain them. (P10)

The interview responses revealedmajor challenges facing the Ethiopian health care system. The respondents indicated that the system wasweak because of an acute shortage of physicians,infrastructure, andsupport staff. Moreover,excessive interferenceby politicians at every level of the decision-makingprocess and a lack of respect for medical doctors on the part of government officialswere making things worse.

Most participants agreed that there had been improvements inthe preventive aspect of health care, in thatthe government has made health care accessible to the rural poor by building health centers and deploying trained health care workers, even in remote areas of the country. Most respondents also agreed, however, that there had been no progress on the curative side of health care because the government did not pay much attention to tertiary-level referral/teaching hospitals, which wereas a result poorly-equipped and lacking in well-trained medical professionals. The problem was not even related to funding, since significant aid was coming into the health sector from donors; indeed,this aid has on occasion been returned to donors at the end of budget year for lack of effective and efficient leadership to use it to address the society's health needs. One respondent cautioned that the rapid increases in population, urbanization, and demand for health care services could undermine the progress made thus far unless prudent measures were put in place to meet future challenges.

The second interview questionasked, "What is your opinion of the effect of medical migration on the health care system in Ethiopia?" P1 responded to this question by asserting that medical doctors contribute significantlyto the health care system from management to service delivery. For P1, doctors have anunmatchedunderstanding of how the health care system works, so that, if they are not fully involved in its design and implementation, the quality of health care will be compromised.

P2 observed that seven yearsand tens of thousands of dollarsare required to train a medical doctor.

> To replace a doctor lost in migration, the country has to wait seven years and spend a lot of taxpayer money. Poor countries like Ethiopia with a disproportionately heavy share of disease burden cannot afford to lose the time and money spent to train a doctor.(P2)

P3, on the other hand, pointed toadvantages and disadvantages of medical migration.

> The disadvantage is that medical doctors who migrate to developed countries are knowledgeable and experienced and it is a big loss of human resources. On the other hand, when these professionals go to the United States, United Kingdom and other industrialized countries, they learn new skills and practices and get training in the latest technology. If a favorable condition is created, these physicians could return to their country of origin and be agents of knowledge and technology transfer. (P3)

P4 indicated that the health sector suffered from a shortage of physicians and that, to address the problem, the government had built a number of medical schools and brought aboutdramatic increase in the number of medical graduates. Nevertheless, this respondent noted,theoutflow of physicians from the country continued, and the loss of medical doctors after seven years of training and the investment of considerable funds in their education represented a drain on economic and human resourcesthat could jeopardize the health sector.

P5 stated that medical migration, while itimpacted Ethiopia negatively by taking away the well-trained and experienced physicians,could not be halted.

> Owing to globalization, the world is getting smaller at an incredible pace. People learn about opportunities that exist outside their countriesfrom various sources and attempt to grab them. However, we do not have to see medical migration in a totally negative way. The brain drain concept indicates that doctors who already left will not return to their country of origin, but that is not always the case. As the saying goes, "you can take away the person from the country but you can't take away the country from the person." Migrant doctors have strong attachment to their country because they have families, relatives, and friends. Hence, they could use the skillsets and experiences they have acquired abroad to serve their people and change the medical situation in their country of origin. There are individuals who are doing it, and there has to be a paradigm shift from brain drain to brain share. (P5)

P6 noted that medical doctors who left the country were mostly experienced, ambitious, and motivated individuals and that, when they left, they took with them their knowledge and experiences, which indeed represented a huge loss for the Ethiopianhealth sector. The respondent criticized the government's laissez-faire approach to medical migration and the grounds that its attitude of "let them go; we will train more doctors"was harmful because,even if the government trains more medical doctors, the best and the brightest will be the ones who seek to go abroad.

P7 described the flight of medical doctors as a serious public health concern: "When doctors leave the country, they do not only take away the tax payers' money

invested on them during their training but also their knowledge and experience which could save lives."

P8 asserted that the departure of medical doctors from the country had a tremendous impact on the health care system.

> Doctors who migrated are trained in Ethiopia for seven years and they have practical experience. Those who left, including my own teachers, were the best and the brightestthatcould contribute a lot to the country and solve problems, but their departure puts the already fragile health care system at risk. (P8)

P9 shared the outcome of research that his class had conducted in hissenior year regarding medical migration.

> In our final year, my batch [graduating class] conducted a survey for our graduation yearbook and found out that 60% of the students in our batch indicated their desire to leave the country immediately after graduation. It is worrisome that such a large percentage of students wanted to leave the country after a lot of tax-payer money was spent on their education. The more troubling aspect of it was that those who migrated were not only new graduates but those who were teachers and practiced medicine for a long time. Obviously, medical migration has a big impact on teaching, medical practice and quality of care.(P9)

P10criticized the government's view that the migration of medical doctors doesnot have a serious impact on health care because diseases in Ethiopia canbe treated by health officers and nurses.

> I wonder why the government spentmillions of dollars on building medical schools and training students if nurses and health officers could provide health care. The government must understand that the training level of medical doctors, nurses and health offices vary significantly. Each health professional plays a different role and when only nurses and health officers are in charge, people will not get quality care. (P10)

The respondents, then, indicated their belief that the migration of medical doctors posed a serious public health concern. To lose medical doctors after seven years of training and the investment of a great dealof money in their training represented for them a drain onboth human and financial resources. The respondents also pointed to alack of concern on the part of government officials in the face the migration of medical doctors, suggesting that this attitude showeddisrespect and disregardfor them. They further suggested that the government should develop retention mechanisms so that the country would not continue to lose knowledgeable and experienced doctors. Some of the respondents, however,argued that medical migration should not be seen in an entirely negative light. Doctors who left home could return to their country, provided that the government and other stakeholders would work to create a more favorable environment for them. Those who returned could utilize their skills and experiences acquired abroad to serve the people and, as P5 put it, change brain drain to brain share.

The third interview questionasked, “At what point did you decide to leave Ethiopia?” In response to this question, P1 stated that an accumulation of frustration over the years had driven him from the country.

My parents are extremely nationalist. My father is a teacher and he inculcated in his children the love of a country and service to the people. No one in my family had the slightest intention to leave Ethiopia. My whole plan was to live and work in my country. However, when I was assigned to work at a health center after graduation, I encountered a crisis of expectation. I have never thought I would face such a problem in my medical practice. In the health center I was working in, I felt lonely. There were no infrastructure, no materials, no support staff who could help in making medical decisions, and the only thing available was I and my stethoscope. Then I began to ask, why did I spend seven years in medical school for this kind of practice? The problem was that there wasa great mismatch between the training we got in medical school and the health facilities we were assigned to practice medicine. As a young medical doctor, I was so passionate and ambitious. I thought I could solve a lot of problems, but when I was exposed to ill-equipped medical facilities, I got frustrated. The other problem was lack of financial security. As a family, we believed education was the only vehicle to extricate ourselves from poverty. Hence, my parents invested all the resources at their disposal on the education of their children. My parents have toiled a lot,and I felt obliged to pay back. However, I soon realized that, let alone supporting my family, I could not even afford to rent an apartment and I had to live with friends to minimize expenses. It was quite frustrating. An equally serious issue was lack of opportunities for professional growth. In the U.S., one can plan his/her growth and there is no limit to it. A doctor can plan what he/she wants to do next year and

> in the coming five or ten years, but one does not have such an opportunity in Ethiopia. It is only by chance that a doctor may have continued professional growth because there are not much training opportunities. For example, I was a general practitioner, and my expectation was that I would specialize in a certain field, for example, surgery or internal medicine, but there were no such opportunities for professional growth.(P1)

P2 noted that low pay, lack of opportunities for professional development, and poor working conditions undermined physicians' motivation.

> With the salary I used to get, I could only cover my basic needs. Other than that, I could not even afford to pay for a plane ticket. In our department, there were expatriate staffs, mostly Indians. We were teaching the same courses but they were paid in dollars whereas we were paid in Birr, the local currency. Therefore there was a big income difference between the local and expatriate staff. We were denied equal pay for equal work in our own country,which was really frustrating. What was even more frustrating was the environment in which medical practice took place. Our bosses were not inspiring and they were not ready to help us in any way in providing opportunities for professional development. What also has saddened me was that patients came to the hospital for treatment after it was too late and I could not help them. Even in situations I could help, there were no medication, equipment, and laboratories. Patients were asked to bring medicine from outside the hospital. Those who could not afford to buy medication had to

> die. Actually there is nothing more frustrating to a doctor than his/her inability to save a patient's life. (P2)
>
> I believe professional satisfaction is more important than money for a doctor because doctors deal with human life, which is sacred. Some people asked me, why not start private practice? Well, I could have earned more money if I were involved in private sector, but there are some unethical practices in the private domain. When doctors order unnecessary tests or expensive medication that patients could not afford, it is unethical but probably difficult to avoid due to cut-throat competition. Hence, I was confronted with two choices, either to work in the government sector with dismal pay or get into private practice and involve in unethical behavior. I wanted to avoid both options and decided to leave the country. (P2)

P3 stated that there were many push factors that had forced him to leave the country.

> I worked for nine years in the Ethiopian health system. Although there were many push factors, I remained hopeful that the situation could gradually improve. However, there were no signs of improvement. The government issued laws that demotivated health professionals. Previously, when students returned home upon completion of their studies abroad, they were allowed to bring in automobiles tax-free for personal use but that right was denied. On the other hand, the so-called businessmen could get investment licenses in a day without showing any money and allowed to bring three or four trucks tax free. It was really annoying that a

medical doctor who served society did not have the chance to bring even a single automobile upon returning home from a study abroad. The other problem that annoyed me was the NGO law. When I was working for an NGO, we had provident funds. At one point, the government issued a regulation stating that provident funds should go to the government-administered pension fund. If provident funds go to government-administered pension fund, there is no guarantee one could get his/her money back. There is no transparency or accountability in the government and the government just took people's money with a stroke of a pen. (P3)

The other problem of medical doctors was that they did not have a say in the health care system and government officials did not give them recognition for their work. For instance, I started ovarian cancer treatment in Ethiopia from scratch. Many women die every year as a result of this deadly disease and yet it was extremely difficult to start the treatment because of the negative attitude of officials at the Ministry of Health. I literally begged the officials, most of whom were my juniors, to start the program. After a long struggle, I got the green light from the Ministry of Health to launch the program. What was started in the capital city, Addis Ababa, was scaled up and became a national program. To do the job, I had to train officials in the Ministry of Health. Sadly, there is no system in the health care administration. Programs are executed at the will of officials who are often affiliated with the ruling party. They are so bossy. They do not accept ideas which come from people like me who have no affiliation with the ruling party. I

had to beg the officials every time I came up with some valuable initiatives. If they want to, they can stop a program that is running very well. The ups and downs I have gone through have frustrated me and I decided to leave the country. (P3)

P4 pointed out that it was difficult for doctors to lead a decent life on the salary that they were paid.

I thought of the next phase of life, like establishing a family, children's education, and financial security, and I decided to leave the country because I could not even rent a two-bed room apartment with the salary I used to get. Regardless of the number of years I stayed in my profession, I wouldnot be able to buy a 100,000 Birr ($4,100) condo. Thus I decided to leave the country in search of a better life. (P4)

P5 stated that he had grown up in a politically terrible timein which manyyoung people were murdered. Since it was difficult to leave the country, he joined the Gondar Medical School.

After graduation, I practiced medicine for a year and half and then tried to find a way out of the country. My interest to get out of the country was mainly triggered by political instability, coupled with other push factors in the country.(P5)

P6 also stated that many factors had contributed to pushhim out of the country.

After several years of training in medical school and all the hard work put into it, I led a very uncomfortable life. I took taxi to work every day and lived in a low-standard house, whereas those who do not even have first degree drive luxury cars

> and live in fancy houses. Ironically, people think doctors get a lot of money. My relatives ask me where I keep my money and expect me to be generous with them. What is also disappointing is that the government does not value the services of medical doctors. So many things piled up over the years which frustrated me and I had to leave the country before I was about to collapse. (P6)

P7 stated that he decided to leave the countrybecause his salary was low and the work environment demoralizing.

> My salary was not commensurate with the work Idid. Idid not even meet my basic needs with the paycheck Iused to get from the government. It would be good to make some reasonable adjustments. The other problem was the work environment. I was general practitioner in Ethiopia and there were surgeons, pathologist, etc., who were working with me in the hospital. These people were of high standard but they had no transportation service which could take them from home to work and back home. There was only one service bus and it was always full. Those who were the last to board the bus could not find seats and we had to go all the way home standing in the overcrowded bus. The pathologist and surgeons had the opportunity to work in the capital, Addis Ababa, but they worked in a small city to serve the people. The hospital administration refused to allocate a service bus for the doctors. Doctors stayed long hours at work and not to have a seat in a bus when they were going home was an insult. Low payment, poor work environment, lack of basic equipment and support staff had frustrated me and I decided to leave the country. (P7)

Similarly for P8, “a combination of factors such as lack of hope for improvement in personal and professional life, unhealthy working condition, low payment and lack of freedom have pushed me out of the country.”

P9 indicated that a student protest against the government during which many students were killed and injured had troubled him a great deal.

> Many dead and injured students were brought in to the hospital where I was working at intensive care unit. Many of them were shot on the head and chest with live bullets. When I asked them, some told me they were not even in the protest rally; they were just walking on the streets. What has horrified me was that the victims were being mistreated in the hospital by government officials who came to check on their identities. The officials were also insulting families who came to visit the victims. It was a terrible scene and I felt the same thing could happen to me at any time and thought it was not wise to stay in the country. Although this incident was a turning point in my decision to migrate, there were other factors that drove me out of Ethiopia. (P9)

The health care system is permeated with a big political dose. Health care professionals are forced to blindly support government policies even when they see the health care system is in decline. We watched on TV when our bosses told viewers that there was a great improvement in health care. Moreover, government officials made decisions on our own money without consulting us. In a meeting where doctors did not participate, our bosses used to announce that employees of XYZ hospitals have agreed to give 10% of their salaries for Renaissance Dam (a

> dam being built by the government on the Blue Nile River). If I were asked to give money for a project, I might give whatever percentage I was comfortable with, but somebody deciding on my own money was outrageous. (P9)

P10complained about abuses perpetrated by an administrator of the hospital against medical doctors and described a particular incident.

> One day my friends came from Addis Ababa to give training ontheHIV/AIDS pandemic. I took part in the training and returned to the hospital. The administrator saw me as I was returning to the hospital. He approached me and screamed at me in front of people. As if I did something shameful, he told the people around that I called friends for overnight party and there was no one left in town. I was so disgusted and enraged. I asked myself why I spent all those years in medical school to be punished by a layperson and I decided to leave the hospital. A week later, I left for the capital, Addis Ababa. (P10)

These interview responses indicatealack of hope for improvement in personal and professional life.Low pay and unhealthy working conditions frustrated medical doctors and forced them to leave Ethiopia. Most of the respondents stated that there was too much political interference in health care administration; thus government cadres dominated professionals at each level of the health care system and made it difficult to carry out proper medical practice. The cadres relied on their political power and made unwise and sometimes unethical decisions, which further frustrated medical doctors. Moreover, most respondents stated that the government failed to recognize their services to society anddidnot reward their initiatives. Since doctors had no input in the decision-

making process, they lacked motivation, felt alienated from their own profession, and ended up going to work only to receive a pay check.

The fourth interview question asked, "In order of importance, please identify the major causes for the migration of Ethiopian medical doctors." In response to this question, P1 noted:

> First comes lack of job satisfaction. What brought job dissatisfaction in my case was the mismatch between the training, which was pretty much up to international standard, and health institutions to which medical doctors were assigned to practice. There was no health infrastructure which could enable us to put into practice what we have studied in school. Hence, I began to ask, why I have studied for seven years to do what I do. How could I put into practice all the concepts and theories I have studied in school? Secondly, economic factors come into play. The unreasonably low wages paid to medical doctors could notafford them to rent modest apartments. After seven years of study, I could not lead a decent life and support my family. In the third place comes lack of professional progress. There were no training opportunities which could enable individual doctors to maintain and improve their knowledge and skills and thereby cope with existing health problems and emergent threats. (P1)

For P2 as well, the major causes for the migration of medical doctors included a lack of professional development, low wages, and a lack of conducive environment to practice medicine.

P3 indicated that there was too much political interference in the Ethiopian health care system, since the political class dominated the professional class.

> Doctors could be dismissed from their jobs if they were not affiliated with the ruling party.The other problem was lack of incentives. In Addis Ababa, medical doctors could not afford to pay apartment rent with the salary they earned. In order to survive, some had to work in private clinics or run side businesses. Also, there was no good environment for medical practice due to shortage of support staff, medical equipment, andlaboratories. (P3)

According to P4,the most serious problems that pushed doctors out of the country were, in order, low pay, job dissatisfaction, and administrative/political interference in their jobs. P6 cited the same reasons in the same order, andP5 cited the same reasons, but with lack of job satisfaction and low pay second. P6 also drew attention to the role of economy in the migration equation.

> After all the hard work they put in during their studies, medical doctors lead uncomfortable life due to their economic situation. I had friends who were small business owners and they had a lot of money, but we as medical doctors lived pay check to pay check. I always asked, if my medical degree could not improve my life, why I have studiedmedicine for seven years? (P6)

P7 cited political/administrative problems, low pay, and poor working conditions adversely affected doctors in their medical practice, P8 low pay, political problems, andlack of professional advancement, P9 acorrupt political system, low wages, and

poorworking conditions, andP10 low pay, political intervention, and poor working conditions. Elaborating on these issues, this respondent noted:

> The first thing that stuck out for me was low salary, which was the cause for the exodus of physicians. Secondly, health care was highly politicized. Political interference adversely affected doctors'ability to put into practice what they have studied in school. We got good training and we were expecting to help our people based on our training, but to no avail. Government cadres controlled everything. The government did not have respect for doctors and did not recognize their contributions to society. Moreover, the work environment in which medical practice took place was very bad. There was no equipment such as X-rays, MRI, and in some hospitals, even gloves were in short supply. There was a dearth of lab technicians and some tests could not be done in the lab or it was too expensive to do tests. Sowe could not diagnose diseases but onlysaw the symptoms and gave best clinical judgment. In that situation, I kept asking myself, I studied medicine forseven years to do what? There was no setup to apply all the medical courses we studied in school. I felt like I should not have studied medicine for that longto do what I was doing. (P10)

The fifth interviewquestion asked, "When you compare your medical practice in the United States to that in Ethiopia, in what way(s) are they different?" P1 stated that there isa big difference in health infrastructure.

> Health care practice in the United States is aided by modern technology. The availability of cutting-edge equipment such as MRI, X-ray, CT scan, and well-

> equipped laboratories make it possible for physicians to order any test. Moreover, doctors with different specialties, well-trained support staff, and consultancy services are available in the United States. Physicians are paid high salaries and they have opportunities to fully exercise their professional training and to advance their career. On the other hand, there is lack of modern medical technology and specialty services in Ethiopia. On top of this, low wages, poor working conditions and lack of career advancement contribute to low morale.(P1)

For P2 the main difference between the United States and Ethiopiawas the availability of resources.

> In the United States, hospitals meet at least minimum requirements, such as having well-trained doctors, nurses, and other support staff. Moreover, they have functioning medical equipment and labs. However, there is a dearth of such resources in Ethiopia. The second difference is the level of coordination in the healthcare system. In the United States, if a patient goes to a certain facility for treatment and that facility could not handle the case, the patient would be referred to another facility where he/she could get care. The referral system is fluid. On the other hand, there is no fluid referral system in Ethiopia. For instance, if a patient in Jimmais referred to a hospital in Addis Ababa, it doesn't mean he/she will get immediate treatment. Since there is no communication among hospitals, the patient may start the process anew in the destination hospital. In some cases, patients die even before they reach the hospital for lack of transportation. Besides,

there is shortage of manpower in hospitals. Even hospitals in the capital, Addis Ababa, do not have enough doctors or specialized services. (P2)

The other important difference between the two countries in health care provision is that, when a patient comes to a hospital in United States, the priority is to save his/her life, not money. Whether the patient has money or not, he/she will get medical care first and the money issue comes later. Of course, if the patient has insurance, information about the insurance is taken from the outset. On the other hand, if the patient has no money in Ethiopia, he/she could not get medical treatment and there is no insurance system in the country. One other difference is that patients in the United States are more knowledgeable about their health situation. They know about the diseases and to a degree about the treatment they need. On the other hand, most patients in Ethiopia, particularly the rural people are uneducated and uninformed and that has tremendous impact on the health care system. Worse, many patients come very late for treatment because of lack of knowledge. (P2)

P3 compared the healthcare systems of Ethiopia and the United States in the following way.

There is acute shortage of well-trained health professionals and equipment in Ethiopian health facilities, which are not problems in the United States. While the U.S. healthcare system is led by professionals, the Ethiopian healthcare system is highly influenced by politicians. Moreover, doctors earn higher salaries in the United States compared to their counterparts in Ethiopia. I got two post-graduate

> degrees, one on international health and the other on public health. Normally, the more one studies, the better his/her chances are for a better life. However, it doesn't work that way in Ethiopia. The chances are a doctor will not improve his/her life regardless of the number of degrees he/shemight obtain. One can have a much better position and better life by joining the ruling party rather than getting degrees. People who are appointed as directors of various programs in the Ministry of Health are fresh graduates. These are individuals who have no experience or expertise to lead programs. When I was working with some of them, I was dismayed at the level of their inexperience and incompetence. Although they were program directors, I had to teach them first and then try to influence them to do what was right for the public good. For instance, the health administrator in the zone I was working in was my student and also my boss at the same time. He was responsible for a number of health programs, including hospitals, health posts, medical doctors, and nurses. The individual was assigned to that position simply because he was a member of the ruling party. The regime assigns individuals not based on their knowledge or skill sets but on the criterion of party membership. What puzzled me was that political appointees put pressure on the medical staff which made the latter unhappy and frustrated. (P3)

P4 highlighted a variety ofmajor differences between health care systems in the United States and Ethiopia.

> In the United States, basic equipment and supplies are available, whereas in Ethiopia it is difficult to get even gloves, and doctors order patients to bringgloves

andgauze. Secondly, in the United States, doctors get support from well-trained staff. There is responsibility on the part of the doctor and also there is trust in the doctor. More importantly, doctors are legally liable for what they do. On the other hand, doctors in Ethiopia do not have the support of well-trained staff, and there is alsoa problem of accountability. As far as remuneration is concerned, doctors are highly paid in the United States, whereas they are the least paid in Ethiopia. In the United States, doctors have the opportunity to upgrade their knowledge and skills by joining continuing education. In Ethiopia, once doctors graduate from medical schools, there is not much opportunity for training in critical areas. They might have a chance to take part in one or two government-sponsored seminars, but there is no as such training in critical areas and continuity in imparting knowledge. However, if effort is made and necessary resources are allocated, there could be improvements. The point is that the standard of every individual who practices medicine should be improvedand that would lead to overall improvement in the health system. It is possible to effect system-wide change, but it requires a political decision. (P4)

P5 pointed toa bigdifference between the United States and Ethiopia in terms of practice.

There is a big support for physicians in the United States,such as diagnostic laboratory support, administrative support and staff specialty support. Hence, a doctor is not left alone, whereas in Ethiopia a doctor is pretty much on his own. A doctor diagnoses clinically, and sometimes the diagnosis is not specific.

Treatment is mostly empiric, professional regulation is lax, and a doctor is not accountable for his/her action. There is also a big difference from patients' perspective. In the United States, patients are aware of their rights, whereas in Ethiopia they are not aware of their rights. It does not mean everything is perfect in the United States. For instance, there is the problem of over-testing and over-exposure.In the United States, doctors are quite sensitive to the environment in which they operate and their eyes are wide open in order not to expose themselves to litigation, but there is no such an environment in Ethiopia. I often go to Ethiopia, and I have a chance to visit different hospitals and health centers. A couple of years ago, a group of doctors including me went to Ethiopia. We were volunteering. In one hospital, we visited the emergency room and it was nightmarish. The place was stacked with people and a lot of them were on stretchers. There were also many people waiting in the lobby. I thought that was in my dream, not a reality. In fact, private health institutions have helped to some extent, but government hospitals inside and outside Addis Ababa operate at a very low level. If people talk of improvements, it is in the area of roads, buildings, businesses, gross domestic product, but health care service in general lags far behind. In fact, we have seen improvements in preventive medicine, in that more children get immunization and more mothers get healthcare services from outreach workers who go out to villages and do immunization and antenatal care. However, we have to go a long way on the curative side. Everyone's nightmare these days is what will happen to me if I get sick?(P5)

P6 addressed the difference between the United States and Ethiopia with regard tothe insurance system, resources, and technology.

> In the United States, there is health insurance, but in Ethiopia there is no insurance system and the patient pays out of pocket. Moreover, in Ethiopia, labs are not well-equipped and the use of medical technology is at a low level. As a result, diagnosing the causes of sickness is mainly clinical. Doctors rely on the patients' description of their sickness. However, in the United States, physicians could ask a few questions and order tests. The other difference is that, in the United States, medical practice is business-oriented. A doctor has limited time to treat a patient. On the other hand, a doctor in Ethiopia is not under time pressure. There is no rush, especially in the public sector, and what drives physiciansis not money they bring in to the hospital. Moreover, most patients are very poor in Ethiopia and they spend much of their money on the way to a hospital. Transportation cost andthe cost of staying in the hospital as well as other expenses have already consumed them. Since patients get exhausted and broke, doctors who know about their situation sympathize with them. There is this attachment with patientsandthe doctors' preoccupation would be how to save the patient with less expenses.(P6)

P7 cited many of the same themes noted by other respondents in describing the significant difference between the practice of medicine in the United States and Ethiopia.

> As opposed to the United States, there is shortage of equipment, labs, and physiciansin Ethiopia. If a patient suffers from diseases like heart attack and lung

> disease, medical equipment such as MRI and CT scanare not easily accessible. There are MRI and CT scans in private hospitals, but only rich people could access them. Poor people go to government hospitals and the wait time is too long; it may take two to six months to get a hospital bed. An individual was diagnosed with cancer and he should have been immediately admitted to a hospital. However, the admission office scheduled him for six months and that is the story of the Black Lion Hospital. If a patient suffers from a disease, not an infectious one, chances are that he/she will die while waiting for admission. Lab tests are not available for complicated cases. Once, a patient with a stroke came to our hospital for treatment. We had to find out what kind of stroke and where the stroke was located in order to determine the type of treatment he needed. Since we had no CT scan, that medical facilities in the United States use left and right for simple health problems, we had to assume what kind of stroke it was and where it could be. So in terms of evaluation, we did not have tests. There werepatients who needed surgical intervention, like heart surgery and lung surgery, but there was dearth of specialists and there was no equipment. If a patient has renal failure in Ethiopia, the chances are that he/she would die. (P7)

In comparing the United States and Ethiopia,P8 addressed in particular the areas of accountability and standardization.

> In the United States, there is accountability and hence doctors become very cautious in treating patients. In Ethiopia, the level of accountability is very low compared to the United States. As far as standardization is concerned, boththe

United States-born and foreign-born doctors have to take standardized exams, pass those exams and get licensed to practice medicine. Such a system protects patients. A sick person who goes to the hospital for treatment trusts the system because doctors who treat him/her have passed through that system. However, in Ethiopia, there is no such standardization. I was teaching nurses in Ethiopia and I felt very sad. The training was not that great and they did not meet the standard. The government was only interested in numbers, to boast about figures and say 1,000 or 2,000 nurses have graduated. For the government, what mattered was quantity rather than quality. I have family in Ethiopia and when they get sick, I worry because I don't trust the system. I do not know what kind of doctor will see my family and I am not sure whether they will get real or fake medicine. There are no checks and balances in the system in Ethiopia, whereas in the United States the system has checks and balances. If a doctor misses something, nurses could find it. If nurses miss it, pharmacists could identify it or lab technicians could spot it. So in the United States, the system reduces the chances of committing errors. There could still be errors, but it is not comparable to Ethiopia. People in Ethiopia do not trust the medicine they buy and its origin. If it is a shirt or skirt, it is okay whether it is used or new and its origin may not be an issuebecause it is just a cloth. However, one cannot just bet on medicine which could kill people. Unfortunately, the government's control is minimal. The ethical standard that used to guide society has been eroded over the years and now people sell all sorts of medicines and use labels to make them look like original. In the old days,

people were not doing such outrageous things on food and medicine. These days, people lost moral compass and sell whatever they think will get them money. As a society, we have gradually become money worshipers. (P8)

P9 voiced similar concerns.

Physicians in the United States practice in a well-organized setting, whereas in Ethiopia the system is haphazard. Moreover, in the United States, there is no resource limitation, whereas in Ethiopia there is an acute shortage of resources. In the United States, doctors, nurses, lab technicians, clerks focus on their specialty and discharge their specific responsibilities. In Ethiopia, it is more of generalist and paternalistic. A doctor advises patients what to do and what not, whereas in the United States, the physician offers options and the patient makes a decision. The Ethiopian approach is physician-centered whereas in the United States it is patient-centered. The other issue is that, in Ethiopia, a physician is responsible for many things. For example, when I had to perform surgery, I had to coordinate the activities of staff nurses, anesthetists, and others. This means that the whole burden was on me. In the United States, a physician does not carry such a burdenbecause the system is well-organized and coordinated. In Ethiopia, even basic medicine and medical equipment are not available as needed. Since there is acute shortage of hospital beds, sometimes even women in labor do not get beds. (P9)

P10 was among the respondents who raised the issue of patients' responsibilities in comparing the two systems.

> In the United States, people are aware of their health situation. Most people have primary care and they do annual checkups. However, in Ethiopia most people are not aware of their health situation and there is no annual checkup. People go to hospitals when they get sick. A doctor has to ask a patient many questions in order to get some important information because the patient might have never seen a doctor before. Most people in Ethiopia do not have medical history. Although some may have medical history, it is stored in an antiquated system of archives. To avoid searching for the files, patients are often issued new cards rather than finding the patient's record from a stack of files in the archive. On the other hand, each individual in the United States has medical record dating back many years and medical decisions are made based on the patient's medical history. A patient has to just give last name or date of birth and the file could be pulled out instantly. (P10)

The participants indicated that technology plays a crucial role in medical practice, enabling physicians in the United States to diagnose and treat patients better than the case in Ethiopia. The availability of such cutting-edge equipment as MRI, X-ray, and CT scanners and well-equipped labs makes it possible for physicians to order any test. Moreover, doctors with different specialties have access to well-trained support staff and consultancy services in the United States, where they receive high salaries and have opportunities to exercise their professional training through continuing education and to advance their careers. There is also a high level of coordination within the U.S. health care system,as can be seen in the efficient and fluid manner in which referrals are made.

When a patient is admitted to a U.S. hospital, a physician's priority is to save his/her life. Of course, insurance information is taken upon admission, but even uninsured individuals are supposed to receive treatment first and money is supposed to be secondary. Patients in the United States are also more knowledgeable about their health situation than those in Ethiopia. To a degree, they know about diseases and the treatment thatthey need and, moreimportantly, they are aware of their rights. As far as leadership is concerned, health care in the United States is led by professionals in the field. Since doctors are held accountable, i.e., they are legally liable for what they do, they are more cautious in treating patients. Doctorsmustpass standardized exams in order toobtain licenses to practice medicine. Such standardization protects patients and fosters trust in the system. This is one example of the many checks and balances in the United States health care system.

By contrast, the health care situation in Ethiopia is bleak. There is a critical lack of modern medical technology, consultancy services, support staff, well-equipped laboratories, and other services. A doctor delivers clinical diagnoses that may lack specificity, so thatthe treatment is mostly empirical. On top of these issues, low wages, poor working conditions, and lack of career advancement and professional development opportunities contribute to low morale. Doctors in Ethiopia are unable to upgrade their skills and develop their knowledge through continuing education or training programs. The shortage of doctors, especially in a number ofspecialty areas,compounds the problem.

Moreover, there is lack of coordination at every level of the Ethiopian health care administration. Patients referred to hospitals from other health facilities do not receive immediate services, so thatacutely sick patients in need of immediate treatment may be forced to wait for months before being admitted to a hospital. A patient who has no money cannot get treatment. Most patients in Ethiopia, particularly those from rural areas, are uneducated and uninformed about diseases and their treatment and are not aware of their rights. Owing to the lack of knowledge, many patients come for treatment after a disease has reached an advanced stage that makes life-saving efforts immensely difficult or impossible. The absence of insurancemakes it difficult for poor people to afford out-of-pocket medical expenses.

Other major problems include the fact that the Ethiopian healthcare system is highly susceptible to political influence. Professional regulation is lax, and doctors are not accountable, or legally liable, for their actions.There is moreover a lack of standardization, so thatpeople have less trust on doctors. Because the system lackschecks and balances,mistakes can easily go unidentified. What is also daunting is that people do not havemedical histories because they come to hospitals only when they get sick.

Moving on, the sixth interview questionasked, “Why did you come to the United States? Why not to Europe or other regions?” In response to this question, P1 stated that there is a path for entry into the health care system in the United States. It is clearly defined and that no other country gives equal opportunity to Americans and immigrants alike to practice medicine as long as they meet the requirements.

> There is a clear way to get into theUnited Statesmedical system. Besides, there is no limit to reach the goals medical professionals aspire as long as they work hard. Compared to other countries, the United States is more receptive to immigrants and there is not much discrimination. If we consider wages for medical professionals, the United States is way better than any other country, and that partly explains why medical doctors from even developed countries migrate to the United States.Thus the information I had about the United States coupled with the push factors at home made me decide to migrate to the United States. (P1)
>
> P2 stated that there are many opportunities in the United States.
>
> I was in the United States before and I realized it is an amazing country. My friends who practice medicine told me there is an environment where quality care could be provided to patients, that I could join specialty program of my choice. The United States is a nation of immigrants, a very diverse, financially rewarding and foreigner-accepting society. On the other hand, European countries have fewer resources, limited opportunities for foreigners, and give priority to their citizens. (P2)

P3 distinguished theUnited Statesfrom Europe while noting that the two regions are at roughly the same level in terms of medical advances:theUnited Stateshas a place for immigrants and a clear path fordoctors to follow in order to integrate into the health care system, and it absorbs more foreign doctors than Europe. “I was working for an NGO with United States nationals and they told me about the system and the great opportunities available in the country. Hence, I decided to migrate to the United States”

P4 noted that the opportunities formedical doctors in the United Statesare not available anywhere else in the world.

> In addition to high income and opportunities for professional development, there is respect for individual rights. Discrimination based on skin color is far less than what one experiences in Europe. The fact that English is the primary language attracts those of us who studied in English from high school to university. (P4)

P5 viewed the American system as being clear, defined, and accepting.

> I got information about medical practice in the United States from American colleagues who were working with me at a mission hospital. They would say, "See you in Boston,""See you in Chicago," and that has captivated me to a great degree. Moreover, friends who were in the United States gave me some ideas about medical practice in the country. Before I came to the United States, I was in Europe but I didn't want to stay there because the system is not well defined like the one in the United States. For instance, a doctor comes here, takes exams, joins residency for some years and that is it. If the doctor continues fellowship, it would take some years and after that he/she could start medical practice. It is very clear and well-defined. In Europe, it is open-ended. Europeans take a physician to the next step if they feel he/she is ready. They do not have open and accepting system like the United States.(P5)

P6 also spoke of the great opportunities for medical doctors in the United States, such as professional advancement, higher salaries, access to advanced technology, and a

better standard of living. He said that he receivedinformation about medical practice in the United States from friends and family members living there.

For P7, theUnited States represented conducive environment in which medical doctors could join the health care system once they meet the standards.

> I was in Europe but I did not want to stay there because it is not inviting. The good thing about the United States is that Americans accept our medical degrees. A medical doctor who wants to practice medicine in the United States has to pass medical licensing examination and do residency. Unlike Europe, the system is straightforward. What is also interesting is that people in the United States are sociable. In Europe, many people do not even say hello. If they do, they ask what you study and when you will return home. (P7)

P8 said that he had come to the United States for high wages, a conducive work environment, advanced technology, and opportunities for professional development.

P9 echoed other respondents in claiming that the United States offers better opportunities than any other place on earth.

> I have friends who practice in the United States and I got information from them. They told me about the work environment, the payment, technology in use in medical practice, and opportunities for professional advancement, and hence I decided to come to the United States. (P9)

P10 found the American system is attractive in many respects.

> Friends told me that the United States has an excellent health care system and is welcoming to medical doctorsas long asthey meet the standards. Moreover, higher

> salaries, opportunity for professional development, use of advanced technology, absence of government interference in medical practice are all attractive to me and that is why I decided to come to the United States. (P10)

The participants thus described the United States as being unique in terms of the opportunitiesitoffers to native and migrant doctors alike to practice medicine as long as they meet the requirements. The United States, as a nation of immigrants,they found to be more receptive to foreigners, less discriminatory, and more committed to individual rights than European countries and, more importantly, to offer a clear path into itsmedical system. Compared with other countries, wages are high in the United States,and this partially explains why even doctors from developed countries move there. There are also additional attractions such as opportunities for professional advancement, access to advanced technology, anda better standard of living.

The seventh interview questionasked, “On a scale of 1-10, with 10 being the highest, how important were the following push factors in your decision to migrate?”

- Low wages/salary
- Lack of professional development
- Poor working conditions and unavailability of medicine, equipment, and supplies

- Fear of contracting HIV
- Heavy workloads
- Low job satisfaction
- Threat of political persecution
- Lack of political stability in the country

Table 3

Factors Influencing the Migration of Medical Doctors

VARIABLES	SCALES									
	1	2	3	4	5	6	7	8	9	10
Low wages/Salary						●	●	●●●	●●	●●●
Lack of Professional Development				●		●	●●	●●●●		●●
Poor working conditions						●	●	●	●●	●●●●●
Fear of contracting HIV	●●●●●●	●	●		●	●				
Heavy workloads		●●	●●		●	●●●	●	●		
Low job satisfaction					●		●●	●●	●●	●●●
The threat of political persecution				●●		●●	●●	●	●	●●
Lack of political stability in the country					●●		●●●	●●●	●	●

Note: Each dot represents a doctor that chose that numeric value.

Table 3 summarizes the degree to which each of the factors influenced the migration of medical doctors from Ethiopia to the United States.

The eighth interview questionasked, “Under what circumstances would you return to Ethiopia to practice medicine?” P1 found such a move to be unthinkable, at least on apermanent basis, because decent living conditions, health infrastructure, appropriate compensation, political non-interferenceand other conditions that would be attractivewere unachievable in the foreseeable future. This respondent had, however, visited Ethiopia to providemedical services without permanently relocating to Ethiopia.

> Trying to persuade doctors to return to Ethiopia, from my point of view, will not work, at least in the short term, because the country does not have resources to satisfy financial and professional needs of doctors. However, the government as well as institutions like universities, hospitals, and other stakeholders, can create an enabling environment for doctors to use their vacation time to provide medical services. I went to Ethiopia twice for short periods of time and visited some medical facilities. The expectation of officials in those facilities was that we should have brought money and helped them. It seemed to me that they were not interested in our professional input. We may not have money, but we have knowledge and experience that we could share. I am sure there are many doctors who would like to serve freely if the government and institutions create conducive environment. (P1)

P2 cited a number of reasons why it would be extremely difficult to return to Ethiopia after years of medical practice in the United States.

> Medical doctors who are in the United States are accustomed to ways of life that are different from their country of origin. Among others, there are differences in

> lifestyle, working conditions, remuneration, schools for children, and the like. Even if Ethiopia has excellent medical facilities, like well-equipped hospitals, medical laboratories, well trained support staff, life is not all about health infrastructure for doctors. They need decent housing, roads, electric power, good schools for their children, and conditions for professional advancement. In a country where there is shortage of clean drinking water and power outage two to three times a day, it is very difficult for doctors who lived in the United States to adapt to such difficult conditions. However, it would make me happy to go once a year and provide services. I went to Ethiopia at the beginning of 2016 and I got a chance to participate in a workshop organized by a Norwegian group on infectious diseases. Since it is my specialty, I gave lecture on the topic. Whenever opportunities arise, I will go and give services and lectures.(P2)

P3 said that it would be gratifying to return to Ethiopia and serve the people if working conditions improved and political pressure could be avoided. This respondent expressed the opinion that the government should grant incentives and encourage, reward, and appreciate doctors' contributions to society.

> However, the government will not satisfy these demands and hence I will not return to Ethiopia.There must be a system where you could serve society based on your knowledge and skills and you are free to express your views, but there is no freedom in Ethiopia. You worry about what you say and how it will be interpreted by government people. Even if you know the facts and comment on them, you could be labeled anti-government and go to jail. There is too much political

> pressure and government cadres abuse the system in a lot of ways. There is corruption on a grand scale in the health care system. Even ambulances that are supposed to transport patients are used for private use, and it is very hard to work in that kind of environment. (P3)

P4 was very critical of the current system in Ethiopia and its impact on medical doctors.

> The regime has brought its battlefield experience and applied it in hospital and university settings. Medical doctors were detained as a result of "Gimgema," meaningperformance evaluation. They were least affected even under the Socialist system of the former military junta led by Colonel Mengistu Hailemariam compared to the seemingly liberal political philosophy of the current EPRDF regime. Under the EPRDF regime, there is too much pressure and undue influence than ever before and that hurts medical doctors. It is difficult to return to a country where individual rights are trampled and doctors have no role whatsoever in the management of the health system. It is particularly difficult for those of us who are accustomed to the United States environment to go to Ethiopia and practice medicine.(P4)

P5 described a number of conditions needed to be met in order for a doctor to return to Ethiopia to provide medical services.

> If a doctor has children, they have to go to college because it is very difficult to leave children behind and go while they are in high school. Secondly, one needs to have financial security because doctors will not make that much money in

> Ethiopia. Moreover, doctors should have more control over their professional life. To work in government hospitals like Black Lion is difficult because doctors have no say in the system. (P5)

P6 stated that the political situation would have to be conducive in order for him to return to Ethiopia. “There is no freedom of expression in the country. As a result, self-censorship is highly prevalent.” This respondent described the situation as frightening and stated that, unless there isdramatic improvement in the political landscape, it would be difficult for doctors to return to Ethiopia and work in such a stifling political environment.

P7 considered a return to Ethiopia after living in the United States as unthinkable in light ofthe differences between the two countries. This respondent identified some of the inconveniences encountered in Ethiopia.

> The environment in Ethiopia is not convenient to live and work because there are so many things one encounters in day-to-day life. People who work in NGOs and who are paid over 50,000 Birr per month, which is a lot of money,resign from their jobs because of inconveniences they face. You may have money, but there are no goods you would like to buy or you are not sure whether the items you buy are genuine or counterfeit. If you observe, there is a pile of waste in the city center because there is no proper waste disposal system. The city is overcrowded. To reach a point of destination, which normally would take five minutes, takes an hour. Even you cannot find gas to fill up your car in every gas station. It is true these problems discourage many doctors from returning to Ethiopia, but I am not

> saying I will not return at all. I would like to go there during my vacation and dedicate one month each year to serve the people. (P7)

For P8,return to Ethiopia would be conceivableif there were health facilities somewhat similar to those in the United States standard, including the availability of such equipment such as MRI, CT-scan, and dialysis machines.

> Someone approached me about two years ago on my way to the United States and told me he and his friends would like to establish a big hospital in Addis Ababa that meets American standard. I asked him, why build such a hospital in Ethiopia? The individual said there are many NGO employees and diplomats in the country who complain about lack of reliable medical services and hence he and his friends decided to cater for this group of people. I told him I would be comfortable to work in a hospital of that nature if it is ever built. It is because the pay would be at American standard and the hospital would be equipped with modern technology. Of course, many poor Ethiopians cannot afford such high tech hospital. Recently, the father of my friend had heart attack. There is what is called cardiac cath, a procedure where a narrow artery is widened. In the United States, many hospitals can perform the procedure, but not in Ethiopia. Had my friend's father stayed in Ethiopia for a few weeks, he would have died. So he came to the United States to get treatment because he has a son who could pay his medical bill. Nonetheless, the availability of such a high tech hospital is good for the country because those who go to South Africa, Thailand, and India seeking quality care could be treated in Ethiopia. Currently, the medical system is in shambles. My pharmacist friend

told me even basic drugs such as insulin are not available. One can survive without salt or sugar, but unavailability of insulin for a diabetic patient is like denying him/her oxygen or water. It is so worrisome to return to Ethiopia under such a situation because you ask, what if something happens to me? Lack of basic medication persists not because there is no money. The government gets money from donors, and some of it is returned to the donors at the end of the budget year because of failure to utilize it. While I was working in a hospital in southern Ethiopia, there was a program called "Make Pregnancy Safe." It was a pilot project and it had a lot of money. The goal of the program was to select a zone in each region of the country and train midwives in rural areas to use gloves, make the environment clean and help pregnant women during labor. If midwifes are not sure they could help, immediately take the pregnant woman to a health center. If the health center identifies problems, immediately take the woman by ambulance to zonal hospital. (P8)

The zonal hospital was supposed to have a doctor who could do C-section. I had training on how to do C-section, and some nurses were also trained. Since the budget came to the zone, the zonal health officer was responsible to effectively utilize it for the intended purpose and the budget was released phase by phase. Donors needed to see the successful completion of the tasks in the first phase before they release the budget for subsequent phases. However, the zonal health officer was such a lazy person he did not report what was done in the first phase and the cost of operation. Hence, donors were not willing to release the

> remaining funds. Apart from inefficiency in managing the funds, political interference in the zone hampered the delivery of medical services. Even the hospital ambulance was used for political campaign. Since the zonal administrator was a political appointee, he gave priority to politics rather than healthcare and there was no accountability whatsoever. If there was someone who felt responsible, possibly a health professional, the funds could have been used effectively. The next zonal administrator was actually a student. Ironically, he was my student and my boss at the same time. It was a very tough situation. (P8)

P9 stated that, under the current situation, it would be impossible to return to Ethiopia. This respondent mentioned government intervention, lack of personal freedom because of such intervention, low pay, poor working conditions, and lack of professional development as major reasons for not returning to Ethiopia.

P10 was another respondent who spoke of the difficulty of living in Ethiopia after many years of medical practice in the United States.

> Once you get accustomed to the American work environment, it is very difficult to go back to Ethiopia. In the United States, you can conduct investigation of the patient to the molecular level, which you cannot do in Ethiopia. I was treating people with typhoid, typhus, malaria in Ethiopia, but I have never treated people with such infectious diseases in the United States because there are none. If I go to Ethiopia, I will not be able to deal with such diseases because I forgot them. I am detached from infectious diseases which are prevalent in Ethiopia whereas diseases such as diabetes, hypertension, heart disease, kidney disease are common

> in the United States. Actually, diseases and their distribution vary from country to country, and they are largely dependent on the level of the development of a given country. I cannot say I will never return to Ethiopia,but I have torefresh my knowledge on infectious diseases if I want to return to Ethiopia, but it is unthinkable to return under the current government. (P10)

The participants indicated that it would impossible to return to Ethiopia under the current conditions because the country lacked the resources to satisfy the financial and professional needs of doctors. Those who had lived and worked in the United States for years had adapted to a certain lifestyle and working conditions. Many of the respondents mentioned the strikingdifference in remuneration between the two countries. Also frequently mentioned were problems in such areas as school for children, power, housing, roads, water, and other needed services. Moreover, the participants felt that the government did not recognize, reward, or appreciate doctors' contributions to society and that there wereexcessive political interference,rampant corruption, and human rights violations. In an atmosphere of undemocratic governance, self-censorship is highly prevalent, and it is difficult to imagine a doctor wishing to return to Ethiopia to work in such a suffocating political environment.

Interview question 9asked, "The Ethiopian Government has introduced a 'flooding strategy', the goal of which is to train more doctors to replace those who depart. Do you think the strategy will work? If not, why not?" P1 stated that training a large number of students was important but that this goal should not be realized at the expense of quality and pointed out the consequences of such a strategy.

Medical doctors deal with human beings, and human life is not a joke. When a would-be doctor is trained, he/she should see many patients. At present, many students are admitted to medical schools, which is way beyond the capacity of the schools, and that would definitely compromise quality. I believe in training as many doctors as possible, but only when the health infrastructure is expanded and the emphasis is on quality. At the same time, a strategy has to be designed to retain those who currently work in the country. The students who are trained under flooding strategy could leave the country if they do not see opportunities for professional advancement. Hence, flooding alone cannot solve the problem. What is needed is concomitant improvement in addressing the push factors. As we flood and maintain quality, we should also focus on retention by addressing push factors so that we could keep at home as many doctors as possible. (P1)

Moreover, government officials should show supportive attitude to medical doctors. To the contrary, the officials from the prime minister down to the lower level administrator have negative attitude toward medical doctors. Every year, government officials used to come to Jimma University to officiate at the graduation ceremony. After one of her commencement addresses, the former Minister of Education was told that a lot of medical doctors leave the country. Her reaction was blunt and unyielding. She said “those who want to serve could serve and those who want to leave, good luck.” Many doctors were offended by her remarks, and those of us who just graduated felt the government does not need us. Government officials should have encouraged us and say“let us work together and

confront the health problem through coordinated effort." One of the factors that could keep physicians in their country is a feeling of belongingness, making them feel they are wanted and the challenge in the health sector is their challenge. If government officials say physicians can leave if they want to, it is a kind of attitude that alienates doctors and pushes them away from the society they serve. (P1)

P2 also stated that, whilea flooding strategy might alleviate the shortage,it should not be carried out at the expense of quality.

The government is working on one aspect of the problem, i.e., increasing the number of doctors. The question is, how about the capacity of hospitals and other health infrastructures? When we were students in Jimma University, the class size was only 50-60 and each student had the chance to examinefive or six patients. In the current situation, six students may be able to examineone patient. How can students learn by interviewing just one patient for six? A medical student canlearn by examining many cases, and much of it is through practice. Without increasing the capacity of hospitals and health infrastructure, increasing the number of trainees could have serious consequences for public health. The students may graduate, but they may not have the desired impact on the health care system. My fear is that we may produce doctors who do not know what they are doing and they could do more harm than good.(P2)

P3 described the flooding strategy as a disaster.

I wonder why government officials use the word flooding when they are talking about training doctors who will deal with life and death situation. It is not a joke. Flooding is a wrong strategy because it compromises the quality of education. I am not saying trainee numbers should not increase. However, there should be a balance. When the government increases the number of trainees, it should simultaneously work to enhance the quality of education so that medical schools will not produce mediocre doctors. (P3)

P4 in a similar vein described the flooding strategy as a waste of resources. Training 3,000 students per annum is quite a stretch. If the training is for export purpose, it is okay because it will generate remittance. Training has to be based on strategic needs, and as a society we have to identify our priorities and invest scarce resources judiciously. Each region, taking into consideration its own unique circumstances, should plan its needs, and that should be used as an input for planning at a national level. If the country produces dysfunctional doctors who count chloroquine,then it is a total waste of resources. Even if we train 3,000 students and half of them stay in the country, we create a demand that we cannot absorb. What is also important to note is that, when we train 3,000 per year, we should also build hospitals and other health facilities that could absorb the graduates, but there is no capacity to build health facilities at that rate. It is evident that we have a gap in doctor-to-population ratio, but we cannot fill it by flooding because it is a spontaneous and wrong approach. (P4)

P5 likewise considered the flooding policy to be a source of considerable contention and concern.

> I talked to the Minister of Health on flooding strategy, and his argument is that there is a mismatch between the speed at which the population grows and the number of doctors medical schools produce. He said, “Letus now focus on quantity and we will move on to quality later on.” The Minister’s focus was on the preventive, fundamental health care, and there is some merit in his argument. In Ethiopia, for a long time, about 50 students were graduating each year, first from Black Lion Hospital. Later Gondar and Jimma Medical Schools each began to graduate 50 students. For quite some time, we were able to graduate 150-200 students from the three universities. It is true we cannot continue to graduate just 150-200 per year. However, why not adopt a happy medium?Why should we have to suddenly jump to thousands? My fear is that a sudden jump will compromise quality. The problem is that, if people lose confidence in the health system, it is very difficult to regain it. Training in thousands also shows some disregard for intellectual capacity. It sends a signal that you can make anyone a doctor. The other rationale given by the Ministry officials is that, if they train 100 doctors and 50 of them leave the country, it will hurt, but if they train 4,000 and about 2,000 leave the country, it is okay. This is similar to traditional mothers who say, “let us have seven or eight children and, if two or three of them die, we will still have children,”and that is a fatalistic approach. (P5)

P6 discussed the ramifications of the flooding strategy for health care in Ethiopia.

Government officials have indicated that the departure of medical doctors will not hurt the population because they can train more doctors and flood the system. To that effect, they have opened several new universities. The problem is that there are many students in one batch, as many as 300, but when I was a student, there were only 40 students in my batch. Training many students in the absence of the required infrastructure is quite problematic. I was teaching at a reputable medical school, yet it was very difficult for me to teach in overcrowded classrooms. When it is theoretical, it is okay to teach many students, but ours is not theoretical like other disciplines. Students need to examine patients, but the problem is that there are no enough patients for a large number of students. I offered courses, not at a preclinical level, but when students reached the third, fourth, fifthyear as well as graduating students and all these students needed to examine patients. There were other students also from private medical colleges, and all of them needed patients. Even if there were patients, it was exhausting to be examined by so many students. As a patient, how could one allow to be examined by students the entire day? When students practice on patients, it should not be in a way that affects their dignity or privacy. In the United States, students have labs, and they could practice on synthetic human bodies. If the class size is small, students could get enough patients for practice, but when it is large class size, it is very difficult. This means that, the more the number of trainees, the lower the quality of training. (P6)

P7 was another respondent who described flooding as a disastrous strategy that focused on quantity rather than quality.

> When we were students, there were about 65 students in one batch and the quality of training was great. Moreover, we had exposure to patients. Each student had the chance to examine about 10 patients. The more patients a trainee has, the more exposed he/she will be and as a trainee; it is necessary to have a lot of exposure. However, the government has opened several medical schools, and the number of trainees under the flooding strategy could reach about 400 in a batch. Those who are being trained under this strategy may see one patient for six [students] in a day. In such a situation, students will not have the required number of patients as well as a variety of patients. I have no idea how a medical school could handle 400 students in just one batch. My fear is that, with such a sloppy program without much exposure, there could be a lot of medical malpractice. Medical malpractice exists everywhere, including the United States. However, in the United States, there is an attempt to minimize the problem by reviewing the system. I believe the Ministry of Health officials will stick to the flooding strategy because they believe in numbers, just to say they have a large number of doctors. It will take several years to see the full effect of the flooding strategy. When people start to die and many feel it is scary to be treated in Ethiopian hospitals, then the Ministry will consider a change in strategy. (P7)

P8 also considered the flooding strategy to be an ill-conceived approach to training medical doctors.

> When I was a student, there were 60 students in our batch, and each of us could see 6 or 7 patents a day. However, under flooding strategy, there could be over 400 students in a batch, and they may not be able to get even one patient or they might get one patient for six. Students graduate without understanding many basics, and the care they would give will be substandard because they are not being trained adequately. It is good that the government is training more students because the population is growing. However, students who graduate should be tested for competence. If they pass competence tests, they should be awarded certificates of competence that could enable them to practice medicine. However, there is no such system in Ethiopia. Students who are trained in a resource-scarce environment will not be well equipped with knowledge and skills, and that compromises quality. Health care quality should not be compromised at all because doctors deal with human beings and to allow them to practice medicine without adequate training is dangerous.(P8)

For P9,the flooding strategy simply did not represent a long-term solution to the problem at hand.

> Even if thousands of doctors are trained, those who get the opportunity will migrate. Doctors leave not only for United States and Europe but also go to Southern Africa and the Middle East. In the long term, flooding strategy will negatively affect the country's health care system. When I compare the time I was trained and those who are being trained now, there is much difference in terms of quality. When we were trained, we had small class size, good professors, and

> adequate exposure to patients, which in fact impact quality. Those who are not adequately trained will have problems in practicing medicine; they could hurt their patients, and it is a wrong investment. In the short term, the government will benefit politically. Government officials will boast that they have made huge progress in health care. They would point to the number of hospitals and health care facilities built and the number of doctors trained. I graduated four years ago, and out of my batch consisting of 60 students, 10 are in the United States, 10 of them migrated to Europe and the Middle East, and about 20 of them are in the process of leaving the country. Unless the government addresses the root causes of migration, it is impossible to stop doctors from leaving the country regardless of the number of doctors trained.(P9)
>
> P10 stated that the government isnot interested in quality.
>
> If resources for 60 students are made available to 400 students, how could they get quality training?When we studied anatomy, we used cadavers and a group of 8 to10 students used to have at least one cadaver. Since the number of trainees has increased by many folds, a group of 40 or 50 students may be forced to use one cadaver. Also, the number of patients that students will examine will be minimal because there will not be enough patients for 400 students in a batch.(P10)

The participants thus expressed concern that the flooding strategy would compromise the quality of training in medical schools. P5 questioned the wisdom of increasing the number of students from a fewhundred to four thousand rather than moving at a slower pace. P2 warned that training thousands of doctors every year without

concomitantly increasing the capacity of hospitals and other health infrastructure would have serious consequences for public health. P4 questioned why the country should produce doctors whom it cannot absorb and further criticized flooding as a short-sighted strategy. P3, P6, P7, and P11 indicated that training thousands of students in conditions of resource scarcity would produce mediocre medical doctors. P8 stated that students would not receive quality training under a flooding strategyand could thus pose a serious risk to public health. P1 and P9 emphasized the need to tackle the causes of medical migration rather than training more doctors to replace those who had migrated or could do so. From the participants' perspective, evenif the government trains thousands of doctors each year, the medical brain drain will continue as long as the root causes of migration are not addressed.

Interview question 10asked, "Suppose you were in charge of the Ethiopian Ministry of Health; what would you do to reduce the outflow of medical doctors?" P1 identified a number ofbasicsto be addressed in dealing with medical migration.

> The first thing would be to gather doctors and ask them what they want and what frustrates them. After talking to them, I would prioritize their needs and act accordingly. From my perspective, the first thing I would address would be pay raise. Doctors work long hours, and they do not spend enough time with their families. They work during the day and also at night, and it is too much of a burden on them. With the current level of salary, doctors find it difficult to cover their expenses and at times even their rent. Hence, in order to improve their living condition, I would grant pay raise and extend long-term loans to enable them to

> build houses and buy automobiles for personal use. Secondly, I would provide training opportunities and specialty training so that doctors would have the chance for professional advancement. Medical doctors could stay professionally stuck unless there are training opportunities. Doctors graduate at the age of 23 or 24, which is the right age to learn more and prepare for professional advancement. Hence, training opportunities should be made available from time to time. If these conditions are met, I believe migration of medical doctors would decline significantly. From my own experience, if these issues were addressed, I wouldn't be frustrated and leave my country. I would rather stay near my family, raise my children in the culture I was raised in, and more importantly serve the poor people of my country who paid for my education. (P1)

P2 called for open discussions with medical doctors in order to identify their most pressing needs.

> I believe it is necessary to build health infrastructure. In Ethiopia, 70-80% of diseases are preventable and, if we have good health infrastructure, we could reduce many diseases, which in turn will reduce burden on the health care system. If there arefewer burdens on the health care system, then we could prioritize problems and start giving specialized care. At the policy level, we should provide incentives to doctors, like land for house construction, low interest loan for automobile purchase and house construction, change the work environment by reducing bureaucracy, insulate health care from political influence, and create opportunities for professional advancement. What is also important is job

satisfaction, and this could be achieved by involving doctors in thedecision-making process so that they could feel they are part and parcel of the system. One of the reasons I left Ethiopia was because I did not have any say in the system and I felt I was not needed. The government does not care for doctors, as officials have repeatedly expressed their indifference in many occasions. The other problem is the resource issue. Resources that come from the government or from aid agencies should be made available to doctors. Much of the budget of the Ministry of Health comes from aid, and there is no shortage of money. Actually, there are times that aid money is returned to the donors from hospitals and universities as unused budget. There is much mismanagement, inefficiency, and a lot of corruption in the health care system. In sum, if doctors are paid well, opportunities are created for them for professional advancement, the work environment is good, and they have a say in the health care system, I am sure many of them would prefer to stay rather than leave their country. (P2)

P3 criticized the power of politicians within the health care system and the extent to which politics overshadowed the day-to-day operation.

If I were in charge of the Ethiopian health care system, eliminating political influence in health care would be one of my priorities. Of course, at a policy level, there is always political decision, but politics should not interfere in day-to-day operations. Secondly, medical professionals should be allowed to work in their field of study, and their assignments should be based on their expertise and competence. Politicians should not be allowed to meddle in areas which require

> expertise and technical skills. Some programs could not be implemented despite their usefulness because prominent political figures did not back them. Thirdly,we have to devise retention mechanisms. The salary of doctors does not even cover rent. Medical doctors are serving the people, and they should be compensated well and it should include benefit packages. They should be given long-term loans for house construction and allowed to import an automobile tax-free for personal use. Such incentives will motivate doctors to serve their people rather than think of leaving the country. In the current state of affairs, doctors get low salary, not commensurate with the work they do, whereas members of the diaspora who make no significant contribution to the country get land and many other benefits from the government. Moreover, health professionals should have a say in the health care system. (P3)

P4 indicated that salaries should be increased, savings and credit facilities created, training opportunities made available, and working conditions improved in order to reduce the migration of medical doctors.

P5 stated that the government should recognize the important role that physicians play in maintaining the health of society and genuinely address their concerns.

> The government should raise the salaries of physicians and provide them with incentives, such as interest-free loans for building houses and purchasing automobiles. Doctors either individually or in groups who attempt to build hospitals and other health institutions should be encouraged rather than encumbered with taxes and various bureaucratic hurdles. The experience is that

> some medical doctors who tried to open private hospital were heavily taxed to install telephone lines in hospital rooms, whereas there is no tax for hotel builders. The rationale tax administrators gave was that there is no tax in the tax code for hotels, which means hotels can install phone lines in each room tax-free. Such bureaucratic obstacles frustrate medical doctors. As government officials attempt to attract foreign direct investment, they should also see the value of skilled manpower, appreciate it and support it. However, the officials are political appointees, not meritocrats, and they do not respect doctors. They are so defensive, and one cannot have meaningful conversations with them. I met some of them who are actually my juniors. They are not interested in serious, substantive issues, and they give priority to politics than to the profession. (P5)

P6 suggested that the Ministry of Health should, as part of its retention policy,increase doctors' pay, provide such incentives as interest-free loans for buying housing or purchasing automobiles, give doctors a greater say in the health care system, eliminate political influence in doctors' day-to-day practices, and create professional development opportunities.

P7 indicated that, if doctors were provided with a pay raise, incentives, subsidized loans for purchasing automobiles and building houses, and a better work environment, they would be motivated to serve their people rather than think of leaving the country.

P8 identified low pay as an issue that should be given attention by theEthiopian government.

> I think payment has to be improved. When I graduated, I was given a letter showing my monthly salary to be 1,250 Birr [$52.08 at the present exchange rate]. My friend who was working for Ethiopian Airlines saw the letter and got surprised. My friend does not even have diploma. He just graduated from a two-year program run by Ethiopian Airlines Technician Training Institute. He was paid 5,000 Birr per month, which was way higher than what I used to earn despite having a medical degree. With that payment, a physician could not survive in Addis Ababa, especially if he/she paid rent. I had a physician friend who was working in Addis Ababa. He used to live with his mother because his salary was not enough to cover his rent and daily expenses. This was about 10 years ago, and that time was much better than today because things were cheaper then. Finally he requested a transfer to a rural town where he could get things cheaper. In addition to appropriate compensation for their work, doctors should have the opportunity for professional advancement. Moreover, they should get subsidized loans for building houses and purchasing automobiles. If the government could address these issues, doctors will be happy and may prefer to stay in their country. (P8)

P9 suggested that the government could help to reduce the outflow of medical doctors by offering better pay, such incentives as long-term home and car loans, opportunities for professional advancement, better working conditions, and de-creased political influence in health care. This respondent also indicated that lower-level officials in the Ministry of Health falsify data, reportinginflated figures in order to impress superiors and obtain favors in the form of promotions and other incentives. “The

system rewards liars, and I think to address such a problem is critical for the health of the Ministry of Health."

P10 also stressed the need for freedom from political interference in the medical practice.

> The nature of medical practice is that politicians should not prescribe what we physicians do. The government has introduced a management concept called Business Process Reengineering (BPR), and assigned politicians as hospital administrators to oversee its implementation. These people have no medical knowledge, and it was a disaster. Hospital administrators should be physicians, because they understand the nature of the job and can easily communicate with physicians. Of course things like finance are separate and professionals trained in finance handle them. However, medical issues have to be handled by physicians, not politicians, because professional issues should not be mixed up with politics. In the United States, there is what is called Chief Executive Officer (CEO) who is the head of a hospital who may not necessarily be a physician. I have a CEO in my hospital, but she never told me anything about my work. It is my boss who is a physician who interacts with me. What the CEO does is develop the overall structure and, if it is not suitable, my physician boss would deal with her. To the contrary, the Ethiopian government assigns politicians who order doctors what to do and what not. There is a need for functional differentiation, i.e., doctors should be allowed to do what they are trained to do. There is also the need for salary increment. We know how much the government pays for its cadres. Physicians

> whose job is quite demanding are paid much less than political cadres, and it is totally unfair. (P10)

The participants indicated that,were they in charge of the Ministry of Health, they would raise the salaries of doctors as a retention mechanism because one of the factors pushing doctors out of the country was a level of pay insufficient to maintain even a modest standard of living. The participants also indicated a need to provide long-term loans for doctors to facilitate theirbuilding houses and purchasing automobiles, to create good work environment, and to offer training opportunities for professional advancement. P2, P3, P5, P6, P9, and P10 stated that there was excessive political influence in the health care system, suggesting that, if the Ministry is to be effective and efficient in health care service delivery, it needs to be insulated from political influence. P2, P3, and P6 urged that doctors be given a say in the health care system so that they will be motivated to implement their own decisions and thereby enjoy greater job satisfaction.

Interview question 11asked, “What recommendations do you have for the Ethiopian government for tackling medical migration?” P1 stated that economic and professional frustration should be addressed by raising salaries of medical doctors and creating opportunities for professional development.

> An equally important issue is the attitude of government officials toward medical professionals. Government officials should encourage us and work with us to solve health challenges. You can retain doctors if you make them feel that the health problem in Ethiopia is a common challenge that could be solved by collective effort, not just by the government. This kind of approach will make

> doctors feel they are part of the solution. What is needed is not alienating doctors but fostering a feeling of belongingness. If government officials continue to show disdain and tell us to leave if we want to, that would make us feel unwanted. If doctors are alienated, there is no reason why they cannot leave the country. (P1)

P2 suggested that the Ethiopian government should focus on a few specific areasin order to improve the country's overall health care system.

> The government should focus on retaining medical doctors by raising their salaries, offering benefit packages, and enabling them to advance professionally. Moreover, the government should build health infrastructure and invest in training low-level health workers in mass. Many of the diseases in Ethiopia are preventable, and they could be handled by health extension workers. There is a need to train midwives in local communities so that mothers will not come to hospitals when they are in labor.(P2)

P3 described medical migration is an inescapable and multi-faceted problem that occurs to some extent even in developed countries.

> However, to reduce the outflow of medical doctors, the government should provide financial incentives, improve working conditions, and create opportunities for professional advancement. The government should also tap diaspora resources. Enticing doctors who practice in advanced industrial countries to return to their country of origin on short- or long-term basis to transfer knowledge and skills they have acquired abroad is very important. The government, hospitals, and universities should develop a database of doctors in

> the United States, Europe, the Middle East, and Africa so that they could summon them whenever they need them. By summoning the untapped talent abroad, government and institutions fill existing gaps in health service delivery,and also it is recognition to the doctors who are asked to serve their country of origin. Tapping skilled professionals for institutional/national development is imperative, but in Ethiopia it is quite difficult to develop such attitude because there is no political will on the part of government officials or institutional leaders. Government officials do not want to see someone who excels and who might dwarf them. (P3)

P4 indicated that there are a series of measures to be taken by the government and medical professionals.

> One of the causes for the exodus of physicians is low salary, and, unless there is substantial improvement in this regard, doctors will leave the country in search of better pay. Doctors are paid very low, and they could not afford to rent an apartment with the salary they are paid. Medical profession is one of the most prestigious professions, but doctors are paid so little, and it is frustrating to most of them. The government should raise their salaries to the point that it is good enough to maintain a normal standard of living and alsocreate non-financial incentives to motivate them and keep them at home. There is shortage of drugs, medical equipment, and labs, which cause professional frustration and the government should address these problems as well. The other issue that should be emphasized is that doctors should be free from undue administrative/political

> pressure that is stalking them in their professional life. To solve serious problems plaguing the health system in Ethiopia, there is a need to involve professional associations in the study of the problems and finding solutions. The professional bodies based on research findings should be able to convince policy-makers to take prudent measures to come up with solutions to health care challenges. However, in a country like Ethiopia, it is very difficult to have strong professional organizations because the government does not want them to play a role in health care policy formulation and implementation. If doctors do not have a sense of belongingness in their profession, and they are constantly sidelined by political appointees, that could exacerbate medical migration. It is therefore vital to give doctors a sense of ownership by involving them and their professional organizations in policy formulation and implementation. Professional associations should utilize social media to create consensus as to what should be given priority in the process of policy making. (P4)

P5 emphasized the need for developing strong retention mechanisms rather than trying to entice members of the diaspora community with various incentives.

> The Ethiopian government offers medical doctors in the diaspora duty-free automobiles and plots of land for residential house construction if they decide to return to their country of origin, but such an opportunity does not exist for doctors who live and work in Ethiopia. Providing incentives to the diaspora leads doctors who work in the country to think that, unless they migrate, they will not be rewarded. The government should change course and provide incentives to those

who serve their country rather than benefit those who spent much of their professional life abroad. With a rapid rise in the cost of living, it is unthinkable for doctors to lead a decent life with the incredibly low remuneration, and hence the government should step in to address the problem. If the government adopts a positive attitude and creates conducive environment, it is possible to create alternative narrative, i.e., a movement from brain drain to brain share. Doctors in the diaspora could go to Ethiopia to give training or treat patients during their break, thereby facilitating skills, knowledge and technology transfer. Actually, doctors in the United States have interest to give back to their country of origin. What should be done is to create a channel through which resources could flow into the country. Doctors who may return to Ethiopia have international perspective, acquired new skills, used new technology and have networks that could benefit the country in a lot of ways. Hence, government officials should ponder as to how they could utilize such potential and make the most out of it. Developing contacts with physicians in the diaspora and creating good environment for them to provide services should not be left for the government. Hospitals, medical schools, and other institutions that could benefit from such partnership must play a role in inviting doctors and creating enabling environment. Once joint programs/projects are created, the frequency of going to Ethiopia could increase. Actually, institutions in the United States show great interest to partner with institutions in the Third World. Today, global health has become a hot issue, and there is an attempt to create triangular partnership. In the

> case of Ethiopia, triangular partnership consists of institutions and policy makers in Ethiopia, the United States and other developed countries,and health care professionals in the diaspora. The benefitsthat come from the coordinated efforts of these bodies are bigger than whatever benefits come from bilateral relationship. (P5)

P6 explained what happened when doctors' demands were forwarded to the Minister of Health.

> A group of doctors went to see the Health Minister, and we suggested to him that, to reduce the outflow of medical doctors, there should be pay raise. We told him that, with the current salary, doctors cannot even rent a decent one-bedroom apartment, and most of us live in service quarters of individual landlords. We suggested that the government could give us condominiums. We also brought to his attention the transportation problem we face every day. There is shortage of taxis in the city, and we report late to work. We asked if the government could help us import used automobiles tax free. We told him the Kenyan experience in this regard, that the Kenyan government allows medical doctors to bring automobiles tax-free, not only once, but every five years. We also told him they are paid very high salary compared to Ethiopian medical doctors. We emphasized that we were not asking him to pay us like Kenyans but to accept our very simple demands and that such incentives would decrease medical migration. The government builds condominiums, and what is wrong if it dedicates condominiums in one neighborhood for medical doctors? How about allowing us

> to import used automobiles tax-free? It will not hurt the government much, but it will make doctors happy. Yet the government does not want to provide such basic necessities to doctors who are in charge of the health of millions of citizens. Although we made it clear that our demands are easy to meet and meeting these demands could potentially reduce medical brain drain, the Minister brushed them off. The scary part was that he threatened the group members individually. Such is the attitude of government officials toward doctors, from the premier to the lower level officials in the administrative hierarchy. (P6)

P7 identified a number of now-familiar factors that should be addressed by the government: increasing salary, allowing duty-free import of automobiles for personal use, providing condominiums or land for housing, avoiding political interference in doctors' day-to-day lives, improving working conditions, and creating opportunities for professional development.

P8 provided a similar list, including removing politics from health care, increasing salary, benefit packages that include subsidized loans for transportation and housing, professional development opportunities, better working conditions in terms of available equipment and medicines, and involving doctors in the decision-making process to foster a sense of belongingness and ownership.

P9 asserted that the government must provide incentives, improve working conditions, and, more importantly, stop politicizing the health care system.

> I was one of the most ardent advocates of anti-migration. Finally, I decided to leave the country because I saw the system up close. Since I was the vice

> president of Medical Students' Association, I was more exposed to the system. Moreover, while I was a student, I was closely working with the Minister of Health on various student-related issues. My experience has shown me the weaknesses of the system. If you become part of the political establishment, then the government will give you position, money, and other favors, but you have to abandon your values and medical ethnics to get such favors. I believe that, unless we extricate the health care system from political entanglement, it will be very difficult to make progress in the health care front. (P9)

P10 echoed the other participants in calling for the Ethiopian government to increase salary, provide long-termloans for house construction and automobile procurement, create conditions for professional advancement, and improve the work environment.

According to the participants,the Ethiopian government should focus on retaining medical doctors who currently live and work in the country by developing attractive retention mechanisms. All participantspointed to pay as a critical factorand suggested that it should be prioritized because the rapid rise in the cost of livinghas made it increasingly difficult for doctors to live comfortably. Besides increasing pay, they suggested that the government should also provide incentives such as long-term, low-interest loans to help defray transportation and housing costs. The participants further urged that the government build health infrastructure, improve working conditions, create opportunities for professional advancement, avoid political interference, involve professional associations in the study of problems, give doctors and their professional organizations a

sense of ownership by involving them in the decision-making process, and forge partnerships with doctors in the diaspora community who could assist in the importation of knowledge, technology, and skills into the country.

Analysis of focus group data. The focus group discussion consisted of eight of the doctors who had participated in the interviews. Ittook place in a conference room in a public library, lasted for about two hours, and was recorded digitally. Building on the answers to the questionnaire, the focus group discussion generated new ideas and provided deeper insights. In this section, I summarized the group's responses to each of the questions that were posed to it

The first focus group questionasked, "What are your thoughts about the health care system in Ethiopia? What is the first thing that comes to your mind?" The members of the group agreed that much progress had been made in the preventive aspect of healthcare in Ethiopia. The Ethiopian government has built health posts and has trained tens of thousands of health extension workers who are assigned to the smallest units of government. Their purpose is to teach about family planning, antenatal care, childhood vaccination, household hygiene, malaria prevention, tuberculosis, HIV, and other personal care outcomes. These measures have had a significant impact on preventative care. However, the curative side of health care had not shown much progress. Severalhospitals were built over the last decade, but they are not well-equipped. There is a critical shortage of medical doctors, equipment, and medication. Doctors are unable toprescribe even necessary tests because laboratories do not function properly. The doctors who serve in public hospitals or health institutions are demoralized because they

are underpaid and lack opportunities for professional development. Working conditions are not favorable,and the health care system is overly politicized. In short, there are no resources and no access to quality medical care for many people, especially those in the poorestsections of society. Private hospitals and clinics do not have any consideration for patients. They intentionally write prescriptions that are expensive and rarely found in Ethiopia. When doctors order medications that are not available in Ethiopia, people think they are smart because they believe medicine that comes from overseas is better than what is available in the country. Many Ethiopians who live in the United States are burdened with costs of medicine prescriptions ordered by doctors in Ethiopia for their ailing parents or relatives. Besides, the system is overloaded with mandates. The government and non-governmental organizations (NGOs) come with money and order doctors around. They do not involve doctors in developing the goals of the projects that they want them to staff,ask them to share their views, or take into consideration absorptive capacity. For the success of any program or project, there is a need for people who are motivated and capable and for a shared vision rather than the imposition of preconceived goals on the community of physicians. The leadership in the Ministry of Health should show the doctors that they are together in the struggle to overcome health challenges in Ethiopia. However, the manner in whichhospitals and staff are managed reflectsa dictatorial culture.

The focus group discussion brought up some issues that were not raised during the one-on-on interviews. To begin with, private hospitals and clinics received a great deal of criticism on the grounds that they lacked consideration for patients and prescribed

medicines that are expensive andunavailablein Ethiopia, thus corroborating the anecdotal reports about the erosion of medical ethics in Ethiopia. The other issue of interest was that members of the diaspora community carry the burden of sending medicines to their family in Ethiopia that doctors there prescribe. By way of a personal example, I myselfsend medicine every three months to my father-in-law, who has a chronic illness, and this takes a toll on my budget.

The second focus group questionasked, “What are the major problems that push medical doctors out of Ethiopia?”One of the reasons that doctors migrate from Ethiopia to the United States is to further their economic interests. As mentioned, Ethiopian doctors receive far less compensation than their counterparts in Kenya: average salary for a general practitioner in Ethiopia is 6,000 Birr, roughly $240.00 per month,and that in Kenya is roughly$1471.00, more than six times as much. Moreover,Kenyan doctors have access to long-term loans for purchasing cars and building houses,as do those in Sudan. There is no such system in Ethiopia,and the country could not learn from its neighbors. Another issue is lack of professional development. Once doctors graduate, they remain stuck, without a chance of attending any continuing education or training. Moreover, the system is haphazard. Some doctors do not work properly, and sometimes it is very difficult to know who works in the hospital and who does not. There is no leadership, no accountability,and no work ethic. Some doctors work under the table trying to make ends meet. The situation is quite chaotic. Also extremely frustrating is theshortage of medicine, medical equipment, laboratories, and support staff. Inability to provide health care to people is in fact the major source of frustration for many doctors.

The discussion ofmajor factors that push doctors out of the country brought to light many of the issues raised during one-on-one interviews. It also made abundantly clear the disorganized nature of the health care system. The participants indicated that "there is no leadership, no accountability, and no work ethic," which are signs of a health care system in crisis. In such a chaoticsituation, there is a need for, among other things,inspired and inspiring leadership that canmobilize the entire health care professionals to achieve national health care goals. Indeed, there must be a chain of inspired and inspiring leaders, from the top to every level of the health care administration. Unfortunately, the Ethiopian health care system is filled with bosses, rather than leaders who could inspire their subordinates.

The third focus group questionasked, "What influenced you personally to leave Ethiopia?"In this case, the participants agreed that the shortage of medical doctors limits options for treatment, especially in areas that require specialized care, and is further exacerbated by a migration of doctors that is in part due toa lack of financial and non-financial incentives. Moreover, shortages of medicines, medical supplies, laboratories, and support staff, coupled with bureaucratic bottlenecks and excessive political interference in the health care system, contribute to undermine job satisfaction and motivation among physicians. There is nothing more frustrating and painful than to watch patients die for lack of medicine and the inability to run tests to explorethe causes of diseases owing to a lack of laboratories and essential equipment. Frequently, patients who needed urgent care had to wait for six months to be admitted to hospitals because of a shortage of beds. The lack of access to medical treatment forces Ethiopians to use

traditional medicines (TMs), whichpose a real risk of overdose because many of them do not come with instructions. Furthermore, the fact that medical doctors do not have a say in the health care systemcauses them to feel alienated and dissatisfied. Thus involving doctors in thedecision-making process and recognizing their contribution to society could motivate them and enhance their productivity. Many of the serious challenges regarding the delivery of essential health care services in Ethiopia are beyond the control of medical doctors and reasons for their migration.

The issue of TMswas one that came up only during the focus group discussions. It is significant because these remedies are used in rural communities, and to some extent even in the cities. The use of TMs is attributable in part to the lack of access to modern health care services, as just alluded to, butalso to longstanding cultural practices.Theremay of course be health risks because the safety and effectiveness of TMs is not well established.

The fourth focus group question asked, “In your opinion, what can the Ethiopian government do to reducethe outflow of medical doctors?”The most obvious answer was to increase pay. Owing to globalization, individuals can easily access informationand learn that developed countries pay higher salaries. They look forward to moving to those countries when the situation permits because the local system lacks resources. There is a serious shortage of physicians, support staff, medicine, medical equipment, and supplies,including sometimes even gloves. Hospital beds are inadequate, and patients who need urgent care have to wait for months to be admitted to hospitals. On top of these, management is a serious problem. Ethiopia’s authoritarian culture has had

asignificant influence on the management of modern organizations. In a country where governments use force to stifle dissent, violence against women is rife, and children areharshly punished for “unacceptable behavior,” the management of organizations, including health institutions, cannot be any different. However, the world is changing, and the old way of managing, “do what I tell you to do,” has less traction in this day and age. There is a need for leaders who are committed, transparent, accountable, and more importantly determined to transform an authoritarian culture into a democratic one. The government should also provide extrinsic and intrinsic rewards for physicians to motivate them to stay in their country. Thus, for instance, providing physicians with long-term, interest-free loans to purchase automobiles and build houses would help them offset the rising costs of living. Even if Ethiopia cannot afford to pay salaries comparable to those indeveloped countries,intrinsic motivation does not cost much. Additionally, good leadership is needed. Giving recognition to physicians and having a leader who is a team player rather than a dictator may motivate them. Another worrisome issue is that the system is overloaded with mandates. The government and NGOs come with money and order doctors around. Instead, there should be absorptive capacity to implement projectsthat includes people who are capable and motivated to do the job and suitable working conditions. There is also a need to create a sense of shared vision in the hospital environment. Leaders should connect with the doctors who do the work rather than manage them in a manner reminiscent of a dictatorial culture. The government should appoint leaders who have the capacity to transform the existing work environment into a more conducive and participatory one and fully involve physicians in the decision-

making process. The government should also lift restrictions on the import of medicine and medical equipment and free health institutions from political influence.

On the other hand, the migration of medical doctors should be seen in the context of the country's overall development. Ethiopia is one of the poorest countries in the world, with a per capita income of $590 that is substantially lower than the regional average (World Bank, 2016). In addition to other prudent measures thatthe government might take to reduce the outflow of medical doctors, the country should attain a certain level of development. If the economy grows, thegovernment could afford to pay higher salaries and to provide fringe benefits. If people could afford to pay, doctors who practice in the private sector could chargeindividual patients, allowing them to earn more money and therebyeventually leading to a reduction in migration.

The discussion in this section highlighted several issues not raised during the one-on-one interviews. Thus there was an emphasis on the importance of good leaders who can mobilize physicians to achieve the health sector goals by providing them with extrinsic and intrinsic motivations. Other key issues were the lack of absorptive capacity and of a shared vision andthe need to involve physicians in the decision-making process. There is no doubt that participation enhances knowledge of problems and solutions and makes participants committed to the goals that they have set. Finally, poverty and the associated political instability in Ethiopiawere cited as factors that led to migration.

The fifth focus group question asked, "Ifyou were invited by the Ethiopian authorities to make changes in the health care system in order to reduce the migration of medical doctors, what changes would you introduce?"The participants agreed that thefirst

measure would be to increase pay for medical doctors so that they receive at least a living wage. They were well aware thatphysicians in neighboring Kenya are paid sixtimes more than those in Ethiopia. Moreover, financial incentives work better when used in conjunction with non-financial ones. As an example, formerHealth Minister Dr. Tewodros Adhanomonce started a program in whichlaptops were given to medical doctors assigned to rural areasalong with the promise that they would be transferred to urban areas for post-graduate studies. However, these measures were not made permanent, and the program ceased with the departure of the minister. The problem in Ethiopia is that individuals make bold initiatives that do not endure owing to the absence of a policy or system to plan for the future. Moreover, physicians find it frustrating to work in an environment in which they are not able to meet even the most basic needs of patients, since there is a critical shortage of medicine, medical equipment, supplies, and support staff. Career advancement opportunities for doctors are also necessary so that they can keep up with advances in medicine and medical technology; without such opportunities, they feel stuck and seek to migrateto countries where they hope tohave the chance to develop their knowledge and skills. More importantly, doctors should be involved in the decision-making process rather than forcedto implementthe decisions made by politicians and bureaucrats. Doctors know what should be done to make the health system work better, and their voices should be heard. In addition, professional organizations should be strengthened because they have the capacity toinfluence government health policy, protect public and professional interests, and encourage research and training for health professionals. Moreover, doctors need to be free from

political pressure; thus many of the participants in the study complained that they had been pressured to support the ruling party and that refusal to do so could lead to the loss of opportunities for career advancement, training, and other benefits. The government must understand that political affiliation has nothing to do with how doctors discharge theirprofessional responsibilities.

In Ethiopia, however, policies and best practices are not institutionalized and eventually disappear once their sponsors leave office or retire. Personnel policies, practices, values, and codes of conduct need to be based on a sound health system rather than leaders' arbitrary decisions. This much is clear from Dr. Adhanom's initiative of giving laptops to doctors in rural areas, which was quite effective but ceasedafter he left office. In addition to useful initiatives, there must be a clear policy regarding the number of years doctors serve in rural areas and when they begin their postgraduate studies. If there is clear policy, doctors will be motivated and able to plan their futures.When, however, doctors sense indifference or unfairnesson the part of government, they lose hope and become frustrated. Other issues that were extensively discussed included the lack of a health infrastructureand the role of health professional organizations in influencing policies and advocating for better health and higher professional standards. The focus group also asserted thatnothing was more frustrating than being unable to help patients for lack of basicmedical equipment, supplies, and drugs.

The sixth focus group questionasked, "Thinking back over the years that you have been in medical practice in Ethiopia, what were some of your disappointments and your

positive experiences?" In response to this question, one of the participants mentioned the situation with HIV when he was a student in the mid-2000s.

> In 2005, HIV was rampant in Ethiopia. Actually,students in my batch were aware of the pervasiveness of the disease while we were in our internship program. After we graduated and started medical practice, we found it to be extremely horrifying. There was no medication, and people were dying in large numbers. When I diagnosed, I knew the patients were going to die,and itwas unbearable to me and I hated being a medical doctor. Three quarters of hospital beds were occupied by HIV patients. However, after a while, thanks to President Bush's Emergency Plan for AIDS Relief (PEPFAR), drugs becameavailable to patients. Yet, there were still complaints that the government was not providing drugs for opportunistic infections caused by virus, bacteria, and the likethat take advantage of a weakened immune system due to AIDS
>
> What was really disturbing was that many pregnant mothers came late and died during labor. The reason was that patients who came from rural areas did not have access to public transportation. Pregnant woman who had been in labor for two or three days and who were exhausted passed away before they received treatment in a hospital or clinic. There were so many sad incidents of death of pregnant women or dying babies due to dehydration or a lack of oxygen. (One of the focus group participants).

A related concern was that many of the diseases that kill people in Ethiopia,such as malaria, pneumonia, and meningitis, arepreventable. However, people die in large

numbers because of a lack of medication or because patients come to a hospital after it is too late to help them. Especially in rural areas, people suffering from illness spend days trying various TMsthat further complicate their health situation.

Because there is no well-organizedorcoordinated support system in Ethiopia, the burden falls on the shoulders of physicians. Many of them, however, lack motivation and see medical practice as simply a means of earning a living. A related problem is corruption and political interference in the health care system, as government officials reserve beds for their relatives while those who have no connections must go without.Yet another problem is shortage of physicians, medicine, medical equipment, laboratories, well-trained support staff and specialist staff. A member of the focus group described a particularly vivid incident that illustrates lack of specialist staff.

> An individual whose jaw was broken with an axe during a fight was brought to our hospital. I could see his tongue through his jaw, and it was terrifying. Although the hospital I worked in was a referral hospital, we did not have an ear, nose, and throat (ENT) specialist and, hence, we could not help him. What I could do was wrap his jaw, stabilize him, and send him to Addis Ababa.(One of the focus group participants).

Soon after the EPRDF government came to power in 1991, it introduced what wascalled“Gimgema,” a form ofperformance evaluation that it had usedon the battlefield when it was a guerrilla group.Politicians evaluated doctors even more harshly than had been the case under the previous Socialist government. “As a result, many doctors I know were hurt,” one member of the group recalled. “I remember two of the medical doctors

were arrested as a resultof ‘Gimgema.’ There is too much pressure and political interferencein health care system under the EPRDF regime than any other time in the history of the country.”

Other issues that drew attention during the focus groupincluded the death of pregnant women before and after arrival at hospitals or health centers, in particular the fact that problems with transportation often prevent pregnant women from visiting health centers. The lack of specialists, such as ENTs, even in referral hospitals was also cited as aserious problem. As has been seen, political influence in the health system was extensively discussed during the focus group session.

The seventh focus group question asked, “In what ways can migrant medical doctors individually and as a group contribute to improving health care delivery in Ethiopia?” Members of the group noted that doctors in the diaspora community could help in numerous ways given cooperation from the government. Some expressed the desire to visit Ethiopia for a short period of timeto serve the Ethiopianpeople or to provide assistance by means of telemedicine. Others, whose children had completed high school and who had no other commitments,were considering returning to Ethiopia permanently. It is clear that many doctors want to do pro bono work, but there is a need to coordinate, mobilize, and channel their resources and expertise if they are tohave a significant impact on the health care system. Currently, however, there is no organization that can connect doctors in the diaspora communitywith potential beneficiaries in Ethiopia. The Ministry of Health, hospitals, medical schools, and other health

organizationscould reach out to these doctors in order to tap into their expertise and skills.

In this part of the discussion, the focus group cited coordination between medical doctors in the diaspora community and leaders of health institutions in Ethiopia asa means to channelresources and expertise into the country. The prevailing view was that an independent agency should be established, one outside the purview of the Health Ministry's bureaucracy. One of the initiatives that this agency could coordinate would be telemedicine; it was noted thatIndia's effort to bring telemedicine to Ethiopia provides a useful example for how medical doctors in the United States could expand their involvement in the practice by making use of advanced communications technology.

Trustworthiness of the Study

One of the most important aspects of qualitative research is establishingitstrustworthiness. According to Lincoln and Guba (1985), trustworthiness consists of four components: credibility, transferability, dependability, and conformability.

One way of establishing credibility is through member checking, whereby the researcher verifies the accuracy of the interpretation of the data obtained from the participants by allowing them to review and comment on the findings (Harper &Cole, 2012). As defined by Creswell (2007), member checking "involves taking data, analyses, interpretations, and conclusions back to the participants so that they can judge the accuracy and credibility of the account" (p. 208).Accordingly, after the initial drafts of Chapters 4 and 5 of this dissertation were completed, I asked the participants to review

the interpretation of the data and the findingsfor accuracy and to make corrections wherever they found mistranslations or misrepresentations. A further way of establishing credibility is by describing “the setting, the participants, and the themes of a qualitative study in rich detail” (Creswell &Miller, 2000, p. 128). In an effort tofollow this suggestion, I conducted interviews, follow-up interviews, and a focus group discussion that took a considerable period of time.

Transferabilityrefers to the applicability of the findings of the research to other groups or situations (Cope, 2014). There are, however, contrasting views with regard to transferability in qualitative studies. For Shenton (2003), “Since the findings of a qualitative project are specific to a small number of particular environments and individuals, it is impossible to demonstrate that the findings and conclusions are applicable to other situations and populations” (p. 69). However, Stake and Denscombe (cited by Shenton,2003), “suggest that, although each case may be unique, it is also an example within a broader group and, as a result, the prospect of transferability should not be immediately rejected” (p. 69). The participants in the present study were 10 migrant medical doctors of Ethiopian origin practicing medicine in the Washington, DC metropolitan area; they are not necessarily representative ofmigrant medical doctors of Ethiopian origin throughout the United States.Nevertheless, their experiences may speak to commonalities among this larger group of doctors.

Dependability refers to the consistency of the conclusions reached through a research projectif it were to be repeated with the same participants under similar conditions(Cope, 2014). In other words, were the research to be performed againusing the

same method, participants, and context, the results wouldbe similar (Shenton, 2003). I conclude that, if all ofthe above conditions were met, the results of the study would be similar because the push and pull factors thatforce doctors to leaveEthiopia remainmore or less the same. Nevertheless,because this is a qualitative study, changes in the environment in which the subjects are studied could lead to different results and different conclusions.

Conformability refers to the extent to which the resultsof the research arebased on the responses of the participants and the findingson the data (Cope, 2014). The goal of conformability is to overcome bias in the research. For Cope (2014),one way to reduce researcher bias is by "providing rich quotes from the participants that depict each emerging theme" (p.89). So it was that, in my research, long and rich quotes from each participant provided the basis for emerging themes. In addition to one-on-one interviews with participants, follow-up interviews and a focus group discussion were conductedin order to make sure that the participants' views were fully expressed. Moreover, interpretations of the data were given to the participants so that they had the opportunity to identify any errors or distortions.

Chapter 5: Discussions, Conclusions, and Recommendations

Introduction

This chapter summarizes the findings of the study and offers conclusions and recommendations. The purpose of this phenomenological study was to explore the reasons for the migration of Ethiopian medical doctors to the United States and to identify solutions to stem the outflow. In interviews and a focus group discussion, the participants revealed sourcesof frustration while they were practicing medicine in Ethiopia and explained how this frustration had informed their decisions to migrate to the United States. The results showed that the doctors were still interested in giving back to their country of origin provided that the government would be willing and able to createa conducive environment.

Interpretation of Findings

The followinginterpretation of findings is organized around major themes that emerged during the data analysis, namely (a) low pay, (b) lack of professional development,(c) poor working conditions, (d) low job satisfaction, (e) the threat of political persecution, (f) political instability in Ethiopia, (g) heavy workloads, (h) fear of contracting HIV, and (i) lack of opportunities for medical doctors to participate in health care decision-making.

Theme 1: Low Wages/Salaries

Participants were asked torate, on a scale of 1-10, with10being the highest, the degree to which low pay influenced their decisions to migrate. Thirty percent of the respondents chose 10 on the scale to indicate that low wages/salaries were the most

important factor in their decisions to migrate. Likewise, 20% and 30% of the respondents chose 9 and 8, respectively, on the scale,indicating that low wages/salaries were a very important factor on their decisions to migrate. Another 10% each of respondents chose 7 or 6 on the scaleto signify that low wages/salaries were important factorsin their decisions to migrate.

Theme 2: Lack of Professional Development

Participants were asked to use the scale just describedto rate the degree to whichthe lack of professional development opportunities influenced their decisions to migrate. Twenty percentof participants chose 10 on the scale to indicate that thiswas the most important factor in their decisions to migrate. Another40% chose 8 to indicate that thiswas avery importantfactor. Twenty and 10% of respondents chose 7 and 6, respectively,to indicate that thiswas animportant factorin their decisions to migrate. Tenpercent of respondents selected 4 to indicate that professional development did not have that much of an influence on theirdecisions to migrate.

Theme 3: Poor Working Conditions

Participantsalso rated the influence of poor working conditions,characterized by a shortage of physicians, specialist staff, medicine, medical equipment, laboratories, and well-trained support staff, on their decisions to migrate. Half selected 10 on the scale to indicate thatpoor working conditions werethe most important factorsin their decisions to migrate. Twenty percentchose 9 on the scale to indicate that poor working conditions werevery important factorsfor them. Ten percent each chose 8, 7, and 6 to indicate that poor working conditions hada significantimpact on their decisions to migrate.

Theme 4: Low Job Satisfaction

Thirty percent of the respondents chose 10 on the scale to indicate that low job satisfaction was the most important factor on their decisions to migrate. Twenty percent each chose 9, 8, and 7, indicating that this factor played a very important role in their decisions to migrate. Another 10% of the respondents chose 5 on the scale to indicate that low job satisfaction had some bearing on their decisions to migrate.

Theme 5: The Threat of Political Persecution

The threat of political persecution is pervasive in countries like Ethiopia thatcontinue to be ruled by authoritarian regimes. Twenty percent of respondents chose 10 on the scale to indicate that the threat of political persecution hadthe most significant influence on their decisions to migrate. Ten percent each chose 9 and 8, and 20% each chose 7 and 6,indicating that the threat of political persecution had a significant influence on their decisionsto migrate. Another20%of respondentschose 4to indicate that this factor had some degree of influence on their decisions to migrate.

Theme 6: Lack of Political Stability in the Country

Regarding this theme, 10% each of the respondents chose 10 and 9 on the scale to show that a lack of political stability in the country was the most important factor on their decisions to migrate. Another 30% eachchose 8 and 7 on the scale to show that this factor had a major influence on their migration decisions, and the remaining 20%chose 5 on the scale to signify that it hadsome impact.

Theme 7: Heavy Workloads

The data showed that heavy workloads had more of an influence on some of the respondents than on others. Ten percenteach selected 8 and 7 and 30%selected 6 on the scale to signify that heavy workloads had a significant influence on their decisions to migrate. Of the rest, 10% chose5, 20% chose 3, and another 20% chose 2 on the scale to indicate that this factor wasnot much of an influence on their decisions to migrate.

Theme 8: Fear of Contracting HIV

Fear of HIV had much less impact on physicians' decisions to migrate than the factors discussed above. Thus, 60% chose 1 and 10% each chose 2 and 3 on the scale to indicate that fear of contracting the disease had little influence on their decisions. Ten percent each of the other respondents chose 5 and 6, however, indicating that fear of HIV didto some extent influenced theirdecisions.

Theme 9: Lack of participation in Health Care DecisionMaking

One of the major themes that emerged during the data analysis was the doctors' perception that, in Ethiopia, they did not have meaningful influence over their own profession and did not receive due credit for their hard work. The result was alienation, the feeling that"doctors have no place in the medical system in Ethiopia," in the words of one participant.

> I have started uterine cancer treatment in Ethiopia from scratch. Prior to that, there was no pre-cancer investigation and pre-cancer treatment. Although it was limited to Addis Ababa at first, it gradually spread to Tigray, Amhara, Oromo, and Southern regions. However, at the beginning, it was very difficult to launch

> the program because government officials did not accept it. I had to beg officials who wereactually my juniors. They were given higher positions because of their affiliation with the ruling party. In order to do the job, I had to tell them the importance of the program for women, and also I had to invite them tea, coffee, and at times lunch to persuade them to accept the program. Although the project had national significance, it was an uphill battle to make it sink in them. At one point, I was fed-up of begging government cadres. Individuals with party affiliation have much influence, and that makes doctors frustrate and consider the migration option. (One of the focus group participants).

In sum, what needs to be done is to involve medical doctors in the decision-making process in order to give them a sense of ownership of programs and activities in the health care system.

Findings vis-à-vis LiteratureReview

Analysis revealed that the research findings are consistent with the literature. To begin with, doctors are paid unreasonably low wages in comparison with their counterparts in developed countries(Toader&Sfetcu, 2013). Citing several surveys of health professionals, Chappell and Glennie (2010) identified the desire to earn higher income as the most common push factor.In their study of health worker performance in Ethiopia, Lindelowet al. (2005) quoted a physician in a provincial town as saying that "No physician would leave the public sector if he or she was paid well. The reason for the attrition is purely financial-the salary in the public sector is like a tip" (p.7). In the BBC

report discussed in earlier chapters, ("Why doctors trained in Ethiopia are leaving in their hundreds to work abroad," 2011), a general practitioner who had worked at the Black Lion Hospital at Addis Ababa University for 7years stated that the salary was so low that she and other doctors could barely pay their bills, let alone purchasean automobile or a house. Describing the difference in pay between herself and one of the students in her classliving and practicing medicine in New York, this doctor contrasted the $300 per month received by an internist in Addis Ababa with the $5000 per month received by a third-year resident and $120,000-$180,000 per year for a fully licensed physician in the United States. (A general practitioner in Black Lion Hospital).

The study shows that medical doctors who leave their countries of origin are not motivated by a singular factor. However, wages/salaries appear to be the most important factor for all participants in the study.

As has been seen, low pay is not the only reason for medical migration. Thus Bach (2003) identified such push factors in decisions to migrate as poor working conditions, lack of opportunities for professional development, the HIV/AIDS pandemic, civil unrest, and limited access to technology. Lindelow et al. (2005) identified in addition to lack of housing, transportation, and quality schools for children, prevalence of crime, shortage of essential equipment and materials in the work place, excessive workload, lack of career development opportunities, and limited research facilities as sources of frustration for doctors. Moreover, administrative problems and a dearth of leadership capable of creatingconducive work environment can be detrimental to health workers(Dovlo, 2003). In their study of why sub-Saharan health workers migrate,

Poppleet al. (2014) found that the most common push factors were low wages, lack of opportunities for professional development, lack of equipment and supplies, heavy workloads, low job satisfaction, and the threat of political instability and conflict. The findings of this research highlighted that medical migration is multicausal and there are no simple answers to it. However, countries suffering from medical migration should begin to address the problem using various policy instruments.

In the BBC report, four of five medical students at the Black Lion Hospital atAddis Ababa University indicated that they would like to leave the country as soon as they graduated (BBC report, "Why doctors trained in Ethiopia are leaving in their hundreds to work abroad," 2011). The reasonsthe studentscitedwere low pay, lack of training opportunities, and poor working conditions (BBC report, "Why doctors trained in Ethiopia are leaving in their hundreds to work abroad," 2011).The general practitioner quoted in the above mentioned BBC report,described the poor working conditions in government hospitals as extremely frustrating, observing that doctors are able tomake diagnoses but cannot help patients because of a lack of medicine (BBC report, "Why doctors trained in Ethiopia are leaving in their hundreds to work abroad," 2011). The general practitioner further stated that hospitals experience frequent shortages of both medicines and ofsuch basic supplies as syringes, gloves, and antibiotics, and doctors must helplessly watch their patients die (BBC report, "Why doctors trained in Ethiopia are leaving in their hundreds to work abroad," 2011).

In sum, the BBC report highlighted key factors such as low pay, poor working conditions and lack of training opportunities being behind the migration of medical doctors.

Findings vis-à-vis Theoretical Framework

Analysis revealed that the research findings are consistent with the theoretical frameworks. Thus, neoclassical theories, according to which differences in wages among countries promote migration(Massey, 2003),suggest thatlow payis the most important factor in doctors'decisionsto migrate. This coincided with the findings from my study. From this perspective, labor abundance in one region and scarcity in anotherare responsible for international migration (Kurekova, 2011), which serves as an equalizing mechanism(Massey,2003); absent such wage differentials, labor does not move(Hass,2008). The availability of high-paying jobs and employment opportunities in developed industrial countries in combination with poverty and economic hardship in developing countries stimulate migration (Belton &Morales, 2009). The microeconomic version of neoclassical theory considers migration to be the result ofindividuals'decisions made based on expected return. People move to environments in which they can be more productive and expect a positive net return, usually in monetary form. If the expected return is larger in the destination country than in the source country, then the flow of migration will be larger (Erf &Heering, 1994).

The findings of this study are consistent with the theories that account why migration persists across national borders. The macroeconomic theory considers

migration as the result of wage differentials between countries whereas the micro version of the theory claims that migration is based on individual decision to maximize income.

In my study, participants were asked to rate, on a scale of 1-10, with10being the highest, the degree to which low pay influenced their decisions to migrate. Thirty percent of the respondents chose 10, 20% chose 9, 30% chose 8,and 10% each chose 7 and 6 on the scale to signify that low wages/salaries werea key factor in their decisions to migrate. This resultcorroborates the neoclassical approach to migration; seeking to maximize income,workers in low-wage countries move to high-wage countries.

The push-pull theory of migration is relevant to the findings presented herebecauseparticipants in this studydescribed their reasons for migrating to the United States in terms of push factors at home and pull factors in the destination country. Again, pay, lack of professional development, poor working conditions, heavy workloads, low job satisfaction, threat of political persecution, lack of political stability,and lack of participation in the decision-making process were push factors that drove these doctors from Ethiopia. Pull factors in the United Statesincluded, again,higher wages, better working conditions, advanced technology, opportunities for professional development, and political stability.

Migrationnetwork theory emphasizes the importance of social networks in international migration. Migrant networks can facilitate migration by providing information on the cost of migration and the living and working conditions in the destination country and aid inassimilation after arrival (Poros, 2011). Moreover, friends and relatives can finance the cost of migration and help immigrants to find jobs once they

have arrived at their destinations (Dolfin&Genicot, 2006). This theory has relevance to the findings of this study because 70% of respondents said that their decisions to migrate to the United States were to some degree influenced by friends and family members.

The globalization theory of migration is also applicable to the findings of the study. Globalization theory states that the world has become in effect smallerowing to advances in communication and transportation technologies that enable a constant flow of people and ideas in different directions (Stalker, 2000). People can easily access information and identify the opportunities that are available in developed countries (Belton &Morales, 2009). Most participants in the present study indicated that they had receivedinformation about opportunities in the United States from the Internet and other communication media that helped them to make their decisions to migrate.

The historical-structural theory of migration can also shed light on the findings. According to this theory, migration is the product of uneven developmentacross the world (Belton &Morales, 2009). On a global level, the developed capitalist countries wield enormous economic and political power and dominate and exploit the weaker underdeveloped nations. On an individual level, migrant workers enter into exploitative relationships with employers (Belton &Morales, 2009). According to Belton and Morales, migration is thus the consequence of imbalances in political and economic power between developed and developing countries. Medical doctors migrate to developed countries in the hope of higher wages and a betterstandard of living and the availability of modern technology, well-equipped libraries, and opportunities for career advancement that are not available in the impoverished developing countries.

Recommendations

The study'sfindings suggest several recommendations for immediate action.

Doctors migrate looking for higher paying jobs overseas because they are paid very little in Ethiopia. With the rapid rise in the cost of living there, it is impossible for them to lead a decent life on their current salaries. The government should therefore address the economic frustrations of medical doctors by raising their pay and providing benefit packages that include the tax-free import of automobiles for personal use andlandand long-term,interest-free loans for housing. In sum, in order to prevent Ethiopia from losing out in the global competition for health workers, its government must attempt to address the remuneration gap through a variety of incentives, includingpay raises, so that doctorswill stay in the country.

Medical doctors should have opportunities for professional development that allow them to keep pace with advances in medical science and technology. The rationale for professional development is to maintain and improve doctors'competencies. However, there are no opportunities for professional development in Ethiopia of the sort that can help doctors to cope with existing health problems and emergent threats.

Sound medical practice cannot take place in an environment lacking in doctors, drugs, equipment, supplies, laboratories, and well-trained support staff. Improvement in doctors'working conditions thus needs to be addressed without delay.

Political interference by government-appointed cadres in the health care system was a recurring themeduring interviews and the focus group discussion. The system is currently led by politicians with little or no medical background who exert

significantpressure on doctors and in some instances forcethem to engage in unethical practices. The government must avoid political interference and let heath institutions be managed by professionals who have the necessaryknowledge and skills.

There must be a qualitative improvement in the attitude of government officials toward doctors. Some officials have openly statedthat doctors are free to leave the country and that the government will simplytrain more to replace them. This attitudemakes doctors feel unwanted by their own government. To overcome the health challenges that the country faces, it is crucial tofostera sense of belongingness and cooperation and a shared vision,a sense that "we are in this fight together."

The government should create favorable conditions for the development of professional associations, which in developed countriesplay pivotal roles in promoting the interests of their members. Moreover, they study and research health problems and come up with solutions for improving public health and shape health policies through their influence on policy makers. However, the situation in Ethiopia is quite different. Many doctors complained that government officials fear that their own authority would be erodedif professional associationswere empowered and allowed involvementin policy matters. Officials therefore deny doctors any meaningful participation in policy making or advancing theinterests of their profession.

An important step to attract medical doctors in the diaspora would be to establish a database of medical doctors of Ethiopian origin in the United States, Europe, the Middle East, and Southern Africa. This database could then be used in the design of policies to attractsuch doctors to serve the Ethiopian people. With a change of heart on

the part of the government, it would be possible to createan alternative narrative of movement, from brain drain to brain share. To that end, the government should establish an agency to coordinate and facilitate the return of doctors to Ethiopia and manage their assignments during their stays.The goal would be to createa triangular partnership involving medical doctors of Ethiopian origin, the Ethiopian government, and U.S. and European governments and institutions. These days, global health has become a major concern. Governments, universities, and health institutions in developed countries have an interest in partnershipswith developing countries. Cooperation among these entities could have a greater impact than bilateral relationships.

Professional regulation is very lax in Ethiopia, which means that doctors are not held accountable for their actions and that patients are unaware of their rights. The lack of regulation, coupled with a largely uninformed public,makes it possible for some health care providers to engage inunethical practices, as does the tendency of patients to see doctors as almost divine savior figures. There is, however, no law in Ethiopiaagainst doctors from abusing their patients, so the government, while it works to expand medical services, must also work to increase patients' awareness of their rightsand of doctors' responsibilities. As in developed countries, the law must ensurethat doctors behave in acceptable ways and give patients the right to sue them if they fail to do so.

Implications for Positive Social Change

Ethiopia'sphysician-to-population ratio of 1:21,000is one of the lowest in Sub-Saharan Africa. People die of infectious diseases such as malaria, diarrhea, pneumonia, HIV, tuberculosis, and acute respiratory infections. Although there have been

improvements in preventive health services as a result of the training and deployment of thousands of health extension workers to rural areas, the health sector goals of the country continue to go unmet. Low levels of health sector funding, abject poverty, recurrent drought, poor nutrition, and lack of access to safe drinking water and sanitation facilities have all taken a toll on the population, especially on women and children.

Under these circumstances, reducing the outflow of medical doctors could help to bring about positive social change by buildingmedical talent andstrengthening the delivery of health care. Only in the context of an improved health care system can Ethiopia hope to experience a reduction in its infant mortality rate and in the overall burden of sickness and diseaseon society. Moreover, stemming the flight of medical doctors would help to ensure that medical cases are handledonly by qualified professionalsrather than by those who may misdiagnose medical conditions and prescribe inappropriate treatments. Medical migration has financial implications as well. According to Johansson (2014), Ethiopia loses around $29,000 in educational costs whenever a doctor trained in the country leaves to practice medicine elsewhere. Given the magnitude of medical migration, this adds up to a huge loss for Ethiopia.

These days, considerable numbers of Ethiopians seekmedical treatment in such destination countries as Thailand, South Africa, and India. Stemming the outflow of medical doctors could minimize referrals and consequently the flow of resources outside the country that could in turn be used for financing the health care system. Thousands of people who are at risk from curable diseases could be saved and infections and complications of childbirth treated.Overall, slowing the outflow of medical doctors could

lead to improved clinical outcomes and an overall improvement in the quality of public healththroughout Ethiopia.

Conclusion

This study has explored the lived experiences of 10 medical doctors of Ethiopian origin practicing medicine in the United States. In this chapter, I havepresented interpretations of the findings, examined their relationship to the literature review and to the theoretical frameworks, and offered recommendations for positive social change. This study revealed the major weaknesses inthe Ethiopian health care system and the main causes for the migration of Ethiopian doctors to the United States. The participants indicated that their decisions to migrate were influenced by economic frustration caused by inadequate remuneration, professional frustration caused by a lack of opportunities for professional development, and poor working environments characterized by a lack of basic medical equipment, medicine, laboratories, and support staff. These doctors also emphasizedthe pervasiveness of the influence in the health care system of politicians with little or no medical knowledge.By contrast, doctors were not involved in the decision-making process and as a consequence feltalienated and unmotivated. Nevertheless, nearly every participant expressed a willingness to give back to Ethiopia in one form or another provided that the government would be willing to create conducive environment in which they could practice medicine.

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Appendix A: Interview Questions

Interview conducted to explore
why Ethiopian medical doctors leave their country.

Time of interview:

Date:

Place:

Interviewer:

Interviewee:

Questions:

1.What is your assessment of the health care system in Ethiopia?

2.What is your opinion about the effect of medical migration on the health care system in Ethiopia?

3.In order of importance, please identify the major causes for the migration of Ethiopian medical doctors.

4.When you compare your medical practice in the United States versus Ethiopia, in what way(s) are they different?

5.Why did you come to the United States? Why not to Europe or other regions?

6.In the scale of 1-10, with 10 being the highest, how important were the following factors in your decision to migration?

a. Low wages/salary
b. Lack of professional development?

c. Poor working conditions, unavailability of medicine, equipment and supplies
d. Fear of contracting HIV
e. Heavy workloads
f. Low job satisfaction
g. The threat of political persecution
h. Lack of political stability

7. Under what circumstances would you return to Ethiopia to practice medicine?

8. Suppose you are in charge of the Ethiopian Ministry of Health; what would you do to reduce the outflow of medical doctors?

9. What recommendations do you have for the Ethiopian Government for tackling medical migration?

Appendix B: Focus Group Questions

1.What are your thoughts about the health care system in Ethiopia? What is the first thing that comes to your mind?

2.What are the major problems that push medical doctors out of Ethiopia?

3.What influenced you personally to leave Ethiopia?

4.In your opinion, what can the Ethiopian government do to reduce the outflow of medical doctors?

5.Suppose you are invited by the Ethiopian authorities to make changes in the health care system with the view of reducing the migration of medical doctors; what changes would you introduce?

6.Think back over the years that you have been in medical practice in Ethiopia; please tell me about your disappointments and your positive experiences.

7.In what ways can migrant medical doctors individually and in group contribute to improve health care delivery in Ethiopia?

8.Are there other things you would like to add that you think will slow down the outflow of medical doctors?