

**Exodus of Clinicians from Public Sector to Non-Clinical Practice in Private Sector in Dar es Salaam Tanzania; Exploring the Drivers**Elice Temu<sup>1</sup>, Gasto Frumence<sup>1</sup>, Nathanael Sirili<sup>1\*</sup><sup>1</sup>School of Public Health and Social Sciences, Muhimbili University of Health and Allied Sciences, Dar es Salaam, Tanzania**\*Corresponding author:**

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**OPEN ACCESS JOURNAL****Abstract*****Background***

Globally, shortage of clinicians health workforce is among the major challenges facing the health systems of many countries including Tanzania. Migration of medical doctors from clinical practice to non-clinical practice partly contributes to this challenge. This study aimed to explore factors influencing Medical Doctors' decision to migrate from clinical practice in the public sector to non-clinical practice in the private sector in Dar es Salaam Tanzania.

***Methods***

An exploratory qualitative study was conducted using 12 in-depth interviews with medical doctors working in the private sector but formerly worked in the public health sector. Interviews were digitally recorded, transcribed verbatim and thematically analyzed.

***Results***

Three main themes emerged; health system-level drivers that has three sub-themes, namely poor work environment, heavy workload due to shortage of clinicians and underfunded public health sector; individual-level drivers, which include four sub-themes: Age, area of specialization, marital status and empathy to patients; and external environment drivers consisting of two sub-themes: peer pressure and community culture.

***Conclusion***

Improving the work environment through increased funding will partly address the main health system drivers underlying migration from the clinical practice. Furthermore, nurturing junior doctors to be enthusiastic and adapting to cultural shocks can partly help to address the individual and external drivers.

**Keywords:** Shortage, Medical Doctors, Clinicians, Physicians, migration, health workforce, Tanzania Clinical Practice, Non-Clinical Practice.

**OPEN ACCESS JOURNAL****Introduction**

Globally, more than seven million new health workers are needed to attain the minimum standards of health care needs [1]. Many governments have given much attention to training and deployment of medical doctors for many years in efforts to address the shortage of physicians [2–7]. However, health systems, particularly in Sub-Sahara Africa, have continued to suffer from a critical shortage of physicians [1]. This shortage has been attributed to; international brain drain, failure to employ trained doctors, brain waste and the migration from clinical to non-clinical practice of some physicians [1,8–11].

In Tanzania, it is estimated that one doctor caters for a population between 20,000 and 50,000 [12]. This ratio is far below the minimum threshold of 1:10,000 recommended by the World Health Organization in order to meet at least 80% of the basic health needs of the population [13]. Since independence, Tanzania has taken different initiatives in training and deploying doctors. It is estimated that by 2010 the country had trained around 4000 doctors [14]. However, only close to 50% secured employment in the public sector due to different reasons including limited employment capacity in the public sector that contribute to over 70% of health facilities in the country [3,6,15]. The private sector owns close to 26% of all health facilities and 54% of all hospitals in the country [16]. Out of the hospitals owned by the private sector, about 60% are owned by the faith-based organizations that receive most of their doctors from the government [15] through secondment.

Despite the limited employment opportunities to medical doctors in the public sector, there has been a noticed exodus of doctors from clinical practice in the public sector to non-clinical practice in the private sectors. In their tracer study, SIKIKA in 2013 reported that close to 40% of medical doctors were not in clinical practice [17]. It is further estimated that coming 2025 majority of the young doctors will quit clinical practice [18]. However, the latter studies did not establish the reasons as to why this large number of doctors is quitting clinical practice. Therefore, this study was carried out to explore the factors influencing the migration of doctors from clinical practice in the public sector to non-clinical practice in the private sector in Dar es Salaam, Tanzania.

**Methods*****Study setting***

This study was carried out in Dar es Salaam which was purposefully selected due to its cosmopolitan nature and therefore has most of the non-governmental organizations in the country. The city consists of five administrative municipalities: Kigamboni, Kinondoni, Ilala, Temeke and Ubungu. It has a total population of 4,364,541 [19] with an annual population growth of 5.6% [19].

***Study design***

We adopted an exploratory qualitative study design, in which in-depth interviews were conducted to answer the objective of this study. We recruited medical doctors who worked in

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the clinical practice in the public sector and later migrated to non-clinical practice in the private sector. The exploratory qualitative study design was found adequate to this study as factors influencing the migration of doctors from clinical practice to non-clinical practice are not linear and some are embedded in social and cultural factors.

***Sampling technique***

We used a snowball sampling technique to reach the medical doctors who formally worked in clinical practice in the public sector and who were working in non-clinical works in the private sector during the study period. At first, the researchers obtained the list of doctors who were in clinical practice in the public sector but later migrated to non-clinical practice in the private sector from the office of the Registrar of Profit and Non-Profit Organizations at the Ministry of Health, Community Development, Gender, Elderly and Children. The office of the Registrar helped to identify the first study participant in each district who helped to identify the next participant. Each identified participant helped to identify the next participant until when the saturation of information in relation to the study questions was attained.

***Data Collection***

We carried out twelve (12) in-depth interviews (IDIs) using a Kiswahili semi-structured interview guide. The IDIs focused on particular themes in relation to factors influencing the migration of doctors from clinical practice in the public sector to non-clinical practice in the private sector. Each Subsequent interview helped to introduce new questions and probes until the tool became exhaustive [20].

The first author who was accompanied by a trained research assistant carried out all interviews. The interviews were carried out in the offices of the study participants or a designated place identified by the study participant. This aimed at ensuring natural setting and privacy. The research assistant audio-recorded all the interviews and was responsible for taking field notes. We stopped data collection after the twelve (12) interviews after attaining information saturation.

***Data Analysis***

Data were analysed using a thematic approach with the aid of NVivo programme version 10. At first, the audio interviews were transcribed verbatim. The first author repeatedly read the transcripts so as to get a general impression on how the findings respond to the study objectives. This was followed by the preparation of the initial codebook to guide the analysis. The codebook was then imported to the NVivo program. The first author did primary coding and shared the codes with the other authors where the discussion was held and final codes were agreed upon. The codes helped to identify the features of the data that appeared to be answering the study objectives. Basing on similarities and differences the meaningful codes were sorted into themes that described the factors influencing the migration of doctors from clinical practice in the public sector to non-clinical practice in the private sector.

**OPEN ACCESS JOURNAL*****Ethical Issues***

Ethical clearance for this study was obtained from the Muhimbili University of Health and Allied Sciences (MUHAS) Senate Research and Publications Committee. The permission to conduct research was obtained from the office of the Registrar of non-profit and profit organizations and from the heads of the organizations where these doctors were working. Before the commencement of the interview, written informed consent was obtained from each study participant.

**Results**

From analysis of the gathered information, we grouped the drivers for the migration of doctors from clinical practice in the public sector to non-clinical practice in the private sector into three themes: health system drivers, individual drivers and the external environment.

***Health systems drivers***

Majority of the participants mentioned poor work environment, heavy workload due to a shortage of clinicians and underfunded public health sector to have influenced their migration from clinical practice in the public sector to non-clinical practice in the private sector.

***Poor work environment***

Poor work environment attributed to; underequipped health facilities, harassment from the community, misinformed community on the underequipped public health facilities and lack of flexibility in the public sector were stated as key factors that influenced the doctors to leave the clinical practices in the public sector. Participants stated that clinicians in the public sector felt to be harassed by the community and not valued by the politicians and decision-makers. They felt that in many occasions, the blames on unbecoming conduct were all placed to service providers without a detailed investigation on the causal or source of the situation. On exemplifying this feeling on the value placed to the health workers by politicians, one informant stated:

*"...The problem in Tanzania is that the focus of the healthcare sector is at the community level, not the service providers. The service providers are not valued; that is why when a patient claim to be mistreated, the doctor is not listened to but s/he will be harassed by the politicians or even the public...in such a situation, how do you stay there?" (Informant no. 4).*

Furthermore, participants added that politicians on the situation of the underequipped public health facilities misinformed community on some occasions. They added that, while most of the public health facilities lacked basic equipment, drugs and supplies in some occasions, some politicians gave wrong information to the community of what they should get in the facilities, contrary to what was available. The shortage of the basics not only made the doctors to fail to provide optimal clinical services but also made them face the pressure from the community and politicians who demanded more than what was available.

*"You will hear politicians emphasizing that a certain group of people, let's say, pregnant mothers who give birth at the hospital, will be provided with all services free of charge*

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*covering everything required for child delivery. But practically, it is not the case ... and this brings problems to the healthcare providers including Medical Doctors...” (Informant no. 5).*

While comparing the work environment in the public sector to that in the private sector, participants stated that in the private sector there was high flexibility compared to the bureaucratic rigid nature of the public sector. To stress this, one informant said:

*“In the private sector if you see something that needs to be fixed today you have to do it on the same day. This is not the case in the public sector. A good example is ordering medicine/supplies from the Medical Store Department, sometimes they will tell you they are out of stock. You have to wait, you do not have an option; therefore, you may find that you treat the patient with something that is not right for the sake of saving the present condition.” (Informant no 4).*

**Heavy workload among medical doctors in the public health facilities**

Majority of the participants claimed heavy workload resulted from the availability of a few health workers in the public health facilities. This made them attend to a large number of patients per day than required. For some, this killed their creativity and sometimes felt that they failed to do their best to help their patients. Some went further to refer to international standards and the doctor to patient ratio in Tanzania. With no hope of seeing the situation improving in the near future, they decided to migrate from clinical practice and the public sector.

*“You attend many patients in a day and this does not motivate you. For example, per day one doctor can serve over 50 patients in the outpatient department hence this leads to exhaustion of mind and reduced efficiency. As time progresses many doctors suffer burnout, as they are overworked and being paid the same salary. This frustration grows and they decide to search for a better option hence ending up leaving their job and join the private sector.” (Informant no. 7)*

**Underfunded public health sector**

Some participants reported that chronically underfunded health sector was the root cause of their migration. The lack of equipment, medicine and supplies was a secondary problem due to lack of funds in the health sector. While working hard attending large cue of patients in a poor environment, some doctors complained also that the health workers in clinical practice were poorly remunerated. This made them feel dissatisfied with their work and when looking ahead the non-clinical works in the private sector they were seeing opportunities where there were a less stressful environment and the likelihood of being better remunerated.

*“In the private sector, I am very innovative than before. When you bring ideas people sit down and discuss how to fund it...subsequently, it is funded, but in the government, it's very rare due to the normal cry from everyone, shortage of fund...” (Informant no 6).*

**OPEN ACCESS JOURNAL****Individual drivers**

Age, area of specialization and enthusiasm to patients were stated as important individual factors influencing doctors to migrate from clinical practice in the public sector to non-clinical practice in the private sector.

**Moving for green pastures among young doctors**

Informants in this study revealed that it was easier for young medical doctors practicing clinical medicine in the public sector to make decisions, quit clinical practice, and join the private sector. The consideration of a better job and better pay to achieve their ambitions was important and starting afresh in another organization was not much difficult compared to aged clinicians. Aged clinicians in the public sector were hesitant to change job without having an assurance of the prosperity in the private sector where there is no guaranteed job security.

*“... I am still young and energetic. So far, I have worked for only five years since I graduated. I must seek a job that benefits my family and me at this age. If I will not do it now, I will not get another time to do it. It is my high time to utilize my energy to prepare for the future while living happily today.” (Informant no. 8).*

**Tempting public health as an area of specialization**

Some participants revealed that it is a growing tradition for many young Tanzanian Medical Doctors after their first degree in medicine, to go for a master's degree in Public Health (MPH). The participants added that the specialization in public health is tempting many doctors now as they feel it widens their field and influences them to move from clinical to non-clinical practice easily.

*“...I did masters of medicine in general surgery, and then I did another Masters degree in Public Health specializing in global health and research. After the MPH I felt very different in the way I viewed things than before, after this, I decided to move from clinical practice to non-clinical practice so that I can work in a place where I will directly work on research.” (Informant no. 4)*

Another informant added that he felt that going to the non-clinical practice will make him do things that have more impact. For him, most of the patients suffered from preventable conditions and hence targetting the prevention side would bring more impacts than continuing to be in clinical practice.

*“... My happiness is to help people who are in need. If a person is sick she/he should be treated ... I worked at one of the referral hospitals for some time..., I realized that most of the patients come from low-income families and most of the diseases they were suffering from are preventable. This pushed me to go for preventive service than curative services.” (Informant no. 7)*



**OPEN ACCESS JOURNAL*****Empathy for patients***

Some participants revealed that they shifted to non-clinical practice because of their empathy to patients. They felt highly concerned when seeing patients experiencing great pains amidst inadequate drugs and medical equipment that would not allow them to be treated effectively. One of the respondents said:

*"It was a hard time for me to see the patients failing to pay for services and leave them there without treatment. I felt very bad. It reached a time I was giving them money from my pocket so that they can pay for treatment. As far as moral values are concerned, you cannot let the patient die because one does not have money to pay for services. Ethically, and as far as my morals are concerned, it is intolerable to work in this kind of working environment."* (Informant no. 9)

***External environmental***

External environment attributed to peer pressure and community culture were other factors stated to influence the migration of the doctors from clinical practice in the public sector to non-clinical practice in the private sector.

***Peer pressure***

Majority of the participants claimed that peer pressure influenced their migration from clinical practice to non-clinical practice. They claimed that most of them, especially the young ones, are eager to learn from their fellows who have achieved in life. One said;

*"It is my friend who told me that being a doctor does not mean treating patients only; there is the prevention part of it. He informed me further that the big thing that we can do now is to prevent diseases and not to wait until people become sick then you start to treat them. After knowing that fact I lost interest in treating patients"* (Informant no 6).

***Failure to communicate to patients due to language barrier***

Some of the participants reported that the culture of certain communities influenced them to move to non-clinical practice. Some communities strongly upheld in their language. This became a challenge to the doctors in communicating with their patients. This situation gave doctors a hard time to work because of the communication barrier and with time lost interest in continuing working in the clinical areas.

One informant who exemplifies this situation said, *"I was employed by the Government as a Medical Doctor in a very remote place... It was very difficult for me to communicate with the patients due to language barrier...most of people in that place do not speak Kiswahili. It took me a lot of time to attend the patients and I was not enjoying my work...Gradually I was no longer interested to see patients and hence I started looking for another job outside the clinical practice"* (Informant no. 11)



**Discussion**

This study aimed to explore the drivers influencing doctors to migrate from clinical to non-clinical practice in Tanzania. Our study has revealed three groups of drivers; health system, individual and the external environment. However, these drivers are related to one another and they may influence each other. Our findings add on to what other studies in Tanzania and other places have documented about the human resources crisis and in particular the shortage of clinicians [6,7,21–25]. As observed in this study, poor work environment discourages many doctors from continuing with clinical practice. This is similar to what Sirili et al [21] documented about the poor work environment and the attrition of doctors from the public health facilities in districts in Tanzania. Wanjau et al., 2012 argue that there is good interaction between a good work environment, complete with all the equipment and necessary resources with employees' satisfaction and performance and customer satisfaction [26]. Anyangwe (2007) stated that the poor work environment in Sub Saharan Africa (SSA) contributes greatly to the international brain drain of physicians and nurses to high-income countries [8]. From our findings, it is worth to have confidence that improving the work environment in the public sector will reduce the attrition of doctors from clinical practice in the public sector to non-clinical practice in the private sector.

Heavy workload due to the shortage of health workers as stated by informants is not unique to this study. The shortage of human resources for health is far known since independence by the ministry responsible for health and in the last two decades, serious measures have been taken in order to address it [27–30]. Our findings partly provide information about the big picture of what is happening in SSA and the whole world. It is estimated that while SSA suffers a shortage of more than 1.8 million health workers the world suffers from around 7 million health workers [1]. The few available health workers in SSA are overwhelmed by the huge demands of the health care due to increasing ageing population, non-communicable diseases, injuries and communicable diseases [31].

Underfunding of the health sector in Tanzania as found in our study is similar to what was termed chronic underfunding of the health sector by the ministry responsible for health in 2008 [29]. This is contrary to what was agreed by the high-level forum meeting of African leaders in 2004 in Abuja Nigeria that each country member state should allocate at least 15% of their national budget to the health sector [32]. For many years, the health sector budget in Tanzania has been far low with the overwhelming increased health care demands [33]. The chronic underfunding of the health sector not only affects availability of equipment, medicine and supplies but also affects remuneration of the health care workers.

Our study findings depict that younger doctors are more likely to migrate to the private sector, unlike aged doctors. This is similar to the picture described for international migration of doctors to high-income countries as documented by Mwaniki et al in Kenya [34]. This is also similar to the experience from South Africa where financial incentives were documented as one of the drivers for migration of health workers [35]. Our findings are also in line with what Wilson *et al.*, (2009) stated on retention of healthcare professionals [36]. The later

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found that younger healthcare professionals have lower levels of job satisfaction while the older age group of 40 years and above retain some higher levels of job satisfaction and thus are less likely to make a decision on migration.

Specialization in public health and migration of doctors from clinical practice to non-clinical practice as found in this study may be partly explained by the development of research interest by these doctors. This may make them see a holistic picture of the health sector in comparison to treating individual patients. For decades, the training in medical school has been oriented towards the curative model while paying little attention to the prevention models [37]. The later makes them experience a different picture after having attained training in public health [38]. This may partly contribute to the doctors' migration to non-clinical practice to try what they have learnt in management and leadership. Although going to public health is equally important, measures are needed so that the efflux does not compromise health care services in the clinical settings.

Our study found peer pressure to influence the decision of doctors to migrate from clinical practice in the public sector to non-clinical practice in the private sector. Blacklock (2013) documented the effects of peer pressure to contribute to the brain drain of health workers from Africa to high-income countries [39]. In this meta-analysis study, it was revealed that friends who were already abroad influenced other health workers to migrate from Africa to abroad.

Although our study was about the migration of doctors from clinical practice in the public sector to non-clinical practice in the private sector, the contributory role of communication barrier as revealed in our study, conforms to what was documented on the effect of culture by Shemdoe [22] on the retention of health workers in rural Tanzania.

**Conclusion**

The findings of this study underscore that migration of doctors from clinical practice in the public sector to non-clinical practice in the private sector is multifactorial, being largely influenced by three-level drivers; health system, individual and the external environment. We argue that although it is the right of any employee to choose where and when to work, migration of clinicians from clinical practice to a non-clinical practice in an already clinicians' constrained health system needs to be controlled and reduced. We recommend joint efforts by all stakeholders to address the identified influencers from the health systems, individual and the external environment. The government in partnership with other collaborators should focus on improving the work environment, improve staffing and create role models in clinical practice to attract young doctors to work and stay in clinical practice.

**Trustworthiness**

We used the four criteria by Lincoln & Guba [40], *credibility*, *dependability*, *transferability* and *conformability* to assess the trustworthiness of our study findings. The credibility of our findings was enhanced through the adoption of well-established research methods, checking

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with participants on whether the researcher has accurately described what they stated during the interviews and consulting colleagues and experts on the subject matter. The dependability of this study was enhanced through the triangulation of the study setting, researchers and carrying out the data collection in the familiar settings of the informants. The themes in this study were inductively generated from the data in order to ensure that they reflect the informants' perspectives in order to enhance conformability and these were presented with the support of quotes. Thick description of the study setting and process enhances the transferability of the findings of this study.

The fact that data collection was done by a healthcare profession may have introduced social desirability effect. However, triangulation of methods and researchers were used to offset this limitation. Furthermore, this study is limited to Dar es Salaam which is a cosmopolitan city and perhaps the private sector is more attractive compared to the public sector compared to other non-cosmopolitan cities. Therefore, the findings of this study should be interpreted with caution.

**Conflict of interest**

All authors declare that they have no conflict of interest in this piece of work.

**Authors' contributions**

ET conceived the study, participated in its design, collected the data, analyzed the data and drafted the manuscript. GF and NS participated in the design, analysis and helped to draft and review of the manuscript.

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**List of Abbreviations**

IDI	In-depth Interview
MUHAS	Muhimbili University of Health and Allied Sciences
SSA	Sub-Saharan Africa

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