Career paths of Family Physicians in Uganda. A qualitative research on current activities and factors influencing the career course of Family Medicine graduates in Uganda.

De Rouck An, Universiteit Gent

Promotor: Prof. Dr. De Maeseneer Jan, Universiteit Gent

Co-promotor: Dr. Peersman Wim

Praktijkopleider: Dr. Lootens Marleen

Master of Family Medicine

Masterproef Huisartsgeneeskunde

2014 - 2015

ABSTRACT

Introduction: Family medicine as a speciality has recently started to gain attention and importance in Sub-Saharan Africa. Most countries in the region, including Uganda, have few family medicine graduates and there is still a lot of uncertainty about where these physicians fit in the existing health care system. This qualitative study looks at the current professional activities of family physicians in Uganda, factors influencing the decisions in career changes, their opinion on the role of family medicine in the current Ugandan health care system and opportunities for adjusting the Ugandan health care system in the future.

Methods: This is a qualitative research. Semi-structured interviews were conducted using an interview guideline. All interviews were audio-recorded, transcribed and thematically analysed. Participants were asked about their current professional activities, their own career paths and the motivations behind their decisions in career changes. Also their opinions on the role of family medicine in the current Ugandan health system and suggestions to change the health care system in the future were asked.

Results: A total of 24 interviews were conducted. Sixteen of the 24 family physicians work in the public health care system. They occupy various positions in various levels of the health care institutions. But most family physicians do not work as clinicians close to the community. They occupy management positions or staff departments of public health in regional referral hospitals. Many family physicians also practise in a private practice to generate an additional income because salaries in the public sector are insufficient. Motivations to change their careers are mainly financial, better working conditions and following promotional opportunities. The role of family physicians in Uganda is not clear and this is depicted by an uncertain career path. To shed more light on the speciality, the interviewed family physicians believe there should be family physicians in influential positions in Uganda, undergraduate medical students should be exposed to family medicine early in their training. It would be beneficial to the speciality to keep employing family physicians and to create jobs where they can practise closer to the communities and play a role as leaders in the primary health care team.

Discussion: Many countries in Sub-Saharan Africa are facing the difficult task of strengthening the primary health care delivery structure, while depending on insufficient financial and human resources. In Uganda, positions have been opened up for family physicians but these do not align with their expectations and vision of the role of a family physician within the context of a health care system in a developing country. Furthermore, the career path is unclear and somewhat disappointing which drives some family physicians out of the public health care system.

Conclusion: Uganda as a developing country depends on limited financial and human resources in adjusting the health care system towards a more primary care-oriented system. Family medicine can play a big role in this, but the road is long. Family physicians tend to leave the public health care setting or divide their time between the public and private setting because of low salaries and an unfulfilling career path. These are challenges that will have to be faced in the near future.

TABLE OF CONTENTS

ABSTRACT i

TABLE OF CONTENTS ii

ACRONYMS AND ABBREVIATIONS 1

PERSONAL INTRODUCTION 2

INTRODUCTION 3

Family Medicine in Sub-Saharan Africa 3

Human resources in health / primary health care in Sub-Saharan Africa 4

Family Medicine in Uganda 7

OBJECTIVES OF THIS RESEARCH PAPER 9

METHODS 10

Study design 10

Selection of participants 10

Data collection 10

Data analysis 11

Ethical approval 11

RESULTS 12

Respondents 12

Description of participants 12

Current professional activities 13

Positions held by family physicians in the public health sector 13

Careers in the private sector 13

Careers in the public setting 14

Available positions for family physicians in the public health system 14

Posting after graduation of Family Medicine 15

Promotional opportunities in the public healthcare system 16

Motivations to study family medicine / pursue a career in family medicine 17

Motivations for career changes 18
Changes from a job in the public health system to the private setting or an NGO 18
Changes from the private setting or an NGO job to the public setting 19
Motivations to combine working in the public health sector and in the private sector 19
Family physicians' opinions on family medicine in the current Ugandan health care system 21
Strengths 21
Weaknesses of the current system 22
Opportunities for family medicine in Uganda: adjusting the health system in the future ... 26
More family physicians in high influential jobs 26
Increase knowledge and exposure during undergraduate studies 27
Fund training 27
Create interesting career paths and promotional opportunities 28
Employ more family physicians in clinical positions at lower level 28
DISCUSSION 30
Summary 30
Strengths and limitations of this research paper 30
Comparison with existing literature 31
Implications for practice and research 32
CONCLUSION 33
ACKNOWLEDGEMENTS 34
REFERENCES 35
ATTACHMENTS 37

ACRONYMS AND ABBREVIATIONS

DH	District Hospital
DHO	District Health Officer
FM	Family Medicine
FP	Family Physician
GP	General Practitioner
HC II	Health Centre II
HC III	Health Centre III
HC IV	Health Centre IV
HR	Human Resources
HIV	Human Immunodeficiency Virus
IHSU	International Health Sciences University
MAK	Makerere University
MDG	Millennium Development Goals
MMed	Master of Medicine
MO	Medical Officer
MoH	Ministry of Health
MUST	Mbarara University of Science and Technology
NGO	Non-governmental organisation
RRH	Regional Referral Hospital
VHT	Village Health Team
WHO	World Health Organisation
WONCA	The World Organization of National Colleges, Academies and Academic Associations of General Practitioners/Family Physicians
USA	United States of America

PERSONAL INTRODUCTION

After a 3 month exposure to the health system in Uganda during my final year of undergraduate medical training in 2011, I got interested in the subject of primary health care in developing countries. Many issues struck me: for example severe illness due to late presentation, absenteeism by unmotivated health professionals, vertical programs that do not provide health care to those without a certain disease, etc. I witnessed insufficient primary health care to those who need it most: the poor in rural areas.

In Belgium, the first contact for a patient is the family physician. In Uganda, many patients who use the primary health care system never see a doctor in their life. Lower health centres and primary care facilities are not staffed by physicians. I wondered: is that why so many things go wrong with primary health care delivery?

After reading more on the subject and following a course on international health at the Institute of Tropical Medicine Antwerp, I realised that the structure of the health care systems in Sub-Saharan Africa is grossly different from the Belgian structure that I knew. Family medicine is an emerging speciality in Sub-Saharan Africa within a wider context of challenges in health care system strengthening, and more than anything: human resources in health.

Many areas remain unclear and there is room for a lot of research on the subject. I chose to look for those who are working in Uganda with a postgraduate degree in family medicine, “the pioneers”. Who are they and where do they work? In a time where there is still much uncertainty about their role in the health care structure, have they found a good place for themselves? I looked at their career paths and at the positions where they work at the moment. I want to share these findings with you and hope to clear some of the clouds. I want to make family physicians and their career more visible, because a lot more will be said about this speciality in Sub-Saharan Africa in the following years and the Ugandan family physicians need to be heard.

INTRODUCTION

Family Medicine in Sub-Saharan Africa

It has been shown that health care systems based on effective primary care with highly trained generalist physicians practicing in the community provide both more cost-effective and more clinically effective care than those with a low primary care orientation (1,2). Primary health care contributes significantly to the outcomes of health systems and to health indicators. The World Health Organization has called for health systems strengthening, centred on the strategies and principles of primary health care (3,4,5).

In Sub-Saharan Africa, the primary health care system still faces many challenges (3). Unlike in the western world where primary care physicians are usually the point of first clinical contact in the health care system, in areas of the world where doctor-patient ratios are low, the health care systems rely more on the traditional healers, nurse aides, nurses and bachelor-level doctors called 'medical officers', not postgraduate trained physicians as first clinical contact (1). African primary care systems are poorly resourced and hence rely considerably on the primary health care team, usually led by non-doctors. Generalist doctors are expected to staff district hospitals, to bring hospital care closer to the community. Most generalist doctors, including private GPs in the small private sector, function with only their undergraduate training (6).

More and more universities in Sub-Saharan African countries are starting to train doctors in primary health care, the new African family physicians (3). Family physicians in Sub-Saharan Africa function in a specific social, economic, cultural and health system context. Given their current roles as all-round clinicians in the district hospital and mentors of team-based care in the communities, family physicians feel the need for substantial training in surgical, anaesthetic, and procedural skills, as well as skills in mentoring and teaching to support the front-line primary care workers. This is reflected in a training that is significantly different from European or North American models (6,7).

South Africa was the first African country to incorporate family medicine into their health care system, and also to integrate family physicians into primary health care teams in the community. Besides South Africa, other countries, including Kenya, Uganda, Rwanda, and Ethiopia, are in the process of extending family medicine into their primary healthcare services to ensure appropriate physicians for local populations (3).

In 2009, a consensus statement on family medicine in Africa was developed during the 2nd African Regional WONCA (World Organisation of Family Doctors) Conference. The consensus statement defined the contribution of family medicine to equity, quality and primary health care within an African context, as well as the role and training requirements of the family physicians (8). This consensus is being used to engage various leaders in Sub-Saharan Africa on implementation of family medicine. A study on leaders' views on the benefits and concerns on development and implementation of family medicine in Sub-Saharan Africa, showed however that family medicine is still unknown or poorly understood. There is a need for greater clarity and advocacy to develop family physicians' roles from hospital-based practice, a phase in the development of comprehensive primary health care in Africa, to a concept of personal care for individuals and their families as understood and practised in high-income countries. (6). Creation of clear roles for family physicians/general practitioners in Sub-Saharan Africa will not only make the discipline more accepted by the public and other stakeholders but will also make the speciality more attractive for prospective students. It will prevent the feeling of being "a void" for graduates of the course, uncertain of where they belong in the system (9).

Human resources in health / primary health care in Sub-Saharan Africa

Health care in Africa is defined by its human resource challenge, the 'inverse primary care law'. For example in Uganda in 2011, the proportion of health worker posts vacant was 40% in larger health centres and 55% in smaller (mainly rural) health centres (10). Generally, the national level institutions have better staffing levels for all the cadres; doctors, allied health professionals and nurse/midwives as compared to the lower level institutions. This can be attributed to their central location with adequate social amenities, better housing, water, electricity and schools for their children. The central level institutions also have better and more modern equipment, better infrastructure and more adequate medical supplies. Rural areas lack many of these enabling factors that constitute the highly valued work climate by all health professionals (11). Reasons given by migrant health workers not to take up available posts in primary care are a poor working environment, difficult living experiences and a poor career path (10).

The shortage of primary care physicians in rural areas and in suburban townships, especially family physicians, has been a serious problem for decades, with major implications in access to health care for a substantial proportion of the population (3).

As said earlier, the overwhelming trend in Africa is towards task shifting in order to reduce dependency on doctors. However, it was resolved by the World Health Assembly in 2009 that primary health care teamwork should include family physicians (6). The shortage in physicians trained and working in family medicine is due to many factors including medical education, practice conditions, health system, regulatory, community, personal, family, and financial considerations (3).

A qualitative study among family physicians and their colleague health care workers on what challenges hamper Kenyan family physicians in pursuing their family medicine mandate, showed that the core challenges that need to be addressed were: being posted by the authorities to replace other consultants; a lack of awareness among colleagues concerning their roles as family physicians and institutionalised barriers such as centralised staffing systems (12).

An unclear role for doctors, due to doctor shortages creates conflict and sets up a vicious cycle of further doctor shortage, as they avoid working in primary care. There is a lack of understanding of family medicine by stakeholders, and as a result, there is limited HR policy support (3,13). The emergence of family medicine as a speciality is crucial in mitigating the health workforce challenges in Africa (3).

Medical education can play an important role in the recruitment and retention of rural physicians. Recruiting and retaining physicians in rural practice requires attention to the practice environment, health systems, financial and other factors. The two strongest predictors that a physician will choose rural practice are speciality and background (3). Introducing the discipline of Family Medicine to undergraduate students early in their medical training contributes to choice of speciality training later (14).

In a post-MDG environment, where service delivery is required, with emerging universal coverage systems in Africa, HR policy proposals need to clarify the competencies, structure and limits of primary health care teams, including the role and number of family physicians. It is critical that family medicine education also responds to these issues. Making an impact at scale requires comprehensive human resource planning for primary health care building. Whilst the positive view of family medicine by leaders is flattering to family physicians, a comprehensive approach is required to ensure the retention of highly trained health professionals in rural areas (13).

BOX: The organisation of Uganda's health care system

Health Centre Level		Population Served	Services Offered	Staffing norm
I	Village Health Team	Village (~1.000)	Limited service by providers without formal medical training	Volunteering village members.
II	Health Centre II	Parish (~5.000)	Ambulatory services that are the first interface between communities and formal health system.	Enrolled nurse (equivalent to licensed practical nurse).
III	Health Centre III	Sub-county (~20.000)	Preventive, curative and health-promoting services. Support and supervision of level II health centres.	Medical officer, registered nurse, enrolled nurse, nursing aid, laboratory technician.
IV	Health Centre IV	County (~100.000-500.000)	Same as HC III + emergency services such as caesarean delivery and blood transfusions.	Same as HC III + II MOs and anaesthetic officer.
V	District hospital or general hospital	District (~1.000.000)	Referral centre for HC IV.	Same as HC IV + multiple MOs, anaesthetist, medical superintendent.
VI	Regional Referral Hospital	Region (~2.000.000)	Referral centre for district general hospitals.	Same as HC IV + one specialist in each major discipline.
VII	National Referral Hospital	Nation (~34.000.000)	Referral centre for regional hospitals.	Multiple specialists and subspecialists.

Based on Ssenyonga et Seremba, 2007. (9)

The public health care system in Uganda consists of different levels of institutionalised care, the lowest being a Health Centre II (HC II), where no doctor is employed. A lower health unit is the 'Village Health Team' (VHT), a group of volunteers who play a role in health promotion in their villages. Members of the VHT are not medically schooled. When a patient needs to be referred from a HC II or needs services that are not available at that level, they are referred to the next level: a Health Centre III (HC III). This is the first level of the health care system where a doctor should be employed, usually a medical officer (general practitioner). Although, many HC IIIs currently function without a doctor. The next level for referral is the Health Centre IV (HC IV), where there is supposed to be a functional theatre for some emergency procedures. At this level there should be at least one medical officer employed. This staffing norm is very often not reached. At the next level of health care, in a bigger and more facilitated institution patients can be referred to a general hospital or district hospital. There is usually one district hospital per district. Often more than one medical officer is employed at this level and the facility is supervised by a medical superintendent, who is a doctor who also has a degree in Public Health. The next line is the regional referral hospital, where specialists supervise residents, medical officers and interns. The highest level of health care institution is the national referral hospital, Mulago National Referral Hospital in the capital, Kampala.

Family Medicine in Uganda

In Uganda, there is ongoing debate among health planners and professionals on whether the discipline of family medicine, promoted as a speciality, can play a significant role in improving health services delivery within the existing health care systems in the region (9).

The discipline of Family Medicine was first introduced in Uganda as a post-graduate speciality at Makerere University in 1989 by John Ross, a Canadian family physician (15,16). It has since been bogged down by uncertainty of survival, sustainability, enrolment disinterest, resistance from the major specialties and haphazard deployment of the few graduates of the struggling academic departments from the region (1).

The initial concept was to train primary care physicians to be stationed in rural hospitals in Uganda as part of an effort to support primary health care in the country. Training included a 3-year residency program leading to a Master of Medicine in Community Practice degree, with a theoretical component done at the university medical school in Kampala and a practicum placement at a model rural hospital under supervision of a specialist family physician (9,15,16). The pioneer family physicians were deployed to various hospitals within Uganda, mainly as hospital medical directors (medical superintendents). A similar program, sponsored by the German government was set up at the other medical school in the country, Mbarara University of Science and Technology. Significant internal reorganization of the speciality has been accomplished, including establishment of an expert panel to oversee the development of the discipline within Uganda and the region, recruitment of local academic staff, and renaming the speciality to a more internationally recognizable “family and community medicine”. Despite expressed interest in graduates by the government, and actual sponsorship covering tuition, the Ministry of Health has of yet been unable to formalize the specific roles family physicians are required to play within the health care system. This has resulted in lack of understanding of the usefulness of family physicians within the system, not only by other health professionals and the general public but also by medical students. Thus, enrolment and retention into the course remains unappealing to prospective students, largely due to an unclear career path (9).

Family physicians are registered as specialists by the Uganda Medical and Dental Practitioners’ Council – the licensing and regulatory body for health workers in Uganda. The Ministry of Health has employment positions for family physicians in national referral hospitals, regional referral hospitals and general hospitals, where they perform various roles

as hospital directors and heads of Community Health departments, as well as clinicians caring for both in- and out-patients. Some head district health systems as District Health Officers, where they provide leadership to district health teams (17). It is custom in Uganda that upon graduating the postgraduate training in family medicine, the Ministry of Health will post the graduate in an available position. Graduates do not apply for their own position and don't have control over the process. There is no correlation of this posting with their personal preference and ambition. Also as far as promotions are concerned, family physicians depend on the available posts as created by the Ministry of Health and availability in the hospitals and health centres.

During a national dialogue on 'The Future of Family Medicine in Uganda' in Kampala in June 2005 to address this question, Ministry of Health officials identified the recruitment, training and deployment of family physicians. They recommend posting at least three family physicians at each of the 85 general hospitals, at least one family physician at each of the 151 Health Centre IVs, and to equip each of the centres with functional operating theatres. The Ministry of Health has asked universities to scale up current training to prepare at least 400 new family physicians to meet the set target of one family physician per 75 000 Ugandans. But since then, no significant progress has been made (17,18).

Currently, there are three family medicine training programmes in Uganda: at Makerere University (MAK), Mbarara University of Science and Technology (MUST) and International Health Sciences University (IHSU). MAK and MUST are public universities, whilst IHSU is a private university (17).

OBJECTIVES OF THIS RESEARCH PAPER

The lack of understanding of the role of family physicians, the uncertainty of the career path and employment opportunities for family physicians in Uganda, have been identified as challenges in the current attempts to upscale family medicine in the country. It was one of the recommendations of the 3rd Family Medicine Conference held in October 2013 to document the stories of successful family physicians in Uganda (17).

This study aims at identifying the different professional activities and positions that family physicians hold in the current Ugandan health system and to explore their motivations in decision-making and changing the course of their careers. We explored their opinions on their careers and on family medicine in Uganda, both in the current health system and some of their suggestions or points of attention towards adjusting the health system in the future.

METHODS

Study design

This was a qualitative study, using semi-structured interviews of physicians who are professionally active in Uganda and have a postgraduate education in family medicine.

Selection of participants

Inclusion criteria were having a postgraduate degree in family medicine and being currently working in Uganda. Both physicians with a postgraduate degree obtained in Uganda and those with a postgraduate degree obtained abroad were included in the study. Participants were recruited from the Ugandan Medical and Dentist Practitioners' Council Specialist Register as available online and consulted at various times during the research period. This generated a list of 36 family physicians. By asking the participants in the interviews for contact information of more family physicians working in Uganda, 4 more family physicians were added to the list of possible participants. All of these 40 family physicians were contacted through e-mail and/or telephone by the author. Family physicians who did not practise in Uganda were excluded from the study.

Data collection

The interviews were conducted by the author, MD and resident in family medicine at Ghent University, and three final year medical students of Ghent University who went for an elective in Uganda. All interviewers were female. All interviewers were briefed on how to conduct qualitative interviews. The interviews were conducted at a place convenient to the interviewee, in a quiet place near their work place, chosen by the participant. An interview guideline was used, that was created during the process of study design by the author, Prof. Dr. De Maeseneer, Dr. Willcox and Dr. Peersman. The topics from the interview guideline are summarised in Table 1, the interview guideline itself can be found with the study protocol as Attachment 1 with this thesis. The participants were explained the purpose of the interview prior to the interview appointment, through e-mail or via telephone. Following written informed consent, participants filled in a quantitative questionnaire on their demographics, specifics of their training and the current setting of their professional activities. After this, a 30 to 60 minute qualitative, semi-structured interview was conducted. All interviews were digitally recorded. All interviews were conducted in English and transcribed

by the interviewer, verbatim. A total of 24 interviews have been collected. All interviews were conducted between October 2013 and May 2014.

1. Choice of speciality: motivations, exposure prior to the training, expectations towards training.
2. First job after graduation: where, which activities, how long before training in family medicine was started.
3. Career changes from graduation in medicine up to now.
4. Current professional activities.
5. Opinion on a career in family medicine in Uganda: personal fulfilment, financial security, enabling and limiting factors,...
6. Perspectives to the future: which new changes in the career, why,...
7. Family medicine in Uganda: training preparatory, opportunities, challenges, position of family medicine in the current health system, how can the structure be adjusted in the future,...
8. Contact information of other family medicine graduates.

Table 1: Topics that were addressed during the interviews.

Data analysis

Data about the description of the participants was deduced from the questionnaire. All data analysis from the qualitative interviews was done by the same person, the author of this thesis. The author coded all interviews using NVivo10, according to a topic index based on the different topics as defined in the interview guideline that was used by the interviewers. Code by code, all quotes with the same code were reread and grouped into categories of quotes about the same content. From these categories, results were deduced.

Ethical approval

Ethical approval was given by the University of Ghent (No. 2012/876), by the Mbarara University of Science and Technology Institutional Review Committee (No. 05/12-12) and by the Uganda National Council for Science and Technology (SS 3454). There were no monetary rewards provided to the respondents. The data produced by this thesis is presented in such a way that ensures anonymity of all interviewees.

RESULTS

Respondents

Of the total list of 40 names of family physicians obtained through the inclusion criteria, one family physician was excluded because of being involved in designing this study, one family physician had passed away, four were excluded because they didn't live and work in Uganda at the time of the study, six of them could not be reached because of incomplete or incorrect contact information, four were unable to set an appointment with the interviewers during the time that the interviewers were in Uganda. A total of 24 family physicians were interviewed during a physical appointment with the interviewers.

Description of participants

These data are deduced from the questionnaire that participants filled in prior to the interview. Five of the participants were women and nineteen were men. All participants were between the ages of 42 and 68 years old at the time of the interview.

Fourteen of the participants studied the undergraduate course of medicine at Makerere University, eight at Mbarara University of Science and Techonology and two studied medicine abroad, one in India and one in the USA. Ten of the participants studied the postgraduate training in Family Medicine or Community Practice at Makerere University, ten at Mbarara University of Science and Technology and four of the participants followed a postgraduate degree in Family Medicine abroad, two in the USA and two in South Africa.

Seven of the interviewees practice their profession mainly in a government institution, four work only in the private sector, nine combine both sectors and four participants work for an NGO, as presented in Table 2.

Private	4
Government	7
Combined government + private	9
Other (all specified: NGO)	4
Total:	24

Table 2: Professional activities of family physicians.

Current professional activities

Positions held by family physicians in the public health sector

Most (16/24) of the interviewed family physicians are currently working in the public health sector, fourteen of them in a hospital setting employed by the Ministry of Health, two of the interviewed family physicians work as lecturers for a Ugandan public university, employed by the Ministry of Education.

There is a big variety in the different settings where family physicians are practising: from Health Centre IV to the National Referral Hospital. The activities they do also vary from mainly clinical (senior and principal medical officers, consultant community medicine) to administrative positions (district health officers, medical superintendents). Although all of the former also perform administrative tasks to some extent.

In the following table, all the current positions the interviewed family physicians hold in the public sector and in which facility they practice as such, are enlisted.

Position	**Facility**	**Number**
Consultant Public Health	Regional Referral Hospital	5
Consultant Community Practice	Regional Referral Hospital	1
Lecturer	Regional Referral Hospital	1
Hospital Director	Regional Referral Hospital	1
Lecturer	District Hospital	1
Medical Superintendent	District Hospital	1
District Health Officer	District level	2
Medical Officer	National Referral Hospital	1
Medical Officer	District Hospital	1
Principal Medical Officer	District Hospital	1
Senior Medical Officer	Health Centre IV	1

Table 3: Current positions of interviewed family physicians in the public health sector.

Careers in the private sector

Positions in the private sector vary between different participants. Four participants work for an NGO. They do both clinical and managerial activities there. Four participants work in the private setting only. These are both private clinics and/or other non-medical private institutions where they hold high cadre positions.

Careers in the public setting

Available positions for family physicians in the public health system

Above in Table 3, all the positions are listed that the participants in this study currently occupy. From this, we can deduce a list of possible jobs where family physicians are placed within the current health system. We also added other possible positions mentioned during the interviews (19,20).

Medical officer: general doctor. After graduating in medicine and finishing the required internship, every doctor in Uganda will be recognized as a medical officer and can work in a health centre IV, a general or a district hospital, in a regional referral hospital or a national referral hospital.

Senior medical officer: a promotion after medical officer. This position does not require an additional postgraduate degree after the undergraduate degree of Bachelor in Medicine, but some years of experience.

Medical officer special grade (Community Health): a doctor with a postgraduate specialisation, who got a promotion to a higher salary scale. This posting should be possible at any level where doctors are placed: health centre IV, district hospital, regional referral hospital, national referral hospital.

Principal medical officer: a promotion after senior medical officer. Applicants are expected to have a Bachelor in Medicine and a postgraduate degree in either Public Health or MMed Family Medicine/Community Practice.

Medical superintendent: head of a health facility, i.e. a general or district hospital. Medical superintendents are employed by the District Local Government. This position requires a Bachelor in Medicine and a Master in Public Health (or a qualification considered equal, such as a Master in Family Medicine/Community Practice).

Consultant Public Health: someone with a Bachelor in Medicine and a postgraduate training in either Public Health or Family Medicine/Community Practice. Heads the department of Community Health in a regional referral hospital.

Consultant Community Practice: family physician holding the job of consultant in his own field of expertise, providing clinical care. Amongst the participant, only 1 family physician was working as such, in a regional referral hospital.

District Health Officer: the district director of health services. Carries out executive functions, which include planning, implementing district health activities, distributing drugs and vaccines, assessing manpower requirements and training needs, and monitoring and supervising district health activities (21). The salary scale for this position is the highest in the Ugandan Salary Scales for medical workers (20).

Hospital director: other than medical superintendent of a general or district hospital, family physicians may also head a regional referral hospital or national referral hospital. The latter was not the case at the time of this study.

Jobs within the Ministry of Health: family physicians may also apply and be taken into consideration for jobs within the Ministry of Health. None of the participants in this research were currently in such a position.

Senior consultant Community Practice or Public Health: theoretical promotion after the position of consultant Community Practice or consultant Public Health. There positions are currently not yet created by the Ugandan Ministry of Health.

Posting after graduation of Family Medicine

Noticeably all the participants once graduated in family medicine, were posted by the Ministry of Health. They expected to be posted at district hospitals or in lower level facilities, but since the Ministry of Health did not have posts for specialists at that level, they did not start working in rural areas at lower health centres.

"The expectations at that time, were that when I would complete family medicine, I would be working in an upcountry station that is mostly out of the city, and that I would be involved in clinical care, running of the hospital in general, coordinating work,… Basically, working in a general hospital. Because traditionally, specialists in Uganda mostly work in urban centres. So I expected that I would work in an upcountry centre, I would most probably work in a general hospital at the district level, and, yes, beyond my clinical work and public health work I would also find myself working in the management or leadership positions. That's what I foresaw." Participant n° 2.

Promotional opportunities in the public healthcare system

Family physicians usually wait a long time to get promoted and the opportunities to apply for jobs that will ensure a promotion to a higher salary scale are scarce.

> *"Well, the problem was, the career path was not clear there. So we did not have posting in the ministry of health. So for us, when we were training as family physicians, we thought we would do practice in the whole hospital. When the ministry of health developed the career posting, they posted us to referral hospitals. During the training, you do 7 months in every clinical discipline, so when you come out of there you want your career to be very versatile. You can handle the women, you can handle the children, you can handle accidents,… At that moment you need to be posted at a general hospital." Participant n° 3.*

Motivations to study family medicine / pursue a career in family medicine

When asked in the interview for the reasons and motivations to study a postgraduate course in family medicine, the desire for an all-round training to cater for most of the needs of a great variety of patients in the specific Ugandan district or rural setting was expressed. Mostly because of experiences during their first years of practising after graduation in medicine, participants wanted more knowledge and skills that would serve them while practising close to the communities. Some doctors also followed the course, knowing it would give them a broader knowledge enabling them to practice in a private setting.

> *"I wanted to remain in touch with all kinds of patients: children, mothers, old people. And all kinds of conditions. Because I worked in a rural area for 5 years after my graduation as a medical student. And I saw how people were suffering and I realised those patients, the children, the mothers were not able to go to the district level and downwards. So I thought when I do family medicine, I should be able to go back to the district. … To do it with quality care. I decided to do family medicine during my practice as a doctor in the rural hospital. It was in a very deep rural NGO hospital, far from any roads, very poor community. As I practiced I realised: "Now when I do surgery or I leave the children, I will never see the children again. I will never have the chance to be posted at the district hospital or lower units. I'll just be in the city, in the big hospitals and imagine now the children suffering, mothers dying." … When I heard about a course so general, I said "this is the one!"." Participant n°4.*

The fact that sponsorship was available for the postgraduate training was an extra motivation for many to apply for a place, even for those not particularly attracted to family medicine beforehand.

> *"I have to be honest, at first I didn't have an idea about family medicine. But they had a scholarship. And that is why I decided to do it. … Then, I really found it a whole, very comprehensive program covering all those things, the really, hands-on, practical, fitting the situation especially where I was working in the district. Where you don't have, sometimes, specialists and consultants to refer to. … Being in a position to solve most problems, would be the most adequate thing allowing me to continue treating the people there." Participant n°15.*

Overall, there had not been much exposure to the concept of family medicine during the undergraduate training, but most participants of the study gained their knowledge about the existence of the course rather through colleagues who graduated in family medicine with whom the interviewees worked during their first years after graduation, serving as role models. Some participants stumbled upon an advert for the training in the newspaper when exploring opportunities for further studies and inquired more information about it.

Motivations for career changes

Changes from a job in the public health system to the private setting or an NGO

Motivations mentioned by the participants to leave a job in the public health system for a job in the private setting, include better remuneration in the private sector. Working in a private practice or working for an NGO, generates a higher salary than what is paid in the public setting. There are also more opportunities to get promoted and develop a fulfilling career path.

"The motivation to change… In our setting here, it's more related to career fulfilment. The public health sector pays poorly compared to the private sector. So I worked more with projects, small, for better remuneration. It meets my personal goals more than when I work in the public sector." Participant n° 2.

Generally, working in the private sector creates better working conditions in more modern facilities. Some family physicians like this better because in the public facilities they can experience frustration because of lack of resources, materials,... In the private health sector they can spend more time on each individual patient, who is paying for that time, as compared to the limited time per patient in the public sector because of a greater number of patients using their services.

"I wanted to have an exposure, because this private hospital is a bigger hospital than the district hospital where I also work. The facilities are better here. That is one. And two, the pay is better here. That's why I decided to divide my time. I both work in the public district hospital and here, in the private hospital. This hospital is a bit... The equipment and what, you see now, there is a computer. Things like that. Theatre is a bit more equipped. We have better departments here." Participant n°8.

When applying for jobs, many family physicians have encountered difficulties because of the lack of understanding of the speciality in Uganda. Some family physicians failed to get promoted because of this and decided to start applying for jobs outside the public service, where a postgraduate degree will be valued equally whether it is in family medicine or a different specialisation. The feeling of stagnation in the career path because of less opportunities to promote is a motivator to look for a job outside the public sector.

"By then, it was difficult for the ministry of health to promote people with master of medicine in community practice. We did interviews, but we were not given opportunities. We started getting frustrated, some of us. I'd been there for about 2 to 3 years, with no promotion. So, there I got frustrated and somehow I wanted to, at least be promoted because I had the papers, the skills but the ministry was not promoting us. I decided to apply for a job outside public service. That's how I joined this NGO. Of course when you join an NGO your papers will be taken into consideration." Participant n°10.

Changes from the private setting or an NGO job to the public setting

Motivations to go back to a government job after having worked in the private setting or for an NGO, named by the participants are: ill-alignment with the curriculum and different expectations of a job in family medicine, unfavourable working conditions or feeling unsupported by superiors. NGOs often focus on a particular aspect of healthcare or disease burden, whereas family physicians are trained broadly and can miss applying all their skills when functioning within a structure of vertical programs instead of an all-round (primary) care job.

"I wasn't enjoying the administrative part of it. It wasn't my cup of tea. That's the main reason." … "At the NGO, it was focused in HIV only. And my other surgical skills weren't doing much. I wasn't enjoying it. I wasn't finding it very interesting. So I changed." Participant n°14.

Motivations to combine working in the public health sector and in the private sector

Despite the observation that sixteen of the 24 participants work in a government position, many of the family physicians who work in the public sector feel unappreciated because of the low pay in their current position. They supplement their income with other sources of income. Subsequently, not a full 100% of their professional time and attention goes to their job in the public sector. Some even express the desire to leave the public sector completely and look for greener pastures. This correlates with the information as depicted earlier in Table 2: only seven of the whole group of 24 family physicians work only in a government position.

"I have my own clinic. You know, this private clinic, I would say, is what supports the financial aspect. Because, really, the government pay is very low. And if you want to work in a place like that, then either you have to choose to work somewhere else, or not work there at all. The pay is very low. Because of that, for me, I also work private, right now. And it pretty much takes care of 80% of the finances. The government takes care of maybe 20%." Participant n° 6.

The activities to generate an additional income can be both medical and non-medical. Medical activities were mostly seeing patients in an existing private practice or health facility, some family physicians run a private clinic or pharmacy, overseeing a team of health workers. Some interviewees also generate an extra income through non-medical activities such as farming, rental houses, small businesses,...

"Because if we only live on the salaries which we earned, we may not be able to survive with our families and our children. So we do a little more. People go for private practice, people go for other businesses to try and make ends meet." Participant n° 19.

Because family physicians often work in managerial positions when they work in the public healthcare system, where they have little time to spend seeing patients, some miss the clinical practice and look for more exposure and opportunities for professional fulfilment in the private health sector, if they feel that they cannot practise to their full potential within their government position.

"I found that when I went to X (regional referral) hospital, they were lacking doctors in the surgical ward. So they said: 'You are a family physician and got surgery.' So there I worked in surgery. … But finally you come and manage the outpatient department. So we are doing a quarter of what we should be doing. You feel that you are doing a quarter of work. The only way we try to increase the amount of work we are doing is to do private. So by adding on my private practice I improve the amount of work to half way. Half way capacity work. So to me, I feel like I'm working underutilized. But to improve my utilization I do private practice." Participant n° 3.

On top of getting more exposure to clinical work in the private setting, family physicians feel a strong responsibility for the community, for whom they trained to become a family physician and want to continue providing quality care for them. On top of generating an additional income for themselves, setting up a private practice creates more jobs.

"Actually what I am trying to do, I am trying to use my private practice to provide to the community. Two, to try to maintain in touch with my clients and skills. And maybe to employ and keep some people busy. But otherwise my private practice, very early,… I started up a clinic of mine 3 years ago, I am just developing it slowly. What I benefit more, is adding hands on. But profit-wise I am not yet making it. It is now trying to maintain the other skill, trying to keep myself up to date with that I am a family physician. Though I am now a DHO, but I must keep appraised with the clinical skill." Participant n° 7.

Family physicians' opinions on family medicine in the current Ugandan health care system

Family physicians have varying opinions on their position in the current Ugandan health care system. They identify strengths of the speciality mainly in their broad knowledge and skills, which makes them good clinicians who can serve at different levels of the health care system and at the same time have a good knowledge about administration and management, which is also beneficial when working in managerial positions or in local leadership posts. On the other side, the current health system shows many weaknesses that leave family physicians with much certainty about their role and future within the Ugandan healthcare system: they cannot control their post after graduation, the career path is not clear, they are rarely placed in clinical positions close to the communities and for promotion they depend on new posts made available by the Ministry of Health.

Strengths

Strength as clinicians with broad range of skills

The postgraduate training in family medicine is very thorough in many clinical fields, graduates feel that they gained a lot of knowledge and clinical skills which can serve them well at the level of primary health care.

> *"When you practice medicine in this part of the world, you don't have specialisations in most of the health units. The only places where you'll find specialists, will be the regional referral hospitals. Even those, they have very few. Most of the doctors who work in Uganda and I believe in most other parts of Africa, have got to have hands-on (experience) on almost every discipline around. … So, the nature of the disease patterns and the ratio between doctor and patients really determines that someone should do something like family medicine." Participant n° 22.*

Strength as managers with broad clinical knowledge

When family physicians fulfil a mainly administrative job, they still feel like the training in family medicine has been beneficial to their ability of executing the job. For example, their clinical skills may come in handy when a difficult case presents and there is shortage of staff, inability to refer the patient because of urgency or infrastructure, etc. Also, the knowledge and experience they have built through having studied and practised as a generalist doctor, adds to their managerial potential. They have a clear view on which materials and logistics are important when managing a healthcare facility or heading a health district.

"I am not a DHO who sits in the office, no. I go on ground in these facilities. So, as much as I have cleared the bit of office work and there is room for me to go to facilities and mentor staffs. So, I combine 2 things, what we call the support supervision, I combine it with mentorships, on-job training of staffs. … I want my theatre to start working. I want to mix in myself practically. If you'd come to my district, you'll find me in a clinical coat in the office. Because I am an administrator but by the way, when there is a problem I can just go and handle. So, these small problems, like small procedures, I can work on them. If their doctor is not there, I can work on them. Myself as a DHO." Participant n° 7.

Though it may differ from their expectations at the beginning of their career, family physicians also get a feeling of fulfilment from being in a higher, more administrative position. They feel like through management positions, they have a greater impact and influence than when remaining in a clinical position.

"If you go to higher positions, it means you practice management. As opposed to when you are in a rural position, clinical positions. If you practice your management skills, you feel good also. I think it is a motivation. And also the need to help, I mean, because in a management position, in a higher post, you help more people. Your own skills are being used by a bigger proportion of the population than when you are at a lower post. So I think that is also a motivation." Participant n°12.

Also, family physicians feel that there is the need for better leadership at the lower healthcare structures. They can exhibit this leadership and improve health services delivery closer to the communities.

"We need to pick up leadership positions within the health sector. If you look at the district health system, that is where most of the primary care is offered, there is low leadership. … I feel that it is there where the family physicians really can make a contribution. We should be able to do the clinical work, but also we should be able to give leadership to the health sector, it is still lacking." Participant n°2.

<u>Weaknesses of the current system</u>

Posting

Most of the interviewed family physicians who graduated in Uganda, expected that upon graduation from the postgraduate training, they would be posted at the district hospital level. However, because the career path and employment options of family physicians are not clear, they were posted at higher levels, being the national referral hospital and regional referral hospitals. Even though a family physician may have wanted to work in a district setting, he/she depends on the available positions for posting by the Ministry of Health.

"Actually when we were training and when we qualified, we thought we would go for clinical. But as I said as you fit in the system, it dictates. The system dictates because of the weaknesses here and there. It will dictate, it will push you somewhere else." Participant n° 10.

The expectations of the job after graduating from family medicine were not met. Because the districts are under local government, and in the local government structure after decentralization of social services and so on.. There's no structure for a specialist. And we didn't know that. So after graduating, family medicine went to the ministry for posting, which was the original idea for starting the family medicine course and then the ministry of health and the ministry of public services didn't have a structure. Then the local government and the districts didn't have posts for specialists. Because we had done a 3 year clinical course, we qualified to be a specialist. So they said districts, local governments, cannot take a specialist, therefore we would be under the central government. The central government only posts doctors in national and regional hospitals. Participant n° 4.

Insecurities about the career path

Family physicians are under the impression that their specialisation is less appreciated compared to others, because of the difference in promotion opportunities. The option of diverting to public health has been created: having a postgraduate degree in family medicine also makes it possible to work in the position of public health consultant, heading a department of community health at the regional referral hospital level. This may not feel as the ideal position in the health system, but family physicians still choose to work in these positions because it is an option for promotion and earning a higher salary.

"The biggest problem is the career path. Because we need to identify that as a speciality. So that we can go through consultant, senior consultant or medical superintendent, consultant, senior consultant in that path. That path is not yet clearly identified. That's why most people now go into public health. When they think family medicine, they divert into public health. Like now I am a consultant in public health although my training is as a family physician, but I have been taken to public health. So the clear pathway to career guidance, career path, should be identified in Uganda." Participant n° 19.

"If there would be better openings up there to be continued in, to practice in family medicine, I would not be a DHO. Even if you give it to me next week and I had better options than being a DHO financially, immediately, I take it over." Participant n° 7.

Secondly, at general hospital or at district hospital level, usually no consultants are employed. The staffing of district hospitals is under the responsibility of local authorities, not the central government.

Because then the districts are under local government, and in the local government structure after decentralization of social services and so on.. There's no structure for a specialist and we didn't know that. So after graduating, family medicine we went to the Ministry for posting, which was the original idea for starting the family medicine course and then the Ministry of Health and the Ministry of Public Services didn't have a structure, then the local government and the districts didn't have posts for specialists. Because we had done a 3 year clinical course, we qualified to be a specialist. So they say districts, local governments, cannot take a specialist, therefore we would be under the central government. The central government only posts doctors in national and regional hospitals. Participant n° 4.

Thirdly, there are no postings for senior consultant Public Health or senior consultant Community Practice within the regional referral hospitals, the career path stops at the highest position of Consultant Public Health or Consultant Community Practice, which is not the case for the other specialists who graduated in internal medicine, paediatrics or obstetrics and gynaecology.

"... Not even consultant. We just remain medical officer special grade. Now when they brought in, every regional referral hospital they want a consultant public health. So they had to take us, that people who have done community practice are the ones who qualify to become consultants. But even then it has stopped here. There is no slot for senior consultant public health in this country. So some of us are going to retire at that level. It's now seen." Participant n° 2.

"We have kept saying, because right now the highest you can go in consultant public health. And yet the highest post that other specialists can go to is senior consultant. And perhaps consultant emeritus. So, that career path also has not yet really been fully established. And it's like the chicken and egg. The ministry says that "Where are the family physicians so that we can give them jobs?" And we say " But the family physicians cannot, I mean the doctors cannot be encouraged to train in FM when you have not created the jobs." So that dialogue is still continuing." Participant n° 11.

Many family physicians work in an administrative position

When family physicians climb up the promotional ladder, they automatically end up in an administrative position away from the district level, which leaves them no time to practice their broad clinical skills and continue seeing patients and handling clinical cases. This contradicts the intention of upscaling family medicine in Uganda to support the provision of quality primary healthcare at lower level facilities.

"I was now promoted to consultant public health. So I came in here as the head of department of community health. And then, from there, I have actually lost touch with the clinical work. I'm now purely doing public health activities." Participant n° 23.

Lack of well-paid clinical positions close to the community

Although family physicians are interested in practising medicine close to the community, their career often leads them to a higher position where the work is more administrative and managerial. Also, very few hospitals at health centre IV or general/district level employ family physicians in clinical positions. The salary for a family physician with some experience or promotions is higher than the salary of medical officer and because of this, local governments may prefer or are only able to employ medical officers instead of a medical officer special grade, senior medical officer or principal medical officer. Family physicians find themselves applying for jobs away from the communities although being aware that their intention at the beginning of their career was to work at a lower level of the healthcare system.

"Even me I applied at regional referral hospitals recently. Why did I apply? It is because now, by the time I took up this course, I knew I must be able to progress and become a consultant. But it is not the most ideal place. But because if I find the post is only available there, what do I do? I have to go to that level." Participant n° 7.

"In the current system there is no ideal position for a family physician. Because a family physician really is the community based practice person. And the healthcare delivery system doesn't reach the community level. It stops at the health centre II level. Which is still an institutional healthcare delivery structure. So the institutional healthcare delivery will be good if they could be placed, maybe at health centre II. But health centre II, given the government establishment does not employ a doctor. Health centre III does not employ a doctor. So the lowest possible position is health centre IV. Now HC IV employs a medical officer, they do not employ a specialist, that is just the system. So you cannot have a family physician at HC IV. The position now which can engage a FP is the general hospital at the district level. So, in the current system that is where the starting point, the entry point for the FP. From the district, the general hospital, to the regional hospital, then the national referral hospital. So, the community based aspect is not there."Participant n° 11.

Opportunities for family medicine in Uganda: adjusting the health system in the future

Although family physicians in Uganda currently face many challenges when building their careers, they believe there are many opportunities for family medicine. Upscaling family medicine can lead to a better provision of primary health care but there is a long way to go. The participants feel that in order to upscale family medicine in Uganda, some adjustments should be done to the current public healthcare system. These are making family medicine more visible by putting family physicians in high influential position, exposing undergraduate students to the speciality earlier during their medical training, attract more students to family medicine by providing sponsorship for the postgraduate programs, making the career path for family physicians more interesting and restructure the healthcare system so that family physicians can also practise in positions close to the communities.

<u>More family physicians in high influential jobs</u>

To raise awareness and knowledge on family medicine of the policy makers, family physicians would like to see more of their colleagues in positions where they are heard more clearly. They could advocate for family medicine in Uganda and have a positive influence in the process of increasing the number of graduates and employing family physicians in positions where their skills can be used to the fullest.

> *"Recently I have even applied for one of those bigger posts of the commission. If I qualify, I take it up. It helps both career and also helps the issue of the profession being neglected. Unless if many of us go to the higher level."Participant n° 7.*

> *"At the time that we were finishing, the career path was actually not there. Because you'd go to the director of health services, go to the commissioner in charge of clinical services, and they don't even understand what you're talking about. They don't even know the course. … In fact it is even better to go to the minister of health and create more awareness, create sensitisation and the best way to create sensitisation, I think is the family physician himself in some of the places. If they are not there, these are people who will never understand what these family physicians are talking about. It's a new phenomenon in the healthcare system of Uganda." Participant n° 15.*

Some family physicians who are currently working in administrative positions already see this as an opportunity to advocate for the visibility of the speciality.

> *"I choose to do management first of all to promote family medicine from my management position, to contribute to the management planning meeting. But also to be able to… When you're managing money, then you have resources. And you should think that when you have resources, you also have resources for yourself." Participant n° 3.*

Increase knowledge and exposure during undergraduate studies

Some of the participants think that exposing undergraduate medical students to family medicine early in their studies will increase their knowledge and interest in the speciality. This might have a positive influence on the number of students applying for the postgraduate training.

> *"I have the feeling, if they had a full unit in the university, one, they can influence the university administration, even to start FM maybe as one of the subjects in undergraduate, so that is implanted in people's minds much earlier. Than just mere starting it at postgraduate. And so that people come up when they already have that wider perspective, wider way of looking at things, from the time they are studying in medical school." Participant n° 15.*

Fund training

To upscale family medicine in Uganda and to attract more family medicine trainees, the Ugandan Ministry of Health should allocate scholarships to students pursuing a postgraduate training in family medicine.

> *"With scholarships for family medicine we get more students, we have a large number of them and then to open the path for them to go where we really want them. To give better services instead of having them in the [higher healthcare facilities]." Participant n° 4.*

> *"As a family physician we are at the far front as far as primary healthcare is concerned. And I would encourage that the government actually sponsor more doctors, to encourage them to pursue family medicine, so that they are an all round doctor. Also to work in those areas. Most of the specialists [are] not willing to work in the rural areas. So I think if we got more family physicians then we shall have doctors at HC IVs and all general hospitals to handle most of the patients. Because most of the patients in Uganda are handled at general hospital or district hospital level. Most of the cases are handled at that level. … So I think that if we train more and more family physicians that would be better." Participant n° 8.*

Create interesting career paths and promotional opportunities

Many of the interviewed family physicians regret the limited career path opportunities in Uganda for graduates in family medicine. This scares away students who consider the course. With few promotional perspectives and an unclear future, the postgraduate course cannot attract more students. This issue should be high on the list of tactics to upscale family medicine: create a clear career path, with visible and interesting promotional opportunities, which make a career in family medicine as attractive as any other specialisation.

"The career path in this country is not there. … Even now, enrolment for community practice, there are very few students coming in. … They start, continue asking, but what are you going to become when you finish? … We have been given those positions of consultant public health. And yet we didn't purely do public health. And if public service of Uganda did not consider giving us that option, of getting promoted to consultants public health, I would still be just a medical officer special grade. The career path for family medicine is very unclear in this country. When I finish, what are my promotional avenues? So that I continue in that field of family medicine? Not diverting me to this one or the other one." Participant n° 23.

Employ more family physicians in clinical positions at lower level

Family physicians feel like they can serve best at a level of healthcare provision as low as possible to the community. Here they can fulfil a combination of providing clinical care, because they are well trained in a variety of skills, and at the same time be given a local leadership position in organising the health facilities. The lowest institutionalised care at the moment is the health centre II. But with the current numbers of doctors and other healthcare professionals, this would not be feasible in Uganda. A health system reorganisation would be needed, together with improvements in human resources for health, to create a system whereby doctors can practice within their status as specialised physician but in a health facility close to the community. However, at the moment, the lowest level where doctors with a postgraduate diploma can be employed within their position as specialist, would be at the district level, which is not even done at the moment because of financial decisions made by local authorities operating on a limited budget defined by the central government. Most of the participants think that this is the structure where they should be employed today. When numbers of graduates in family medicine gradually increase, they can continue to do their jobs at lower level health facilities.

"Their skills can be utilised in DHs and HC IVs. That's the best place. That's where the majority of patients is. We don't have many specialists down there. Other specialists, internal medicine, surgeons, etc. They are not there. But if you place a FP there, that is the best place for him. Because he knows paediatrics, he knows surgery, he knows obstetrics an gynaecology, he knows administration." Participant n°24.

However, it has to be noted that working as a family physician in these lower healthcare facilities cannot implicate a lower salary.

"We must balance these issues. The ability to cause the changes, but also the ability for these family physicians to live comfortably. That is a strong issue. That is affecting the choices of family physicians in our country. … You need to combine those needs from university with what's on the ground. How can a family physician live? You can't go to say, educating people, telling people to take your children to school, education is very important, when your daughter has not gone to a very good primary school. You're deceiving yourself as a family physician. So, you must have the resources. … But if you don't have resources, that are not allowing you to stay alive, then you cannot be a good family physician in the community." Participant n° 7.

Family physicians can play a role in the primary healthcare team, where a lot of attention should go to preventive healthcare. A lot of the preventive healthcare is currently organised through vertical programs and disease-oriented approaches. Family physicians believe that by changing the healthcare system structure and placing them closer to the communities, this can have a positive effect on how both preventive healthcare and curative healthcare is organised in Uganda today.

"I think there is more that should be given to the graduate of family medicine, as far as clinical care is concerned. But you know it's a policy thing. The placement of a family physician in the healthcare delivery structure, it's not clear in the policy aspect. Because it's a whole change of concept. Because if you would like to make family physicians the foundation of healthcare delivery, then you would have to reorganise the whole healthcare delivery" Participant n° 10.

"Right now, the doctors are far detached from the communities. The communities reach the doctors only when they are very sick. So having a family physician at that community level would prevent a lot of severe sickness and therefore burden. Burden of disease, and burden on the finances of the country. So I think the country would gain by investing in the family physician. Investing in the family physician is actually investing in the people. ... Not only for the cure of illnesses but on the prevention aspect. The family physician will ensure that people are healthy. Prevention, health promotion, health education, those things. Things that the nursing assistants or the enrolled nurse at the lower healthcare delivery structure may not feel confident to communicate the community about. So I think the government or the country would gain a lot. The people definitely would gain a lot by having a family physician right at their doorstep." Participant n° 11

DISCUSSION

Summary

Many of the participating Ugandan family physicians work in a position in the public healthcare system. Positions vary but most family physicians work as administrators. They do few clinical activities and are not posted close to the communities. The motivations for family physicians to take decisions that influence their career path are mostly financial, following the available career path, looking for promotional opportunities, wanting to work in a good facility and feeling appreciated for having obtained a postgraduate degree. These factors have led to many family physicians combining a career in the public healthcare setting with activities in the private setting or having left the public healthcare system completely. Many family physicians work in private practice to supplement their income and to keep in touch with the clinical aspect of family medicine. Family physicians feel that they are good clinicians and good potential leaders, but for the development of their careers they depend mainly on the posting by the Ministry of Health after graduation based on the available posts. They rely also on available positions for further promotions, which divert the family physicians in administrative jobs away from the communities, as opposed to their own expectations after graduation: they expected to be posted in clinical positions close to the communities. Family physicians see several opportunities to improve the healthcare system in Uganda and the role of family physicians. They would like to see more family physicians in influential positions, they want to see posts created with a more clinical component closer to the communities, they want the career path to be made more interesting and they feel that more students would be interested in pursuing the course if they were exposed to family medicine earlier during their training and if scholarships would be available for the postgraduate training.

Strengths and limitations of this research paper

In this thesis, the opinions of 24 Ugandan family physicians were explored. Although these are not all the family medicine graduates who are currently working in the country, they represent the population quite well since they work in various positions in both the public and the private health sector. Interviewers may have accessed supporters of family medicine more easily, which may have lead to a bias towards more supportive views. The thesis is limited considering all data analysis was done by one person. The findings cannot be generalized to other Sub-Saharan African countries because only the Ugandan career paths in the public

health system were considered. Despite these limitations, data can be of importance in the debate on the role of family medicine in Uganda.

Comparison with existing literature

For family physicians in Uganda and other countries in Sub-Saharan Africa, a big motivation to choose a certain career path is the remuneration. When applying for a promotion or when exploring new job opportunities, the financial aspect plays a big role. This is a difficult point in Uganda's public healthcare system: all healthcare workers, not only doctors, are underpaid. Insufficient salaries may drive family physicians away from the public health system. There is evidence that financial-incentive programs can have a positive effect on retaining health workers in underserved areas (22). But the question remains, how feasible is this for Uganda, a developing country with limited financial and clinical resources as is? WHO has developed recommendations on how to improve the recruitment and retention of health workers in underserved areas (23). The issue of strengthening health systems based on the primary health care approach should be kept high on the international political agenda. One of the tasks for Uganda and all developing countries in the region is to train and retain adequate numbers of health workers, with appropriate skill mix, including primary healthcare nurses, midwives, allied health professionals and family physicians, able to work in a multidisciplinary context, in cooperation with non-professional community health workers in order to respond effectively to people's health needs (24).

Even when staying within the public health system, when family physicians in Uganda want to build their career and follow the promotional pathway that has been developed for them by the Ministry of Health, they don't see all their skills being utilized. They were trained to be broad clinicians who can handle most cases at a lower health institution and to exhibit local leadership, to lead a primary healthcare team and take away pressure from the tertiary centres. However, a good majority are working in managerial positions away from the communities or as public health specialists, heading a department of Community Health (17). This contradicts the consensus on the role of the family physician in Africa as a primary healthcare team player and leader (8). Furthermore it does not align with the prior observations that the role of family medicine is valued by leaders (13). Further efforts should be done to expand the positions in which family physicians can work in the public healthcare system, more in line with this consensus (8).

Exposing students earlier in their undergraduate studies to family medicine has been suggested by the participants to increase interest and eventually numbers of candidates for the postgraduate training. In an American study, attitudes about family medicine were indeed influenced by a required clerkship, more students preferred family medicine after the clerkship than before it (25). But no studies have been done on this subject in a Sub-Saharan African context, that the author is familiar with. Background does play a role in choice of speciality: exposing students from a rural background to family medicine may have some effect, or introducing these elements into the admissions process and the medical curriculum can encourage family medicine as a career choice (26). Currently the family physicians don't often come in contact with medical students, as they are placed in non-clinical postings. Further building the family medicine departments within the Ugandan universities is an important step in both strengthening the training and increasing students' knowledge on the speciality.

Implications for practice and research

With some motivations of family physicians to leave the public health care sector uncovered, interventions can be proposed to address these challenges. Cost-effective human resource models will be important in shifting the paradigm towards a healthcare system based on primary health care, with a role for family physicians in the primary healthcare team.

The statements of the participants of this research were not compared to the current Ugandan Ministry of Health officials' visions on the role and future of family medicine in Uganda, this may be interesting to explore in further research.

CONCLUSION

Family medicine is an emerging specialisation in Uganda. There is still a lot of uncertainty about the role family physicians play in the Ugandan health system and what their ideal level of employment is to fulfil a role as primary care clinicians and local leaders in health care provision. Their potential as all-round clinicians close to the community is contradicted by their placement in higher, managerial positions. With an unclear career path and few promotional opportunities available, it seems the speciality is still under-valued by the Ugandan Ministry of Health as compared to the other postgraduate courses.

Although family physicians are very motivated and sufficiently trained to work as clinicians close to the communities, this is not where the Ugandan health care system places them at the moment. The career path drives them to managerial positions. Guided on a promotional pathway away from the communities, family physicians in Uganda are not fulfilling their potential roles as key players in quality primary health care delivery.

For the family physicians currently working in Uganda, their career path has been leading them to various jobs both within and outside of the public health system. The main motivations to change the course of their careers are financial, following the few promotional opportunities there are within the public health system and looking for a job where they practise in good working conditions.

It is a challenge for the Ugandan policy makers to find a way to incorporate family medicine at the community level in the health care system and at the same time ensure an interesting and financially satisfying career path for family physicians. This requires comprehensive human resource planning and is an area for further research.

ACKNOWLEDGEMENTS

The process of writing this thesis was a long but interesting and rewarding journey. I would like to thank my promotor Prof. Dr. Jan De Maeseneer for giving me the opportunity to dig into this subject in my beloved Uganda. I thank Dr. Willcox and especially Dr. Peersman for all the support and advice they provided me with during my first ever experience with qualitative research. I thank Dr. Mubangizi and Dr. Namatovu for their help in Uganda.

A special thank you to Hanna Kevers, Miet Plettinck and Sofie Van Den Abeele, who also conducted some of the interviews.

I would like to thank all my supervisors who supported me during my years as a family physician in training: Dr. Christian Bachman, Dr. Han Martens, Dr. Bieke Dewilde and all other doctors I have worked with in the departments of geriatrics and emergency medicine of Sint-Lucas Hospital Ghent, Dr. Marleen Lootens and Dr. Patrick Govaert from Huisartsenpraktijk Meerhout in Oostakker. I would also like to thank Dr. Bruno Boone and Dr. Marc Cosyns, my residency coordinators.

And of course my greatest gratitude and love go to my family and especially my parents for their continuous support during my studies, work and African adventures. I would like to thank my boyfriend Simon for his patience and assistance, my friend Fien for motivational cheers and all other people who I could lean on during this journey.

.

REFERENCES

1. Ssenyonga R. Family Medicine may be helpful in improving health care delivery in Sub-Saharan Africa. Afr Health Sci. 2007;7(2):120-1.
2. Atun R. What are the advantages and disadvantages of restructuring a health care system to be more focused on primary care services? Copenhagen: WHO Regional Office for Europe (Health Evidence Network report); 2004.
3. Kiguli-Malwadde E, de Maeseneer J, Kansiime C. Developing family medicine in Africa. Africa Health 2013, 35(4): 27-29.
4. WHO. The World Health Report 2003: Shaping the Future. World Health Organization; 2003.
5. WHO. The World Health Report 2008: Primary Health Care: Now More Than Ever. World Health Organization; 2008.
6. Moosa S, Downing R, Mash B, Reid S, Pentz Z, Essuman A. Understanding of family medicine in Africa: a qualitative study of leaders' views. Br J Gen Pract. 2013;63(608):e209-16.
7. Reid SJ, Mash R, Downing RV, Moosa S. Perspectives on key principles of generalist medical practice in public service in sub-Saharan Africa: a qualitative study. BMC Fam Pract. 2011;12:67
8. Mash R, Reid S. Statement of consensus on Family Medicine in Africa. Afr J Prm Health Care Fam Med. 2010;2(1), Art. #151, 4 pages.
9. Ssenyonga R et Seremba E. Family Medicine's Role in Health Care Systems in Sub-Saharan Africa: Uganda as an Example. Fam Med 2007;39(9):623-6.
10. Moosa S, Wojczewski S, Hoffmann K, Poppe A, Nkomazana O, Peersman W et al. The inverse primary care law in sub-Saharan Africa: a qualitative study of the views of migrant health workers. Br J Gen Pract. 2014 Jun;64(623):e321-8.
11. Ugandan Ministry of Health. Human resources for Health bi-annual report. "Improving HRH Evidence for Decision Making". Kampala: Ugandan Ministry of Health; 2011.
12. van der Voort CT, van Kasteren G, Chege P, Dinant GJ. What challenges hamper Kenyan family physicians in pursuing their family medicine mandate? A qualitative study among family physicians and their colleagues. BMC Fam Pract. 2012 Apr 26;13:32.
13. Moosa S, Downing R, Essuman A, Pentz S, Reid S, Mash R. African leaders' views on critical human resource issues for the implementation of family medicine in Africa. Hum Resour Health. 2014 Jan 17;12:2.

14. Omotara BA, Asuzu MC, Padonu MK. The dynamics of medical students career and medical specialty choices, and their implication for medical education in developing countries: a Maiduguri Medical School study. East Afr Med J. 1991;68(7):547-54.
15. Ross JM. General practice training in Uganda. Part 1: Setting, personnel, and facilities. Can Fam Physician. 1996 Feb;42:213-6.
16. Ross JM. General practice training in Uganda. Part 2: Training program and clinical practice. Can Fam Physician. 1996 Feb;42:226-9.
17. Besigye IK, Namatovu JF. Scaling up Family Medicine in Uganda. Afr J Prm Health Care Fam Med. 2014;6(1).
18. Haq C, Welishe G. The past, present and future of Family Medicine in Uganda. Wonca News. 2005:8–10.
19. HSC Guidelines for the Recruitment of Health Workers in Districts and Urban Authorities 2005. http://hsc.go.ug/content/hsc-guidelines-recruitment-health-workers-districts-and-urban-authorities-2005
20. Uganda Ministry of Public Service. Salary Scales for Public Servants. http://www.publicservice.go.ug/dmdocuments/New%20Salary%20Structure%20FY%202014-2015%20General.pdf
21. Hutchinson P, Habte D, Mulusa M. Health care in Uganda: selected issues. World Bank Discussion Paper No. 404, 1999.
22. Bärnighausen T, Bloom DE. Financial incentives for return of service in underserved areas: a systematic review. BMC Health Serv Res. 2009 May 29;9:86
23. WHO. Increasing Access to Health Workers in Remote and Rural Areas Through Improved Retention. World Health Organization; 2010.
24. Sixty-second World Health Assembly: Primary health care, including health system strengthening. World Health Assembly 2009, 62(12):1-3.
25. Senf JH, Campos-Outcalt D. The effect of a required third-year family medicine clerkship on medical students' attitudes: value indoctrination and value clarification. Acad Med. 1995 Feb;70(2):142-8.
26. Gill H, McLeod S, Duerksen K, Szafran O. Factors influencing medical students' choice of family medicine: effects of rural versus urban background. Can Fam Physician. 2012 Nov;58(11):e649-57

ATTACHMENTS

ATTACHMENT 1: Research Protocol

ATTACHMENT 2: Ethics Committee

Attachment 1: Research Protocol

RESEARCH PROTOCOL

1. Presentation

- **Title**

Career paths of Family Physicians in Uganda. A qualitative research on current activities and factors influencing the career course of Family Medicine graduates in Uganda.

- **Investigators**

From Ghent University:
- Promotor: Prof. Dr. Jan De Maeseneer, Head of Department of Family Medicine and Primary Health Care.
e-mail: Jan.demaeseneer@ugent.be
- Researcher: An De Rouck, Family Medicine resident.
e-mail: an.derouck@ugent.be
- Researcher: Wim Peersman, Department of Family Medicine and Primary Health Care.
e-mail: wim.peersman@ugent.be

From Mbarara University of Science and Technology:
- Researcher: Dr. Vincent Mubangizi, Lecturer, Department of Community Practice and Family Medicine.

From Makerere University:
- Researcher: Dr. Jane Namatovu, Head of Department of Family Medicine.

From University of Oxford:
- Researcher: Dr. Merlin Willcox, Department of Primary Care Health Sciences.
e-mail: merlin.willcox@phc.ox.ac.uk

2. Background

In Uganda, an estimated 45 Family Physicians have graduated from Uganda's program since its inception 20 years ago. A logical place for them to work would be in rural areas, where the need of comprehensive primary healthcare is the greatest. It has been shown that health systems based on effective primary care with highly trained generalist physicians practicing in the community provide both more cost-effective and more clinically effective care than those with less primary care orientation. Despite a growing amount of research that points at this crucial role of Family

Physicians in the health systems, the role that Ugandan Family Physicians are currently playing in today's health care structure is not clear. This research wants to explore the career paths of graduated Family Physicians (further abbreviated to FPs), the motivation of FPs for the career choices they have made, the opportunities they see for Family Medicine in Uganda's health care systems and the challenges they see that come with their specialty.

The importance of this research lies in the uncovering of trends in the career paths of FPs and the underlying reasons, so that in the future, structural changes can be made to the training of Family Physicians and the health systems in which they work to ensure better alignment of the supplier and the consumer of primary health care.

3. Objectives and research questions

- **Objectives:**

- To investigate the current activities of Family Physicians graduated in Uganda.
- To explore career changes and underlying motivation.
- To explore the applicability of Family Physicians in the current Ugandan health system.
- To explore future potential opportunities for Family Medicine in the Ugandan health system.

4. Methods

- **Study population**
    - **Selection and definition**

Target population: all doctors who graduated from Uganda's Family Medicine Program. We will attempt to reach all graduated Family Physicians to ask them to participate in the study.

- **Criteria for inclusion and exclusion**

Inclusion criterion: Graduated as a Family Physician in Uganda.
Exclusion criteria: unattainable Family Physicians.

- **Description of mechanisms of recruitment**

Through a University database of graduated Family Physicians and personal contacts, we will contact all traceable FPs through e-mail and/or telephone, to inform them about the study and the process of parttaking.
The participants will be recruited through personal connections and a University database of graduated Family Physicians.

- **Sample size:**

Since we expect that the current activities of the Family Physicians will be very variable, all of those graduated since the start of the Family Medicine Training Program will be asked to participate in the research. This is an estimate of 45 FPs.

- **Procedures**
  - **Data collection**

Data will be collected through a questionnaire and semi-structured interviews, to be carried out by Medical Students of Ghent University who rotate in Mulago Hospital and Mbarara Regional Referral Hospital

  - **Data analysis**

Transcription and qualitative analysis of the interviews through coding and interpretation.

- **Quality assurance**

All the interviews will be conducted and transcribed in English. There will be no need for translation.

All students who conduct the interviews had a training in communication skills. They will be briefed about the objectives of the research and about the topics they have to discuss during the interview. They had a training in research methods, in which qualitative research methods were also taught.

The interviews will be conducted according to a guideline.

5. Ethical considerations

- **Informed consent**

Individual written consent will be obtained from each interviewee.

- **Consequences for participants and investigators**
  - **Participants**

No physical and/or psychological effects. There is a potential risk to the participants if they are outspokenly critical of the government.

  - **Investigators**

No biochemical risks, no psychological consequences, no risks from the environment.

- **Confidentiality, anonymity?**

All data will be stored anonymously after collection. Participant information will be kept confidential, and all data will be anonymised so that particular statements cannot be attributed to a particular person. The interviews will be conducted in a place where the participant feels at ease to speak freely without being overheard.

- **Data storage and protection**

All collected data and personal information about the participants will be securely stored, on a password-protected computer.

- **Ethical review committee**

Approval of the ethics commity of both Mbarara University of Science and Technology and Ghent University will be sought.

6. Timetable

- **Planning/organisation of the study**
  - **questionnaire design, recruitment, purchases**

June 2012 – August 2012

  - **permission**

September 2012 – November 2012

- **"Pilot study"**
  - **testing of methods and questionnaires**

November 2012 – December 2012

  - **adjust procedures as result of pilot**

December 2012

- **Final study**
  - **data collection**

November 2012 – March 2014

- **analysis**

January 2013 – April 2014

- **presentation of results and write up**

January 2013 – May 2014

7. References

Mash R, Reid S. Statement of consensus on Family Medicine in Africa. Afr J Prm Health Care Fam Med. 2010;2(1)

Ross JM. General practice training in Uganda. Part 1: Setting, personnel, and facilities. Can Fam Physician. 1996 Feb;42:213-6.

Ross JM. General practice training in Uganda. Part 2: Training program and clinical practice. Can Fam Physician. 1996 Feb;42:226-9.

Ssenyonga R, Seremba E. Family Medicine's Role in Health Care Systems in Sub-Saharan Africa: Uganda as an example. Fam Med 2007;39(9):623-6.

Ssenyonga R. Family Medicine may be helpful in improving health care delivery in sub-Saharan Africa. Afr Health Sci. 2007 Jun;7(2):120-1.

8. Appendices

Appendix A : Informed Consent Form

Appendix B : Questionnaire

Appendix C : Interview guideline

NAME INTERVIEWER: _____ NUMBER PARTICIPANT: _____
DATE OF INTERVIEW: _____

APPENDIX A : INFORMED CONSENT FORM

Study Title:

Career paths of Family Physicians in Uganda.

Principal Investigators:

An De Rouck, Family Medicine Resident, Ghent University
Wim Peersman, Researcher, Ghent University

Jan De Maeseneer, Head of Department of Family Medicine and Primary Heatlh Care, Ghent University
Vincent Mubangizi, Department of Community Health, Mbarara University of Science and Technology
Jane Namatovu, Head of Department of Family Medicine, Makerere University

INTRODUCTION

What you should know about this research study:

- You are being asked to join this research study.
- This consent form explains the research study and your role in the study
- Please read it carefully and take your time to decide
- You are a volunteer. You can choose not to take part and if you join, you may quit at any time. There will be no penalty if you decide to quit the study

Purpose of this research:

- To investigate the current activities of Family Physicians graduated in Uganda.
- To explore career changes and underlying motivation.
- To explore the utility of Family Physicians in the current Ugandan health system.
- To explore future potential opportunities for Family Medicine in the Ugandan health system.

Why you are being asked to participate

You graduated as a Family Physician in Uganda. The course of your career from graduating up to today is the main interest of this research project.

NAME INTERVIEWER: _____ NUMBER PARTICIPANT: _____
DATE OF INTERVIEW: _____

Procedures:

You will be asked to fill a questionnaire and you will be interviewed.

Risks / discomforts

None

Benefits

None

Incentives / rewards for participating

None

Protecting data confidentiality

Data confidentiality is ensured: all participant information will be kept confidential and all data will be anonymised so that particular statements cannot be attributed to a particular person.

Protecting subject privacy during data collection

Your privacy will be respected at all times.

Right to decline / withdraw

You have the right to decline participation or withdraw from the study at any time.

What happens if you leave the study?

Withdrawal from the study will be without consequence.

NAME INTERVIEWER: _____ NUMBER PARTICIPANT: _____
DATE OF INTERVIEW: _____

Who do I contact if I have questions or a problem?

- **Contact for principal investigator**

  An De Rouck
  an.derouck@ugent.be
  +32495046337

What does your signature on this consent form mean?

Your signature on this form means

- You have been informed about this study's purpose, procedures, possible benefits and risks
- You have been given the chance to ask questions and response given before you sign
- You have not waivered any of your human rights
- You have voluntarily made an informed decision to participate in this study

| --- | --- | --- |
| Name of participant | Signature of participant | Date |

| --- | --- | --- |
| Name of person obtaining consent | Signature | Date |

NAME INTERVIEWER: _____ NUMBER PARTICIPANT: _____
DATE OF INTERVIEW: _____

QUESTIONNAIRE

- Gender: what is your sex?
  - ☐ Male
  - ☐ Female

- Age: In what year were you born? _____

- Marital status: what is your marital status?
  - ☐ Now married
  - ☐ Widowed
  - ☐ Divorced
  - ☐ Separated
  - ☐ Never married

- Origin: Region: _____
  District: _____

- Year of start of medical studies: _____

- University where medical studies were taken
  - ☐ Makerere University
  - ☐ Mbarara University of Science and Technology
  - ☐ Gulu University
  - ☐ Other, please specify _____

- Year of graduation in Medicine: _____

- Year of start of Masters in Family Medicine: _____

- University where master studies were taken:
  - ☐ Makerere University
  - ☐ Mbarara University of Science and Technology
  - ☐ Gulu University
  - ☐ Other, please specify _____

- Year of graduation in Family Medicine: _____

- Region where you currently practice your profession: _____

- Institution where you currently practice your profession is based in:
  - ☐ National capital
  - ☐ Regional capital

☐ District capital
☐ Rural

other: _____

- Do you currently practice your profession mainly in:
  ☐ Private practice or institution
  ☐ Government institution
  ☐ Both
  ☐ Other, please specify: _____

- Institution where you currently practice your profession is:
  ☐ HC III
  ☐ HC IV
  ☐ District hospital
  ☐ Regional hospital
  ☐ National hospital
  ☐ Other, please specify: _____

- Please fill in the following schedule with your main professional activities.
  Specify for each different item:
  - where you perform the activities
  - whether this is a private or government insitution
  - whether your activities are: clinical / administrative / teaching / research / other
  (if other, please specify)

NAME INTERVIEWER: _____ NUMBER PARTICIPANT: _____

DATE OF INTERVIEW: _____

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
8 am – 9 am							
9 am – 10 am							
10 am – 11 am							
11 am – 12 am							
12 am – 1 pm							
1 pm – 2 pm							
2 pm -3 pm							
3 pm – 4 pm							
4 pm – 5 pm							
5 pm – 6 pm							
6 pm -7 pm							
7 pm – 8 pm							
8 pm -9 pm							
9 pm – 10 pm							

INTERVIEW GUIDELINE

The students who conduct the interviews will be trained before how to gather information. Open questions will be asked on the following topics, the interviewer will stimulate the interviewee to share as much as possible and try to be as specific as possible throughout the interview.

The following topics and the question examples serve as a support during the interview, but are not a fixed questionnaire to be followed. All topics have to be addressed during the interview.

ALWAYS MAKE SURE INFORMED CONSENT IS SIGNED BEFORE STARTING THE INTERVIEW!!!

1. Choice of specialty

- Why did you choose family medicine as a specialty?
- At what time during your career did you know you were aiming for a masters in family medicine?
- What were your motivations to choose family medicine?
- Did you get exposure to family medicine before choosing the specialty? Explain.
- Expectations of training
- Expectations of job

2. First job after graduation

- After graduation from medical school, where did you start work?
- What were your activities there?
- When did you start the Family Medicine training?
- Describe the duration and content of your training.
- Where did you start work after the Family Medicine Training?
- Describe how much of your work was clinical, how much was leadership, research,…
- Evaluate the job you are practicing now compared to your expectations before you started as a Family Physician.

3. Career changes from graduation to now

- Describe the complete course of your career from graduation in medicine until today.
- For every change in location/job content/... ask about: motivation? Advantages/benefits of the change? Disadvantages of this change?

4. Current professional activities

- Complete this part of the interview by talking about the schedule the participant filled in. Ask about every aspect in the schedule: what kind of activities, where,...

5. Opinion on a career in Family Medicine in Uganda

- personal fulfillment: Why do you think a job in family medicine can give someone personal fulfillment? Do you get this fulfillment from the job you are currently practicing?
- work/life balance: How do you keep the balance between work and personal life? How is this balance for doctors active in Family Medicine?
- goal achievement: Are you achieving your professional goals?
- financial security: Is the job you are practicing at the moment sufficient to feel financially secure?
    - If the interviewee is willing to discuss, ask about: how much money he/she makes from what part of their professional activities. How much money is needed to provide them of a standard of living they feel is needed?
- enabling factors to facilitate the work as family physicians
- limiting factors

6. Perspectives to the future

- Are you planning new changes in your career? What changes, when? Why?

7. Family Medicine in Uganda

- Do you feel that the training you received was sufficiently preparatory for the profession you are practicing now?
- What was good about the training?
- What could have been improved ?
- How can family physicians in Uganda best contribute to the provision of quality primary health care to the Ugandan population?

- According to you... What are opportunities for Family Medicine in Uganda?
- Challenges for Family Medicine in Uganda?
- Present Health system structures: where is Family Medicine?
- Adjusting health systems in the future: how? Where do you think Family Physicians should be?

8. Other contacts

- Please could you give us the names, address, e-mail, and telephone numbers for any other family physicians whom you know in Uganda? Could you contact them to introduce us to them?
- This information will be kept confidential and will only be used for the purpose of inviting them to participate in this study.

Attachment 2: Ethics Committee

Universitair Ziekenhuis Gent

UNIVERSITEIT GENT

Afz: Commissie voor Medische Ethiek

COMMISSIE VOOR MEDISCHE ETHIEK

Huisartsgeneeskunde en Eerstelijnsgezondheidszorg
Kliniekgebouw 3 - 6de Verdieping
Prof. dr. Jan DE MAESENEER
ALHIER

Voorzitter:
Prof. Dr. D. Matthys
Secretaris:
Prof. Dr. K. Vandewoude

CONTACT	TELEFOON	FAX	E-MAIL
Secretariaat	+32 (0)9 332 56 13 +32 (0)9 332 59 25	+32 (0)9 332 49 62	ethisch.comite@ugent.be

UW KENMERK	ONS KENMERK	DATUM	KOPIE
	2012/876	03-jan-13	Zie "CC"

BETREFT

Advies voor monocentrische studie met als titel:
Career paths of family physicians in Uganda. A qualitative research on current activities and factors influencing the career course of family medicine graduates in Uganda - MAnaMA An De Rouck

Belgisch Registratienummer: B670201215748

* Adviesaanvraagformulier (volledig ontvangen dd. 04/12/2012)
* Antwoord onderzoeker cfr. Mail dr. An De Rouck dd. 20/12/2012 op opmerkingen EC dd. 06/12/2012
* (Patiënten)informatie- en toestemmingsformulier (E.)

Advies werd gevraagd door:

Prof. dr. J. DE MAESENEER ; Hoofdonderzoeker

BOVENVERMELDE DOCUMENTEN WERDEN DOOR HET ETHISCH COMITÉ BEOORDEELD.
ER WERD EEN POSITIEF ADVIES GEGEVEN OVER DIT PROTOCOL OP 21/12/2012. INDIEN DE STUDIE NIET WORDT OPGESTART VOOR 21/12/2013, VERVALT HET ADVIES EN MOET HET PROJECT TERUG INGEDIEND WORDEN.
Vooraleer het onderzoek te starten dient contact te worden genomen met het Trial Bureau (09/332 05 00).

THE ABOVE MENTIONED DOCUMENTS HAVE BEEN REVIEWED BY THE ETHICS COMMITTEE.
A POSITIVE ADVICE WAS GIVEN FOR THIS PROTOCOL ON 21/12/2012. IN CASE THIS STUDY IS NOT STARTED BY 21/12/2013, THIS ADVICE WILL BE NO LONGER VALID AND THE PROJECT MUST BE RESUBMITTED.
Before initiating the study, please contact the Trial Bureau (09/332 05 00).

DIT ADVIES WORDT OPGENOMEN IN HET VERSLAG VAN DE VERGADERING VAN HET ETHISCH COMITE VAN 15/01/2013

THIS ADVICE WILL APPEAR IN THE PROCEEDINGS OF THE MEETING OF THE ETHICS COMMITTEE OF 15/01/2013

- *Het Ethisch Comité werkt volgens 'ICH Good Clinical Practice' - regels*
- *Het Ethisch Comité beklemtoont dat een gunstig advies niet betekent dat het Comité de verantwoordelijkheid voor het onderzoek op zich neemt. Bovendien dient U er over te waken dat Uw mening als betrokken onderzoeker wordt weergegeven in publicaties, rapporten voor de overheid enz., die het resultaat zijn van dit onderzoek.*
- *In het kader van 'Good Clinical Practice' moet de mogelijkheid bestaan dat het farmaceutisch bedrijf en de autoriteiten inzage krijgen van de originele data. In dit verband dienen de onderzoekers erover te waken dat dit gebeurt zonder schending van de privacy van de proefpersonen.*
- *Het Ethisch Comité benadrukt dat het de promotor is die garant dient te staan voor de conformiteit van de anderstalige informatie- en toestemmingsformulieren met de nederlandstalige documenten.*
- *Geen enkele onderzoeker betrokken bij deze studie is lid van het Ethisch Comité.*
- *Alle leden van het Ethisch Comité hebben dit project beoordeeld. (De ledenlijst is bijgevoegd)*

CONTACT	TELEFOON	FAX	E-MAIL
Secretariaat	+32 (0)9 332 56 13 +32 (0)9 332 59 25	+32 (0)9 332 49 62	ethisch.comite@ugent.be
UW KENMERK	**ONS KENMERK**	**DATUM**	**KOPIE**
	2012/876	03-jan-13	Zie "CC"

- *The Ethics Committee is organized and operates according to the 'ICH Good Clinical Practice' rules.*
- *The Ethics Committee stresses that approval of a study does not mean that the Committee accepts responsibility for it. Moreover, please keep in mind that your opinion as investigator is presented in the publications, reports to the government, etc., that are a result of this research.*
- *In the framework of 'Good Clinical Practice', the pharmaceutical company and the authorities have the right to inspect the original data. The investigators have to assure that the privacy of the subjects is respected.*
- *The Ethics Committee stresses that it is the responsibility of the promotor to guarantee the conformity of the non-dutch informed consent forms with the dutch documents.*
- *None of the investigators involved in this study is a member of the Ethics Committee.*
- *All members of the Ethics Committee have reviewed this project. (The list of the members is enclosed)*

Namens het Ethisch Comité / On behalf of the Ethics Committee
Prof. dr. D. MATTHYS
Voorzitter / Chairman

CC: UZ Gent - Trial Bureau
UZ Gent - Beheer en algemene directie
FAGG - Research & Development; Victor Hortaplein 40, postbus 40 1060 Brussel

Universitair Ziekenhuis Gent
De Pintelaan 185,B- 9000 Gent
www.uzgent.be

Wendy Van de Velde
09/332 56 13
wendy.vandevelde@uzgent.be