A multi-country qualitative study on general practitioners' migration in Europe – Is the grass really greener on the other side?

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Voorwoord

Deze masterthesis is het resultaat van een internationale studie uitgevoerd door vier verschillende auteurs van twee verschillende universiteiten in Europa; Thierry Vanderheyde en promotor Nele Michels van de Universiteit van Antwerpen en Marta Velgan en promotor Ruth Kalda van de Universiteit van Tartu, in Estland.

Alle vermelde auteurs hebben een significante bijdrage geleverd aan het uiteindelijke eindproduct en voldoen aan ten minste een van de volgende criteria [aanbevolen door de ICMJE (http://www.icmje.org/recommendations/)]:

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- het artikel opstellen of kritisch herzien voor belangrijke intellectuele inhoud

Hierbij hebben Thierry Vanderheyde en Marta Velgan het onderzoek geleid, onder supervisie van hun beide promotoren met regelmatige feedback om zo tot het eindproduct te komen. Naar beide auteurs zal verder in deze studie gerefereerd worden als “de onderzoekers” (“the researchers”).

Omwille van het internationale karakter van deze studie werd het geheel in het Engels geschreven en in artikelvorm gegoten. Dit met de uiteindelijke bedoeling deze studie als artikel te publiceren in een internationaal tijdschrift. Om deze studie als masterthesis in te dienen werd de indeling van het artikel deels aangepast aan de criteria van het ICHO, dit in overleg met de promotor.

Abstract

Introductie: Het tekort aan artsen, met huisartsen voorop, is op heden een wereldwijd fenomeen. Dit werkt enerzijds emigratie van artsen van landen met een lager inkomen naar landen met een hoger inkomen in de hand, wat dan weer verdere tekorten van artsen in deze minder ontwikkelde landen veroorzaakt. Vermits de eerstelijnszorg gezien wordt als het fundament van de gezondheidszorg, brengt dit tekort aan huisartsen de werking van de eerstelijnszorg in gevaar, en daarmee mogelijks ook de hele gezondheidszorg.

Doel van de studie: Het identificeren van de motiverende en demotiverende factoren die de migratie van Europese huisartsen tussen Europese landen beïnvloeden, alsook de redenen waarom sommigen uiteindelijk beslissen om te blijven of terug te keren naar hun thuisland.

Methode: In deze kwalitatieve studie werd gebruik gemaakt van semi-gestructureerde individuele interviews bij Europese huisartsen die waren geëmigreerd naar een ander Europees land, daar uiteindelijk zijn gebleven of ondertussen reeds zijn teruggekeerd naar hun thuisland. Deze interviews werden door middel van Zoom uitgevoerd, dit tot data saturatie werd bereikt. Deze opnames werden getranscribeerd waarna hierbij een onafhankelijke thematische analyse werd uitgevoerd door 2 onderzoekers door middel van de NVivo Software (Release 1.5).

Resultaten: In totaal werden 15 individuele interviews met huisartsen van 8 verschillende Europese landen in de periode maart-april 2021 uitgevoerd. De meeste deelnemers waren geëmigreerd van een land met een lager inkomen naar een land met een hoger inkomen. Professionele ontwikkeling werd genoemd als de belangrijkste reden voor migratie, terwijl persoonlijke redenen en zowel de algemene situatie als de gezondheidszorg in het thuisland ook een belangrijke rol speelden in deze beslissing. Min of meer dezelfde redenen werden genoemd als redenen om uiteindelijk te blijven, om terug te keren naar het thuisland of om verder te migreren naar een ander land. Voor deze uiteindelijke beslissing werd wel gezien dat persoonlijke redenen meer beïnvloedend waren dan professionele redenen en de organisatie van de gezondheidszorg.

Conclusie: De redenen waarom Europese huisartsen al dan niet blijvend emigreren, kunnen in 3 groepen worden onderverdeeld: professionele ontwikkeling, persoonlijke redenen en de situatie in het thuisland/de organisatie van de gezondheidszorg. Hoewel sommige factoren, vooral persoonlijke, moeilijk te veranderen zijn, zouden andere bevindingen de beleidsmakers kunnen helpen om strategieën te ontwikkelen om huisartsen in de eerste plaats te behouden en misschien zelfs terug te laten komen naar hun thuisland na een verblijf in het buitenland.

Keywords: Primary healthcare, Doctors migration, General practitioner, Family medicine

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Introduction

The shortage of general practitioners (GPs) is a growing problem in most countries in the world (1-4). Primary care is considered to be the foundation of the healthcare system. Therefore, strong primary care is essential for providing accessible and good functioning healthcare, as well as for health promotion of the whole population (3). It has been described that in countries where primary care is well organized, people have better health outcomes and healthcare resources are more equitably distributed among the population (5). The low attractiveness of the GPs' profession, the lack of social recognition, the negative attitude, the difficult working conditions and lower salary compared to other specialist doctors are considered to be the leading reasons for GP shortage (6). This crisis is both a cause and a result of migrating GPs throughout Europe and throughout the world. It encourages the migration lower income to higher income countries – called a brain drain by some – which on the other hand causes a shortage of doctors, mostly in lower income countries (4, 7-10).

Migration of healthcare workers in general is a well-documented phenomenon. Less documented is the migration of GPs (8, 10-14). While the situation in main immigrant receiving countries like the UK, Ireland, the USA, Australia, New Zealand and Canada has been well-studied, migration to and from other European countries has only occasionally been researched (14-16). According to the OECD, the UK and Ireland are the biggest receiving countries in Europe with respectively 38% and 34% of foreign-trained physicians. Furthermore, there are huge differences in migration between non-English speaking countries in Europe: foreign-trained physicians range from 0,6% in Poland to 18,8% in Switzerland while the number of overall foreign physicians ranges from 3,2% in Poland to 30,2% in Luxembourg. The OECD study showed that nearly all European OECD countries increasingly rely on recruiting health workers from abroad to fill their shortages (17). Why and how people migrate is a complex issue that is being studied worldwide. However, the reasons for the migration of doctors are not so uniform and are constantly changing (10, 16). The concept of pull and push factors is being used as a practical framework for identifying and understanding the causes of migration. The push factors encourage the healthcare professional to leave the home country, while pull factors facilitate the transfer to a new country (16). Klein et al. (2009) added plant factors to this framework, as incentives to stay (18).

As far as we know, no multi-country study about migrating GPs through Europe has appeared yet. As little research focuses on the subgroup of GPs (1, 2, 4, 5, 19), this study is an opportunity to focus on understanding the migration flow of GPs within Europe as a whole instead of per individualized country. The aim of this study is therefore to describe motivating and demotivating factors influencing European GPs to migrate to a new country, to stay after migration in the new country, and/or to return to the country of origin. Insight in this phenomenon could enable the countries involved to change policies and to set up retention strategies if needed and create better solutions to the workforce crisis to protect their own healthcare system.

Method

Study design and setting

A qualitative research method was chosen to explore in depth GPs experiences, beliefs, values and motivations regarding migration (20-22).

Participants and recruitment

Through purposive and snowball sampling, using contacts, mailing lists and online social media platforms (Facebook, Twitter, LinkedIn), emigrant and returned GPs from different WHO Euro-countries were recruited to participate in individual interviews. Before the interview, participants were asked to complete a questionnaire using SurveyMonkey® to collect general information: name, contact information, gender, age, the country of origin, the country they have migrated to, the number of years they have lived and worked in the country they have migrated to and whether they have finished residency in family medicine/general practice (FM/GP) and in which country they did. A total of 31 GPs filled out the questionnaire, of which 15 GPs agreed to participate in this study. Included GPs were proficient in English at communication level, had migrated after finishing undergraduate medical studies in their home country to start their FM/GP specialization or to become a GP abroad, or had migrated after having completed FM/GP specialization in their home country. They all had lived and worked in the new country for at least 1 year.

Data collection

In-depth online interviews were conducted using the Zoom® communication program. The topic guide was developed using data from the literature and it was piloted in the first individual interview, whereafter no changes were made. The final topic guide is shown in Appendix 1. By using the same topic guide and conducting the first interview with both of the interviewers, the researchers tried to create a similar pattern and approach, minimizing possible differences between the interviews. All interviews were conducted in English, audio recorded and later transcribed by the researchers. Interviews were performed until data saturation.

Data analysis

An inductive approach to the analysis was chosen. A thematic analysis, following steps set out by Braun and Clark (23), was conducted by the researchers using the NVivo software (Release 1.5). The researchers first familiarized themselves with the data by reading the transcribed data multiple times, whereafter initial codes were generated and themes searched for by each researcher separately and independently. After that, each researcher managed to create themes and group codes within the themes, whereafter the researchers compared each

other's themes and a common thematic map was created. The created thematic map was reviewed several times until a unified and mutually satisfying result was reached.

Results

Characteristics of the participants

Between the months of March and April 2021 altogether 15 individual interviews were conducted with GPs from 8 different countries. Further characteristics of the participants are shown in Table 1. Each interview lasted between 30-60 minutes.

Table 1. Characteristics of the participants

Gender	Male	Female							
	10	5							
Age	28-34	35-45	46-58						
	5	7	3						
Destination country	Belgium	Sweden	the UK	Norway	Finland	Estonia	France	Switzerland	Ireland
	1	5	2	2	2	1	1	1	1
Country of origin	Estonia	Romania	Russia	The Netherlands	Malta	Poland	Croatia	Greece	
	5	1	1	1	1	4	1	1	
Stay or leave?	Stayed in destination country	Further migration	Migrated back						
	11	1	3						
GP qualification	GP trainee at the moment of interview	GP qualification before migration	GP qualification in destination country						
	2	8	5						

Based on the interviews, the different reasons to migrate were grouped into three main themes and eight sub themes, shown in Figure 1. Reasons to stay or to leave were also grouped into three main themes and nine sub themes, shown in Figure 2. All of these themes will be described further in the manuscript and the different factors can also be found in appendices 2 and 3. Extracts from interview transcripts are marked according to the order of appearance in interviews (GP1, GP2, etc.).

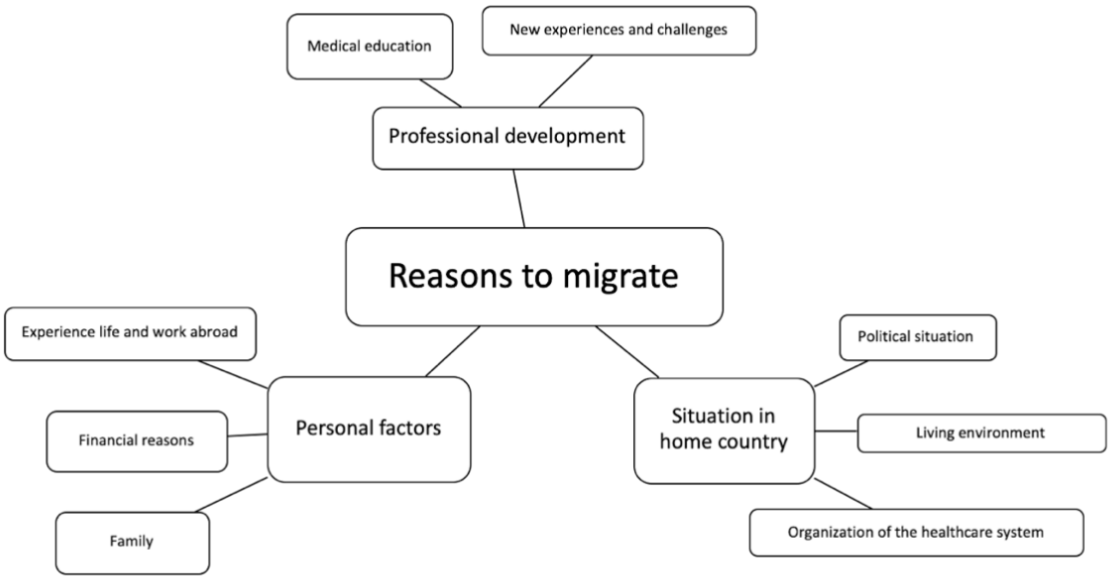


Figure 1. Reasons to migrate



Figure 2. Reasons to stay or to leave

Analysis

I. REASONS TO MIGRATE

Migration of GPs is seen by the participants as both a positive and a negative phenomenon. Migration offers GPs the opportunity to experience life and work abroad, to gain new knowledge and experiences, to meet new people and ideally to take these experiences back home with them. On the other hand, migration can indicate potential problems and dissatisfaction with the situation in the home country and lead people to look for better working conditions and living environments in another country.

GP9: I think that the whole migration thing is not only negative and I think that the whole exchange program should be exchanged. Also, when you come back you can see how things are going, what are the advantages abroad, what are the disadvantages between the systems [...].

Professional development

New experiences and challenges

Professional development was brought up as one of the leading reasons for migration. Many GPs felt that their potential as GPs had not been fully reached or felt that they had already achieved everything they could professionally and were looking for new challenges. Some participants also expressed their interest in experiencing another healthcare system.

GP2: Specific, I think, professional factors also; to develop my knowledge and to see different approaches to medical treatment. I'm very interested in the healthcare system and organization and management, and I saw different views of how to manage healthcare.

GP4: Well, back when I was studying family medicine, Estonian family doctors got a little bit less to do, it was more how to say, [...] hospital centralized medicine system and family doctors did less. And a lot of my colleagues, they went to Finland, because in Finland, family doctors have more responsibility, more freedom in diagnostics and treating. [...] And I did succeed or fulfill my main goal of getting very much practical experience.

Many young doctors have migrated with the aim of gaining more experience as GPs. They see that the work done by GPs in their home country is not challenging enough and that GPs face many constraints, financial or legal, which prevents them from treating patients the way they would like to and using the knowledge and skills they have learned and gained.

GP5: And with work is that the system works, that I feel that I can do things as I learned them, now that the money makes it possible, [...]. Here I can just use my knowledge to do the testing that I need, so it's, I feel really free in the diagnostic process and I feel that I can, that I have

economic capacity now to go to courses, to pay for my own education in the future and to get better.

Medical education

Doctors who migrated with the aim to specialize in FM/GP abroad were also interviewed. Some reasons they mentioned were: better organization and better quality of residency, better pay, and better supervision of trainees. Some participants felt that they were being exploited as junior doctors in their home country but were not getting any education and supervision to develop as a GP.

GP5: What is less natural is that most Polish citizens that study in Poland then very quickly leave, mainly because of the circumstances of the healthcare systems. So, they do their studies and, such as myself, one year of internship, practical and then they when they see what's happening that their chances for example of residency are low, or that there are problems with getting residency spots, pays are inadequate, work hours are bad, the conditions are not the greatest and then unfortunately a lot of them leave.

Personal factors

Family

Another reason to migrate was the wish to offer a better life to their family and better education to their children. Just like healthcare and the primary healthcare system itself, many participants felt that the education provided abroad was of a higher quality compared to their home country and they believed living abroad would give their children an advantage in life. Other personal family related reasons were also mentioned: the wish to live in the countryside, the wish to move closer to the spouse's family, etc.

GP3: It wasn't so much the money, it was the system, the school system, because my child was in the first grade. And when we came here, she went to second grade and she didn't know any language, she coped. But in Finland, there is a very good school system, so she managed very well. And we came to a little small town, where it's safe in every corner. So, I knew that it's, it's a good place to come.

Financial reasons

Although money was not brought up as the main reason to migrate, it certainly was an important factor which did eventually influence their decision to migrate. Bigger income was also connected with the wish to provide a better life for their family. Sometimes it also gave them the opportunity to work part time and spend more time with family and therefore achieve a better work-life balance.

GP11: My main motivation was that I want to live in the countryside. There is not so much countryside in the Netherlands. [...] But of course there is a countryside in the Netherlands as

well, but then me and my husband would have to work full time and we didn't want to, to pay the house, and here in Sweden we can have a house in the countryside with my wage, so, so it was also motivation. And I don't work full-time, I work part-time.

Experience life and work abroad

For some participants, an important reason for migration was the desire to travel, to experience life abroad, to see new places and to see how people in other countries live and work.

GP12: Well I was always, since I was a child I was traveling, going on holiday, my parents took me, we went to many-many countries in Europe and it was another, it was another chance to see how, how the people live and… [...] So it wasn't the way that I didn't know what life looks like, but I just wanted to see. So financial, career and probably interested in visiting.

Situation in home country

Political situation and living environment

Dissatisfaction with the political situation and living environment in their home country was also mentioned as a reason why some GPs decided to migrate. It was both related to the feeling that their efforts and work as GPs were not appreciated by society and to the way society functions in their home country in general. Some participants mentioned corruption, both outside and inside the healthcare system, which made it difficult for them to achieve their dreams and their professional goals.

GP5: Better pay and the structure of the system. That corruption I think is the worst. And in order to achieve something you have to either know someone or get to know someone. And become their friend to be able to work and to be able to have a decent income. So, I think the corruption part is the most important.

Organization of healthcare system

Many participants mentioned the poor organization of healthcare, especially the primary healthcare system in their home country. Some participants had been involved in developing the primary healthcare system and the education of GPs in their home country. Seeing that nothing had changed in years, they felt their effort was not recognized and it even seemed to have increased their wish to experience a well-organized healthcare system where their work would be more appreciated.

GP6: When I decided to become a GP, I was one of the visionaries. [...] We were just looking time passing without big steps but there was still hope until we got that economic crisis [...], but it was clear that the healthcare system is going to collapse and the educational system is going to collapse. [...] We migrated in order to find better work conditions and better scientific conditions. I was not ready to compromise by staying. I wanted somehow to, to, to have the

opportunity to use my competence and everything I have learned as a GP. That's why it became my focus to migrate to a country with a well-organized system, primary healthcare system.

II. TO STAY OR TO LEAVE

When GPs migrate, some already have the idea of returning to their home country at some point, others migrate without any further plans. The included participants were both GPs who had migrated in the past and decided to return, GPs who were still living in the country they had migrated to and GPs who had migrated further. The GPs that were interviewed brought up different kinds of reasons which influenced or could potentially influence their decision to stay in their new country, to return to their home country or to migrate further.

Professional development

New experiences and challenges

Various types of professional reasons influenced the GPs' decision to stay. Further professional development and a stimulating working environment with new opportunities and challenges not available in their home country were mentioned as reasons for staying. For some this was the main reason, while others mentioned it as a contributing factor, alongside others. Some mentioned professional stability being an important factor.

GP8: As of today, I still feel that the work in Sweden is more stimulating. And I still feel that I have things to learn. Before moving back.

New career opportunities such as opening their own practice or continuing developing an existing practice in their home country motivated some participants to return. Some experienced plenty of interesting career opportunities in their home country after their return. Others saw migration to a new country as an opportunity for further professional development.

GP7: My parents are doctors and they have a private clinic. And I ended up working there and developing my own clinics. And at the moment, everything's fine.

GP6: Yes, I am applying for a PhD at the moment. Which if I guess it means I'll be moving to the Netherlands. [...] I'll see what comes next. I would be looking at creating a hybrid career of researching clinical practice, which I would be happy to do in any country as long as I can speak the language and I am happy with the healthcare system and am happy working within that healthcare system.

Working in both countries

Some GPs decided not to break ties with the country they had migrated to after returning back home and continued working part time or remotely in both countries simultaneously.

GP7: Even though we came back to Estonia, we still went back small, like one, two, sometimes three weeks, a month, we stayed in Finland or worked in Finland.

Personal factors

Family

Family was one of the most important factors in the decision to stay or to leave. Here, the life of their children, including education and social circle, but also the overall degree of satisfaction with their life and their family's life in the new country seemed to play a major role.

GP1: So new life has been built for, not a new, their life has been built in Sweden and this is what they consider now as home. […] I don't want to go back anymore. But for us it was so easy with young, small children, because they started from Kindergarten and it went smoothly. […] I found professionally what I wanted and I needed and of course the family likes it, the rest of the family also likes it here.

Some GPs have decided or plan to return home because of family they missed or because of their children's future. Participants who have not yet decided to either stay or return also pointed out that family would be a reason for them to go back at some point.

GP8: We were planning to move back to Estonia when our eldest son starts school, which is in 2025. That will be the main reason to move back. […] For him to be Estonian, he has to have Estonian friends or contact with relatives as well. So, I will say this is mainly due to social and cultural reasons to move back to Estonia….

Living environment

Another factor contributing to the satisfaction seems to be the well-established network of social institutions in the countries they had migrated to, like social security, taxes, education etc. The interaction with local people and the feeling of being welcomed or not also played a role in satisfaction. Some countries turn out to be much more family-friendly, making it easier to work part time and have a better work-life balance.

GP11: Well we enjoy living in the countryside. […] That's just the main reason we're staying, it's fantastic to live here.

GP8: In Sweden, I think it's more compatible with the family situation when you have small children. So, it's the money but as well as the possibilities to work part time.

When people have settled in their new environment and started a new life there, it seems to be difficult to go back or to migrate further. Some also said that the whole process of migration, especially with their family, was difficult and stressful and they do not want to go

through that again. On the other hand, dissatisfaction with the living environment also seems to be a reason why people tend to continue migrating or decide to go back home.

GP11: We as a family are very happy that we can live here. It's too big a step to move again and to adapt again. […] Children, they are in school and they have their friends. [...] I wouldn't think of moving to another country.

GP13: It was a problem with the children: society (Sweden) is very closed. So, they had many problems and many problems with their friends to get into society.

Financial reasons

In some cases, money seemed to play a role in the decision to stay or to leave. Newly achieved financial stability influenced their decision to stay instead of to return home. The standard of living they are experiencing provides them a better work-life balance and a better future, which could be threatened if they would eventually move back. Better pay in another country was also mentioned as a factor contributing to further migration.

GP4: So yeah, but generally, life and work here enables me to buy a new car every other year, if I want. We are building a house. […] And now we can travel every year or every other year to far distant countries for vacation without thinking about money or anything. So, costs of living in Sweden are much higher than in Croatia, but the income side is also a bit higher.

Some encountered financial obstacles when planning to migrate back to their home country, which ultimately forced them to migrate further. Others have made financial investments in the country they had migrated to which binds them and makes it more complicated to return home or to migrate further.

GP4: And the bank loan that the bank in home country would have considered us was considerably smaller and we could have afforded just an apartment. And here the bank said that: "Okay, you're not working here. You don't know the language, but we can see a very big potential in the future and it wouldn't be any problem to take out a loan for a house". So, we decided to migrate.

GP12: Meanwhile I actually met my husband, got married, we bought a house and this is my life here. […] So, now we have a mortgage and we have a house so we obviously stay here yeah.

Experience life and work in a new country

Some participants also mentioned that one of the main reasons to migrate further was to experience a new kind of adventure and to see how people are living and working in other countries.

GP15: I would stay here, but I just want to get more experience, I'm not sure maybe in the medical field or not in the medical field. I want to travel more, maybe to stay somewhere for a longer time.

Organization of the healthcare system

Satisfaction with the organization of healthcare

Satisfaction with the organization of healthcare and its stability was a major reason for staying in the country they had migrated to. The way healthcare – and especially primary healthcare – was organized, as well the working conditions of GPs, played a major role in their wish to stay. The professional and working environment, a good work-life balance, the mentality of colleagues and society's opinion on migrating GPs were mentioned as reasons to stay.

GP10: So, I think the stability of the system is probably the most important factor, that it is predictable, I know it's going to stay the same. Administratively it's pretty easy as long as you fulfill requirements and follow all the steps then, then it's not problematic.

At the same time, the idea of facing the same problems for which they had decided to migrate initially, seems to discourage some GPs from returning to their home country. Some participants had seen that during their stay abroad not much had changed in their home country regarding the healthcare system or that the situation had even worsened.

GP12: Well, there is professionally no reason to go back there. The situation for my colleagues there even worsened with Corona stuff and everything. […] I mean, running out of the money and everything and less is bumped into the primary health care, and they just get more and more things to do and be responsible for and stuff.

The way GP work

Some, on the other hand, found it difficult to adapt to the way GPs work in the country they had migrated to or were too uncertain about the future of primary healthcare and the working conditions of GPs if they stayed, which ultimately made them decide to migrate back home or to another country.

GP6: But there are things that make me a bit wary of working in England, for example, I hear what my colleagues are dealing with. And it makes me a bit, a little bit scared of what things would be like in a few years' time. You know, when would it reach a point of being unsustainable? Would it just, will it become a job that is really difficult? It's already challenging. It's already quite a tiring job. It's already a job, I do not want to do full time. […] Yeah, the idea of working five days a week as a GP is, you know, we mention specific people who do that, and think they're crazy.

Some GPs were reluctant to go back and work again as a GP in their home country. One reason was the way migrants are perceived by society in their home country as well as the continuing unstable political and economic situation in their home country.

GP6: But I, I'm not sure I would like the work as a GP there. […] Working there, as a GP, I'd either be working in a health center where I have little control over the service I provide. And no control over who I - over the patient's population - I'm dealing with. Or I work privately, where I am fully self-employed, and therefore, only earn money If I, if I'm at work. So, there's no annual leave, there's no sick leave, if I'm sick, I'm not getting paid. And that requires quite a lot of buy-in, at least initially.

Improvement of healthcare system in home country

Although most of them seem satisfied with the healthcare system in their new country, a positive change in the healthcare system and the way GPs work in their home country might motivate some of them to return to their home country. Some GPs also mentioned that they would be motivated to go back to their home country to help improve the healthcare system and primary healthcare.

GP6: So, I think that would be the ease of like, if there were more group practices would be one thing. And so, something where you can slot into a system that is already there. Or potentially, if I had to change my career a little bit, and either go into more academic and more research and kind of find a way of doing some research work in Malta.

GP9: And also, I think the idea that you can come back and improve and help improving something, I think that's also a motivation.

Recertification

Apart from personal aspects, GPs are facing professional difficulties when returning to their home country. Recertification after a certain period of absence seemed too much of a hassle for some to decide to go back. Some GPs were afraid that their specialization as a GP in another country would not be recognized in their home country.

GP11: But another reason is that in the Netherlands you have to re-register every 5th year to be a GP and the registration I lost now, it's possible to re-register, even when you live abroad. But I didn't do that. So now if I would move back to the Netherlands, I would have to register. So, it's also a threshold to move back.

Discussion

Summary

This multi-country study was carried out to describe the factors influencing European GPs to migrate to another European country, to stay in the new country after migration, to return to the country of origin or to migrate further.

The main reasons for initial migration were professional development (career progression and education), personal factors (like better living conditions, education and financial reasons) and the situation in their home country (dissatisfaction with the political situation, living environment and the organization of the healthcare system). Professional development was mentioned by most of the participants as the driving factor of migration.

The main reasons for staying in a country they had migrated to, to move back to the home country or to migrate further, were quite similar and could be divided in more or less the same kind of themes; professional development (like new possibilities, career progression and the opportunity to develop new skills and professional stability), personal factors (living environment and education, financial stability and work-life balance) and the organization of healthcare (satisfaction or dissatisfaction). Personal factors seemed to influence this decision more than professional reasons and the organization of healthcare.

Comparison with existing literature

As far as we know, no other multi-country qualitative study focusing on GPs' migration in Europe has been conducted yet. A lot of literature tries to explain the migration of physicians, and medical personnel as a whole, using the terms "push" and "pull" factors. Better pay, better and safer working conditions, smaller workload, the existence of a national public health strategy, political instability, personal insecurity, epidemics and future prospects are just some of the push and pull factors for the emigration of doctors identified in various studies (10, 12, 16). Klein et al. (2009) added the term "plant" factor as the incentives to stay: "conditions that enabled individuals to resist a further migration pull and thus plant themselves within a community" (18). In this study, the focus was laid more on the phases of migration (migration, staying or leaving) rather than solely on the push, pull and plant factors. The same reasons for migration already described in literature were also mentioned by the participants of this study (Appendices 2 and 3). It was noticed that, in all these phases of migration, the same push, pull and plant factors tend to come back. The same reason can be seen as a pull, a push or a plant factor throughout the different phases. A good example is professional development; lack of professional possibilities can push someone away from a country, while new professional possibilities can pull someone towards a country or even influence their decision to eventually go back or stay. So, while this study can agree on the use of pull, push and plant factors to describe reasons to migrate, one should be cautious when describing one reason for migration as only a push, a pull or a plant factor and use them in the right context.

Like mentioned earlier, this study added reasons why GPs, as a specific group within healthcare personnel, tend to migrate back to their home country or migrate further. Gauld et al. (2015) made a similar approach but only studied the reasons why physicians from the UK do not stay very long in New Zealand after migration (24). The ones who did go back to the UK, initially migrated only "for professional development and gaining experience", which was also mentioned by some of our participants. Like Gauld et al., this study also described various factors preventing GPs from going back to their home country. Some of them could be seen as plant factors, while others – like re-entry after a time abroad or the fear of facing the same problems they once fled – could be seen more as barriers. The difficulty of re-entry after being away is something Sharma et al. (2012) also briefly mentioned in their study (25). Another recognizable phenomenon, described by Brugha et al. (2016), is the fact that some GPs who want to migrate further seem to be pulled or pushed by the same reason they were pulled or pushed initially, both professionally and personally (13). These migrants were called "backpacker migrants" by Brugha et al.; always in pursuit of better career opportunities, salaries or overall conditions, hopping from one country to another. This phenomenon also came back in the previously mentioned study of Gauld et al. (24).
In this study, there also was an overrepresentation of GPs from Eastern Europe compared to GPs from Western Europe, which confirms the earlier described findings from literature about the migration pattern from lower income to higher income countries, being Europe's very own brain drain (4, 7-10).

While some literature underlines the need of retention strategies to combat the shortage of physicians due to migration, few studies focus on how these retention strategies should look like. McAleese et al. (2016) stated that developing retention strategies is needed in order to stop the need of some countries to actively recruit physicians in order to fill vacancies in healthcare (8). Both Humphries et al. (2013) and Taderera et al. (2020) underlined the fact that understanding the reasons why young physicians migrate could eventually contribute to much needed policy changes in order to create these retention strategies (26, 27).
Ibrahim et al. (2019) described some pull factors that could result in better retention of expat physicians in the UAE (28). These could be described as the earlier mentioned "plant factors" too. Sharma et al. (2012) briefly addressed the fact easing re-entry policies in the UK could make physicians come back (25). Brugha et al. (2016) also focused on factors influencing the decision to migrate, to stay or to return, focusing more on the specific situation in Ireland (13). Although none of these studies focus on GPs, the same kind of factors were also mentioned in our study. There are factors contributing to migration and the will to stay in a country instead of returning – mostly personal factors like the so-called plant factors and the will to gain experience abroad – seem to be less influenceable, with the possibility of losing GPs in the future. Other factors, being pull, push and even some plant factors – like a better salary, better career possibilities, easier ways to return after being away for a longer time and in general an improvement of the healthcare system in a country – are factors which could potentially contribute to the retention of GPs and even the return of emigrated GPs.

Therefore, the information that was gathered in this study could help develop retention strategies to address GP migration and, consequently, their shortages in the future. The focus needs to be more on improving overall conditions, opportunities and career progression in order to be able to retain younger domestically trained GPs and even make them come back home after initial migration. Focusing on easing re-entry policies after initial migration could also contribute to the decision of some to come back home eventually. Furthermore, a more unified European guideline could help the discrepancies between the countries and the rather professional brain drain from Eastern Europe to Western Europe to disappear.
However, as there is not much focus yet on how retention strategies should look like, especially for GPs, more research on this topic should be conducted in the future to clarify the influenceable factors to help develop these retention strategies, especially in those countries where migration of GPs is a big issue.

Strengths and limitations

For this study, an open call was made to participate in individual interviews – receiving a total of 31 reactions of which 15 agreed to participate. Although the initial goal to receive more reactions (and to select more participants) was not totally met, data saturation was achieved. However, there was an overrepresentation of participants from Eastern European countries, expressing what is already known in literature; the migration flux from lower to higher income countries. Because of these factors, the results of this study cannot be fully transferred to the entire European situation.
The researchers involved in interviewing the participants and analyzing the data have background in FM/GP, which helped in understanding experiences and terms used by participants but could also potentially influence the neutrality. Several participants from Estonia were familiar to one of the researchers and were therefore interviewed by the other researcher. All of the interviews were analyzed by two different researchers, bringing together the elaborate theme structure. By using the same topic guide and conducting the first interview with both of the interviewers, the two researchers created a similar pattern and approach, minimizing possible differences between the interviews.

This qualitative study cannot gather all opinions or claim representativeness across all European countries. It is not possible to report on the viewpoints of GPs who did not participate in our study.

Conclusion

European GPs' reasons for migrating and starting a life in a new country, their reasons to stay in the country they had migrated to or their reasons to leave are quite similar and could be grouped under three main themes: professional development, personal factors and the situation in the home country/the organization of healthcare. The same reason could be seen as a push, pull and plant factor throughout the different phases of migration. Therefore, this framework to describe migration should be used with care.

In order to retain GPs in the future, and even make them return home after initial migration, it seems policymakers should focus more on preventing migration caused by dissatisfaction or the differences in quality of work and life by improving conditions, opportunities and career progression as well as by easing re-entry policies. Other factors, like some personal factors and most plant factors, seem to be less influenceable.

Although this study could already identify multiple factors influencing migration of GPs in Europe, which could help in developing retention strategies, further identification and clarification of these factors is needed. By continuing research on this topic and possibly creating a wider survey on this topic throughout Europe, it could be possible to understand the European situation and its migration pattern even better as well as to clarify these specific factors to be able to use them to develop retention strategies. Understanding the specific reasons per country could be a possible game changer in developing retention strategies in order to address the workforce crisis in primary care, especially in those – mostly Eastern European – countries where emigration of GPs is a big issue.

Ethical approval

Ethical approval was granted by the Research Ethics Committee of the University of Tartu (case number 330/T-15) and by the Ethical Committee of the University of Antwerp (case number 20/47/631).

Competing interests

The authors have declared no competing interests.

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Appendices

Appendix 1. Topics guide

	Research questions	Topics	Questions
The aim of this study is to describe motivating and demotivating factors influencing European General Practitioners to migrate to a new country, to stay after migration in the new country, and/or to return to the country of origin.	**Icebreaker**	**Migration**	1. *Short introduction of this study and this interview.* 2. *Please introduce yourself briefly (Name, place of work)* 3. How would you define migration? What is migration to you? 4. How would you describe the situation with GP migration in your country? How big of a problem is it?
	1. Which factors and how influence European General Practitioners to migrate to another country?	**Push and pull factors influencing migration to another country** - Financial factors - Professional factors - Sociopolitical factors - Personal factors -Facilitators and barriers of mobility	1. Why did you migrate to another country? 2. Why did you migrate to that country in particular? 3. Which factors influenced your choice to migrate (different themes)?
	2. What factors encourage General Practitioners to stay in a new country?	**Factors that encourage staying in a new country**	1. What factors are keeping you in the country instead of going back to your country of origin?

		- Financial factors - Professional factors - Sociopolitical factors - Personal factors -Facilitators and barriers of mobility - Plant factors	2. What factors are keeping you from going to another country?
	3. What would motivate or have motivated General Practitioners to go back to their home country?	**The influence of postgraduate training on career intentions** - Financial factors - Professional factors - Sociopolitical factors - Personal factors -Facilitators and barriers of mobility	1. What factors would motivate you to go back? 2. In case you are planning to go back, which factors have motivated you? 3. Is there anyone who wants to add something to the discussion?

Appendix 2. Reasons to migrate versus push and pull factors.

	Push factors	Pull factors
Professional development	Bad medical education	Better medical education
	Lack of professional possibilities	Gaining experience and new challenges
	Poor career progression	
Personal reasons	Financial reasons (not enough salary)	Financial reasons (better salary)
		Experience life abroad
		Working abroad
		Better education for children
Situation in home country	Political situation	
	Dissatisfaction with the organization of healthcare system	Wanting to experience a better healthcare system
	Dissatisfaction with living environment	Better living conditions

Appendix 3. Reasons to stay or to leave versus push, pull and plant factors

	Push factors	Pull factors	Plant factors
Professional reasons		New possibilities in home country Career progression in home country Professional stability in home country	New possibilities in new country Career progression in new country Professional stability in new country
Personal reasons	Dissatisfaction with living environment in new country Family not fitting in in new country	Education of children in home country Missing family in home country Better financial possibilities (buying a house)	Satisfaction with the living environment Family fitting in and settled in new country Better education in new country Better system (social security, taxes, etc) Financial stability Barriers for going back (paperwork, hassle of migration)
Organization of healthcare	Dissatisfaction of the healthcare system in new country	Improvement of healthcare in home country	Satisfaction of the healthcare system in new country Satisfaction with the way GPs work in new country

Appendix 4. Approval ethics committee

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A multi-country qualitative study on general practitioners migration in Europe - is the grass really greener on the other side? (ManaMa HA geneeskunde Th. Vanderheyde)

Belgisch Registratienummer: B3002020000278

datum	ons kenmerk	contactpersoon
14/12/2020	20/47/631	Secretariaat Ethisch Comité ethisch.comite@uza.be

DEFINITIEF GUNSTIG ADVIES

Geachte Collega,

Het Ethisch Comité van het Universitair Ziekenhuis Antwerpen en de Universiteit Antwerpen bevestigt dat bovenvermelde studie voldoet aan de criteria gesteld in de wet van 7 mei 2004 en geeft een gunstig advies dd. 14/12/2020.

De volgende bijlagen werden volgens de ICH-GCP richtlijnen door het Ethisch Comité goedgekeurd:

- CV onderzoeker
  Th. Vanderheyde
- Informatie- en toestemmingsformulier ENG aangepaste versie dd. 2/12/2020
  Versie 2: clean en track changes
- Protocol aangepaste versie dd. 7/12/2020
  Study design migration of GPs, Versie 2: clean en track changes
- Vragenlijst(en) dd. 6/11/2020
  Versie 2
- Diverse
  Script topic guide Gpsmigration, versie 2 dd. 30/10/2020
  Information letter participants migration of GPs- short version, versie 1 dd. 13/09/2020
  Information letter participants migration of GPs- long version, versie 1 dd. 26/10/2020

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14/12/2020

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Deze goedkeuring is geldig tot een jaar na bovenvermelde datum. Wij verzoeken u ons te melden wanneer de eerste deelnemer werd geïncludeerd, wanneer en waarom de studie (vroegtijdig) werd stopgezet of nooit werd opgestart.
Indien de studie nog loopt na een jaar verwachten we een follow-up rapport waarin eventuele voorvallen worden gemeld.
Tot slot wijzen we er op dat voor in het UZA lopende studies de ernstige ongewenste voorvallen dienen gerapporteerd via het incidentenmeldingssysteem.

Met vriendelijke groeten,

Prof. dr. P. Michielsen
Voorzitter Ethisch Comité

Cc: FAGG - Research & Development Department, Victor Hortaplein 40, bus 40 - 1060 Brussel
De heer T. Vanderheyde, Universiteit Antwerpen - Huisartsgeneeskunde, Universiteitsplein 1 - 2610 Wilrijk

Appendix 5. Approved study protocol

A multi-country qualitative study on General Practitioners' migration in Europe - Is the grass really greener on the other side?

Introduction

Problem definition

Migration of healthcare professionals is a long-existing topic in global health ethics. The migration flow from developing countries to – mostly Western – countries is a well-known and well-documented topic in the world, known as the 'Brain Drain' (1-6).

Because of changing immigration policies in a lot of Western countries during the mid-1960s, the migration of health care professionals from developing countries to – mostly – Western countries to solve health care professional shortages was facilitated (1-3, 6, 7). Currently, this phenomenon of physician shortages is a recurring problem all over the world in both industrialized countries – due mostly to an aging population – as in developing countries – due to migration flow to higher income countries (5, 6, 8-10).

The situation in main immigrant receiving countries (UK, Ireland, USA, Australia, New Zealand and Canada) has been well-studied. Migration to and from European countries though, apart from the UK and Ireland, has only occasionally been researched (4, 11-13). Numbers show that nearly 25% of practicing physicians in the USA, Australia and Canada were foreign-trained, while this number is even higher in New Zealand (44%), the UK (38%) and in Ireland (34%) (7, 8, 14-17). Numbers of the OECD about the number of physicians in non-English speaking European countries show big discrepancies between its different members; especially Sweden (22,9%), Switzerland (28,1%) and Luxemburg (30,2%) seem to be attractive to foreigners – comparable to most English-speaking countries, while Portugal (19,7%) also looks like an attractive destination – probably due to the attractiveness for Brazilian physicians. Contrary to what we might think, Spain doesn't have the same attractiveness for Spanish speaking foreign physicians as Portugal has for their Portuguese speaking counterparts – only 7,5 % of physicians in Spain are of foreign nationality. In the other European OECD countries percentages of foreign physicians range from 3,2% to 16,9% (18).

Although these numbers can tell us a little bit more about the distribution of foreign(-trained) physicians in Europe, they are still difficult to interpret and compare (4). It is difficult to say how the migration flow within Europe works and how many physicians come from non-European

countries. Lack of data on outward and return doctor migration is making it difficult to understand health professional migration (15).

There is also a difference between “foreign-trained” and “foreign-born” physicians, which is not always clarified in these numbers. The reasons behind the migration numbers of different countries are also different. While some countries experience a natural shortage of physicians (f.e. Scandinavian countries), others – like Ireland and the UK – experience a big shortage due to an extreme outflux of health professionals (3, 15, 16, 19). Both suffer from shortages – be it due to different causes – and thus, actively search for foreign-trained physicians to fill their vacant spots (1, 3, 15). The UK and Ireland mostly “lose” their physicians to other English-speaking countries like Australia, New Zealand, Canada and the US, while they themselves attract a lot of health professionals from developing countries (both in- and outside the EU), while Scandinavian countries mostly look for workforce in their neighboring countries (3, 5, 8, 14, 15, 19). The OECD study showed that nearly all European OECD countries increasingly rely on recruiting health workers from abroad to fill their shortages (18).

While the in- and outflux between English-speaking countries is a well-studied phenomenon in the world, the situation in the rest of Europe is less-studied and a little more complex. In the EU, a legal framework exists that regulates the recognition of professional qualification and the free mobility of physicians. This means that getting the recognition of professional qualification in one EU country automatically generates the eligibility for recognition in any other EU country. Migrating physicians from EU/EEA states are mostly not required to undergo further training to ensure professional qualification and the right to practice (10, 11, 21) in most EU-countries, there is no need to proof language competences, unless the employer implements it. Non-EU/EEA physicians on the other hand, will mostly be required to prove medical and language competences, while also be required to undergo additional training in the country of destination (21). These standards for licensing and registration of non-EU/EEA physicians differ across the different EU/EEA-countries, without any uniform approach throughout the EU. This could explain the discrepancies between the different European countries (21).

The why and how migration occurs is a complex topic that has been studied frequently. However, the causes of physician migration are not uniform at all and are continuously evolving. While the physicians’ migration phenomena have several features in common, new facets still continue to emerge and become unrevealed (6, 10). Several authors talk about the concept of both pull and push factors as a practical framework to explore and research the causes of migration around the world. Push factors are the “factors in a health system or country that repel or facilitate the movement of health workers away from that system or country”. Pull factors are “factors in a health system or country that attract or facilitate the movement of health workers towards that system or country” (10).

Different articles cite that a combination of better pay, better (and safer) working conditions, fewer patients on a caseload, national public health policies, political instability, personal safety, epidemics, and future prospects, were only some of the reasons why physicians migrated to other countries (2, 6, 10). Klein et al. added the plant factors to this practical framework, the factors encouraging foreign-trained physicians to stay in the country they migrated to, instead of "migrating through" or going back to their country of origin (24).

The primary care crisis, and in particular the GP crisis, is getting worse in most countries in the world – in both developing as in industrialized countries (8, 25-28). Primary care is considered to be the foundation of the healthcare system throughout the world. Strong primary care is essential to be able to provide accessible and good functioning health care, through a proper level of medical services as well as to health promotion for the whole population (28). Access to primary care is of interest worldwide because of its beneficial effects on population health (29). This crisis is both a cause and a result of migrating GPs throughout Europe and throughout the world.

Objective

As few research focuses on the subgroup of GPs (8, 16, 25, 26, 29) this study is an opportunity to focus on understanding the migration flow of GPs within Europe as a whole instead of per individualized country; understanding the push, pull and plant factors contributing to this phenomenon while engaging GPs from both receiving and sending countries in different European countries simultaneously as well as mapping the challenges GPs, sending and hosting countries encounter due to this migration flow. Insight in this phenomenon could enable the countries involved to change policies and to set up retention strategies (if needed) and create better solutions to the workforce crisis, as well as create a bigger picture for Europe.

As far as we know, no multi-country study about migrating GPs through Europe has appeared yet.

Aim of the study

To describe motivating and demotivating factors (the so-called push, pull and plant factors) influencing European GPs to migrate to a new country, to stay after migration in the new country, and/or to return to the country of origin.

Material and methodology

Study design and setting

To study this phenomenon a qualitative approach will be used. To collect data, semi-structured web based individual interviews with a duration of approximately 30 to 45 minutes, using a video communication program will be conducted by one or two researchers. There will only be two researchers who will conduct the interviews. The individual interviews will be conducted until data saturation, with a maximum of 25 participants. Because interviews will be conducted until data saturation, new participants can be added during the study if needed to achieve data saturation.

The topic guide will be developed using data from the literature and it will be tested in the first focus group interview, modified if needed. All interviews will be conducted in English and all of the interviews will be audio recorded and transcribed.

A thematic analysis following steps set out by Braun and Clark will be conducted by three researchers using NVivo software. Data will be kept safely in a database that can only be accessed by the investigators, on the intranet of the University of Antwerp during 20 years. The administrator and manager of this database and code table will be prof. dr. Nele Michels.

Recruitment and participants

Through purposive and snowball sampling, using contacts, mailing lists and online social media platforms, emigrant and returned GPs from different European countries (WHO Euro-countries) will be recruited to participate in individual interviews. Participants will be asked to fill in a little questionnaire about their demographic characteristics, country of origin and country. An equal spread and full mixture of age, sex, and country of destination/origin will be aimed for, based on the information they sent us in advance.

Excluded from participation are GPs without any decent knowledge of the English language, GPs that emigrated during their undergraduate medical studies, GPs that work abroad while still living in their home country and GPs with less than one year of working experience abroad (this means migrating to another country to live and work).

GPs that emigrated right after their medical studies to start their GP specialization or to become a GP abroad (without the need to do a specialization) will be able to participate.

Informed consent

An informed consent will be obtained from all of the participants.

All of the participants will receive an informed consent by email with the necessary information which they will consent to whilst being recorded in the beginning of the interview. This consent will be kept with the other data and interviews during 20 years.

Script: see attached file

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