Barriers to equal access to eHealth in Stockholm

A qualitative study

Emansilmy Abougazar

The Department of Public Health
Degree of Master 120 credits
Public Heath Sciences
Master's programme in Public Health
Sciences: Individual perspectives

Spring term 2022

Supervisor: Jukka Törrönen



Barriers to equal access to ehealth in Stockholm

A qualitative Study

Emansilmy Abougazar

Abstract

The aim behind this study was to observe and understand barriers to access the eHealth system equally. The study was conducted in Stockholm based on qualitative data in which semi-structured interviews were conducted among 15 interviewees from different localities of Stockholm. The findings from the collected data revealed that language barriers, lack of knowledge about digital literacy, unawareness of Swedish healthcare services, psychological and social barriers, safety and privacy concerns, and the lack of an e-identification are all major barriers to accessing the eHealth system. From the data, it has also been observed that the main causes of the aforementioned hurdles are based on varied socioeconomic levels, literacy conditions of an individual, cultural background, and age. Another important observation shows that highly qualified people with limited language abilities have a difficult time using eHealth services.

Keywords

Ehealth, Covid-19, nudge approach, digital literacy, linguistic skills, Bank ID, 1177.se, Alltid öppet.

Contents

Table of figures:	1
Introduction	2
eHealth	2
Covid-19 and the Rapid Transition to eHealth	3
Social Health inequalities and eHealth	3
Disadvantaged social categories	4
ABOUT STOCKHOLM	5
EHEATH STRATEGY OF SWEDEN	5
Aim and research questions	7
Methods	8
Data material	9
Ethical considerations	10
Analysis	10
Results	11
Illustrated overview of the participants:	11
Lack of understanding the meaning of ehealth:	11
Pros and Cons of eHealth	13
Pros	13
Cons:	
Linguistic skills as a barrier	
Bank ID	16
Lack of knowledge and information	16
Access to health information:	
Social inequalities	
Stress symptoms and other psychological barriers	
visual doctor's appointment/communication	19
External Help	20
Intrinsic motivation:	20
Discussion	21
Strengths and limitations of the study	23
Conclusions	23
References	25
Appendices	27
Ouestions:	29

Table of figures:

Figure 1The e-health literacy framework (eHLF) Source: (Norgaard et al., 2015)	6
Figure 2 Main Research Strategy	8
Figure 3 Process of Inviting Participants for the Research	9
Figure 4 Overview Of The Participants.	

Introduction

Increasing reliance on ehealth services has recently gained support, particularly among politicians and policymakers in Sweden. The increased need for it was explained as a result of its efficiency and giving people greater opportunities to access the healthcare system equally and effectively and it ensures that everyone has equal access to health care. The question now arises: is this true? The main aim of this research is to investigate the barriers to equal access to healthcare through ehealth services. It focuses on the situation in Sweden and mainly in Stockholm Region and it presents an overview of patients' knowledge and experiences related to the rapid transition to digital health during the covid-19 pandemic. Also, it highlights the challenges the patients face with the two public ehealth services 1177 and Alltid-öppet.

eHealth

eHealth is a new perception of Global Health. The World Health Organisation (WHO) defines ehealth as "the cost-effective and secure use of information and communications technologies in support of health and health-related field, including health care services, health surveillance, health literature, and health education, knowledge and research" (Royal College of Nursing, n.d.). Also, E-Health is defined as "health services supported by electronic processes and applications of information and communication technology" (Eysenbach, 2001). Moreover, ehealth can be understood as health services supported by electronic processes and applications of information and communication technology. Telecardiology, telediagnosis and electronic health records (EHRs) are examples of e-Health applications that improve the quality of the patient treatment process (Rodrigues et al., 2016).

Digital technologies have played a useful role in medicine and public health since computing technology was born in the mid-twentieth century. The development process was driven by the invention of the personal computer and the Internet and the World Wide Web (WWW). Later, all these developments were combined and, along with telemedicine, led to the computerization of healthcare information, financial, and communication systems. The term "telemedicine" refers to "the process of communication between healthcare providers and patients and other service providers, recording clinical diagnoses, and providing healthcare services to people living in remote areas through the use of digital technologies." In addition, it includes the technological devices that help patients with self-care and self-monitoring systems known as "telehealth/telecare technologies among other online health education programmes" (Lupton,

2017).

The WORLD WIDE WEB (WWW) encouraged/inspired the development of health and medical-related websites that support the process of communication between health professionals and agencies and the public by providing them with information (Lupton, 2017). Since the turn of the twenty-first century, more technological tools have been developed and seen in more advanced digital media and devices. Therefore, there are more opportunities to seek, share, and discuss medical information through websites, blogs, and other platforms that improve engagement in the medical field (Lupton, 2017).

Covid-19 and the Rapid Transition to eHealth

Many researchers argue about the relationship between health and social inequities in health care. As more inequalities related to the social structure are caused by health literacy, motivation to use health, and the ability of individuals to use this technology. In contrast, other social groups that have high income, high education level, and sufficient literacy skills are much more likely to have sufficient ability to use and benefit from the developed e-health tools and technologies. Another concept, called the "digital divide," shows that social groups that have low income, low education levels, and low digital literacy, as well as those living with disabilities and those living in rural and remote areas, are less likely to actively use the Internet and develop digital literacy skills (Lupton, 2017).

Social Health inequalities and eHealth

ehealth development has been tailored primarily to those who have good skills and knowledge of digital technology and its capabilities, and who have access to the Internet. On the other hand, the "non-users" of the Internet are the elderly and those with low incomes. Which produces more social inequalities in health will develop. This means that the development of health care in favour of a certain social group with specific characteristics can affect negatively another group of people who do not have these characteristics. These characteristics have been described in various studies and affect disadvantaged groups such as people with low incomes, lower levels of education, with literacy difficulties, the unemployed, the elderly, people with disabilities, women, and people of ethnic origin. In addition, these groups have less access to social networks (Latulippe et al., 2017).

Disadvantaged social categories

Disadvantaged social groups, which include people with low incomes and little education or members of ethnic minorities, have a higher risk of illness and death than people with a better socio-economic situation. Furthermore, the same group has a lower chance of accessing quality health services. The lack of knowledge and skills in using digital health technology for these groups widens the gap of existing social inequalities that lead to negative outcomes, including "poor health status and higher levels of poor health" (Norgaard et al., 2015). During the pandemic, the population with low socio-economic status suffered the most. The Stockholm region has the highest mortality rate in municipalities with populations characterised by low education levels and low income, as well as a "proportion of Swedes by birth" (Calderón-Larrañaga et al., 2020).

For example, a study focusing on a group of Australians with low socio-economic status showed that they had limited access to health and medical information and other resources available online. Given the low income, housing instability and lack of knowledge, apart from the lack of social contacts of those who can provide them with knowledge on how to use digital media (Lupton, 2017, p.86). Of course, language also plays a role, as people from non-English speaking backgrounds face the problem of having less language skills and less knowledge about the use of digital technologies in healthcare (Lupton, 2017, p.87).

DEALING WITH THE OUTBREAK OF HEALTHCARE GAPS IN SWEDEN DURING THE COVID -19

The WHO has highlighted that migrants are at higher risk of infection compared to the rest of the population. In Sweden, the situation of migrants needs to be interpreted to understand and answer the question of why this population group is at higher risk of infection. In addition, other statistics have shown that immigrant groups and people with low incomes are the most vulnerable groups to Covid-19 outbreaks (Calderón-Larrañaga et al., 2020).

One explanation is that African and Middle Eastern migrants face a number of issues, including language and cultural barriers that limit their access to accurate public health information and exacerbate the spread of infodemics as they turn to social media to get the information and guidelines they are waiting for. Also, their poor access to health services led them to not get tested and try to reach out to health services in case of an exacerbation of the disease. As a result, there is a higher level of poor health outcomes as well as an increased risk of infection in their environment, including family and communities (Valeriani et al., 2020).

Immigrants living in Sweden were found to be at higher risk of infection during the Covid 19 pandemic. Especially those from Africa and the Middle East. They have different living circumstances and lifestyles that involve more social life and gatherings, which limits their ability to distance themselves socially during the pandemic. They also rely on public transport for their daily mobility. Employees from the same roots are more likely to be in the service sector, e.g. grocery shops, public transport and pharmacies as clerks. This could explain some of the reasons for the high risk of contracting the virus (Valeriani et al., 2020). This study will continue with another investigation focusing on the situation of the population in Stockholm.

ABOUT STOCKHOLM

With 1,676,205 inhabitants, Stockholm is the most populous city in Sweden. Stockholm is home to the largest number of foreign-born people, as they make up 15% of the population. In addition, 27% of the inhabitants are either immigrants or have a non-Swedish background. Finns, Iraqis and Iranians make up the largest foreign population group in the city. Stockholm is a multicultural city with a variety of cultural backgrounds and different languages spoken by residents: "Swedish, Finnish, English, Bosnian, Arabic, Syriac, Dutch, Turkish, Croatian and Serbian" (*Sweden Population (2022) - Population Stat*, n.d.).

EHEATH STRATEGY OF SWEDEN

eHealth 2025 is the Swedish national e-health strategy developed by Sweden's municipalities, regions and the Swedish Association of Local Authorities and Regions (SKR), which concludes that Sweden will be "the best in the world in digitalisation and ehealth": Furthermore, the ehealth strategy aims to develop efficient, accessible and safe healthcare (E-hälsa, n.d.). The strategy of digitising healthcare aims to provide equal access to the Swedish population.

Although everyone has internet access and owns digital devices such as mobile phones and computers, do they have the digital literacy skills to use them effectively to manage their health and ehealth communications? Do they have the sufficient language skills needed for a successful communication process? Can older people make an appointment themselves without relying on outside help? Will those who live alone be able to manage their health using digital technology even though they do not have the appropriate digital skills or/and language skills? Will this be an easy process for some vulnerable groups or will they suffer from psychological barriers because they feel incompetent in accessing e-health services due to their limited skills?

Different theories exist in the literature regarding the "nudge approach" explaining that it is used in promoting digital health in order to encourage the patients to engage in managing their own health using the new ehealth tools and technologies. It is discussed that promoting self-reliance and giving individuals the own responsibility to manage their health matters promote neoliberalism thoughts. Lupton (2017) argues that the nudge approach with its "liberation paternalism", involves commercial, managerial and government actors and agencies working to stimulate behaviour change in individuals and groups". Moreover, "Digitally engaged patient hood and digital personal health promotion" are supported through various roles by healthcare providers, government health promotion initiatives, beside commercial agencies (Lupton, 2017).

The e-health literacy framework: A conceptual framework for characterizing e-health users and their interaction with e-health systems

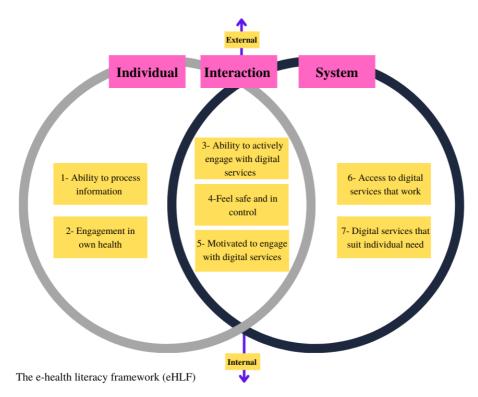


Figure 1The e-health literacy framework (eHLF) Source: (Norgaard et al., 2015).

In order to understand the requirements of e-health users to access and successfully engage with services, a conceptual framework to characterise e-health users and their interaction with e-health systems was developed by O. Norgaard et al. (2015). It is a seven-domain framework called "The e-health literacy framework" (eHLF). Which states that individuals need to have

the ability to process information by having "the mental resources to deal with voluminous information", be able to read, write and learn. They also need to be committed to their own health and confident in their abilities to manage their own health and deal with their condition. The interaction between the individual and the systems requires the individual to be able to actively engage with digital services and feel safe and in control, and to be motivated to engage with the available digital services and a system that is compatible with the individual's needs (Norgaard et al., 2015). The eHealth literacy framework (eHLF) illustrated above and presented in (figure 1) is useful as a theortical guidance to frame the interviews questions through the research method. Moreover, it is useful to interpret the qualitative data of this research and build up a clear understanding of the elements that play main roles the user's capabilities to access and use eHealth beneficially through the (eHLF).

Aim and research questions

This research aims to find an answer to two main questions:

- To investigate the barriers limiting equal access to healthcare through ehealth services.
- To highlight the challenges patients face while accessing health care services through 1177.se and Alltid-öppet in Stockholm.

Methods

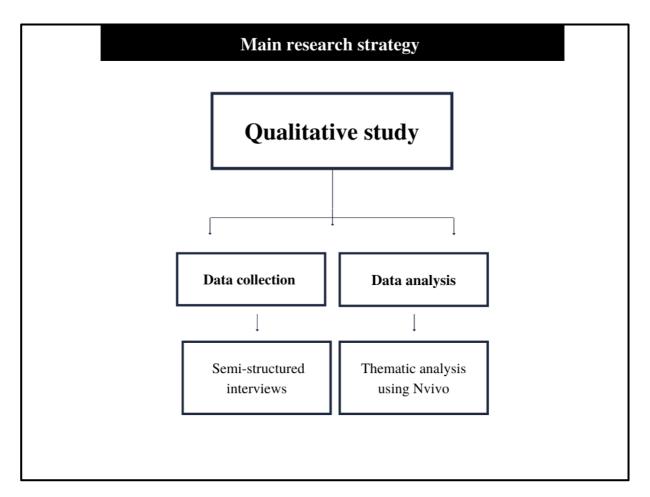


Figure 2 Main Research Strategy

An invitation to participate in the study was sent by direct visits and email to some SFI schools, public schools (Folkhögskola) and non-profit organisations in different areas of Stockholm. Some invitations were accepted and I was asked to introduce myself and present the concept of the Master's thesis to the audience in order to provide them with sufficient background about it. The presentation was done using three languages including Arabic, English, and Swedish due to the diverse nationalities of the attendees. Afterwards, some of the participants expressed their interest in participating as interview partners and contributing to the thesis. They then signed up for a "list of participants" in order to contact them later and arrange a specific time and place to conduct the interviews. On the day of the interview, a consent form was signed by each interviewee confirming that the interviews would be audio-recorded and that the privacy of their personal data would be respected. Participation was open to anyone who could speak

Arabic, English or Swedish as well as to those who can speak other languages and have a translator during the interview.

The interviewees participating in this study were from different countries, including Bangladesh, Egypt, Finland, Germany, Iraq, Lebanon, Netherland, Palestine, Poland, Somalia, Sweden, Syria, and Uganda. The interviews were conducted in different languages including Arabic, English, and Swedish. Each interview lasted for almost 30 minutes.

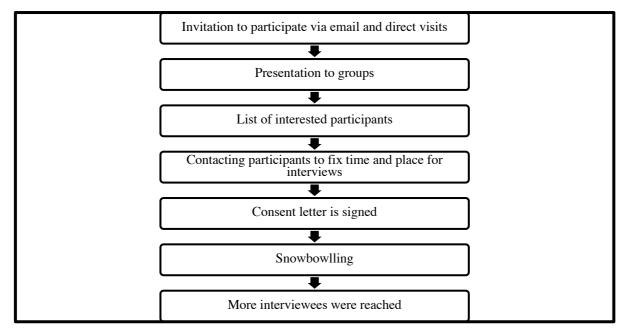


Figure 3 Process of Inviting Participants for the Research

Based on the finding from the literature mentioned previously in this research, the migrants were the most vulnerable group during the covid-19 pandemic as they were exposed to a higher risk of infection. Therefore, we included more interviewees with foreign backgrounds. Also, based on the registered statistics in the Follow-Up Vision for eHealth 2025 report, which includes data on digital health contacts, women had more entries than men, especially between the ages of 18 and 35. Therefore, this study engaged more women than men to get enough answers about their experiences of using eHealth tools and services in Stockholm. The duration of the longest interview was 37:02 minutes and the shortest took 9:08 minutes.

Data material

The study is exploring patients' experiences of using eHealth services in Stockholm, 15 interviewees participated in the research from the region. During the semi-structured interviews, each interviewee was asked to give an introduction about him/herself first. Besides

the length of living in Sweden, and if they attended the pandemic of covid-19 in Sweden or not in order to describe their experiences.

Additionally, they were asked about the languages they speak and the level of their swedish language. Furthermore, we wanted to understand their background about "ehealth" and its meaning in order to measure their knowledge about ehealth and clarify the meaning of it so they will have a full understanding of the thesis's topic. Moreover, they were asked to describe their experience with 1177 and alltid öppet and some of the provided services. Additionally, interviewees were asked to sort out the pros and cons of ehealth services. After that, interviewees were asked to express their opinion about the equality of healthcare services in Sweden. Afterwards, they were asked to describe the process they follow in order to communicate with healthcare services and whether they ask for external help or not. Additionally, it was important to understand which improvement would they like to see in the future of developing ehealth services. The last question was about providing a short brief about the life of each interviewee before moving to Sweden.

Ethical considerations

All participants of the study were acknowledged about the confidentiality of their personal information. Each of the interviewees was given a fake name and code in this study. Also, the interviewees signed a consent letter agreeing about participating in the study, agreeing upon recording their interviews and save them for a specific period of time during the process of the research. The consent letters were signed during the interviews for those who could conduct a face-to-face interview and via email through signing a digital copy for those who had the interviews on zoom. Finally, this study's results were derived entirely from the author's own work, without any copying of other researchers' work.

Analysis

Thematic analysis:

The collected data of this research were analysed using thematic analysis and the interview transcripts were coded with Nvivo software. Generated codes were combined to create the themes presented here.

The thematic analysis provides the reader with what the story is about, its content, and what is being told in it. Moreover, it captures and interprets the superior data of the story (Braun & Clarke, 2006). Thematic analysis is produced by generating the themes in order to write the

report. It starts with getting familiar with the collected data from the interviewees and reading immersively through "repeated reading" of the data, and reading the data in an active way" with the intention to find out useful meanings and patterns. As a result, codes will be generated and they represent "the most basic segment, or element, of the raw data or information that can be assessed in a meaningful way regarding the phenomenon". Then codes are generated through the previous process. The Code identifies a feature of the data (semantic content or latent) that appears interesting to the analyst, and refer to "the most basic segment, or element, of the raw data or information that can be assessed in a meaningful way regarding the phenomenon". The rich thematic analysis applied to the entire data provides the reader with superiority and importance of the data (Braun & Clarke, 2006; Järvinen & Mik-Meyer, 2020).

Results

Illustrated overview of the participants:

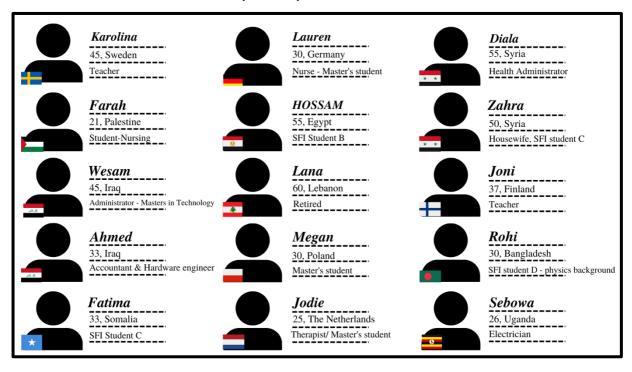


Figure 4 Overview Of The Participants.

Lack of understanding the meaning of ehealth:

The question about the meaning of eHealth was useful to measure the respondents' level of knowledge about what eHealth is and whether they know about existing eHealth services and

whether they need information to understand the topic of this study. Some of the respondents associate the meaning of ehealth with difficulties and challenges. Moreover, the knowledge seems to be determined by the individual's education level and cultural background.

Diala: "Health is that I need to know how to use or how to send SMS, email and so... Yeah, contacting the doctor.... I face difficulties when I want to book an appointment." (Diala, Syria, 55, P1). Zahra: "Maybe it is about when the person wants to call the healthcare services to book a doctor's appointment." (Zahra, 50, Syria, P5).

Jodie: ". In the Netherlands, I used to work with eHealth a lot during the pandemic to keep my clients fit and active and make sure they would follow the rehabilitation program. But here I don't work in health care, so I'm not sure I do not know that you can get like psychology appointments online, stuff like that. Other than that, I'm not sure actually In Sweden, I'm not sure about what is accessible. And I haven't been in touch with anything." (Jodie, 25, Netherlands, P10).

Farah: "Yes, let's say digital health services.". (Farah, 21, Palestine, P3).

Lauren: "I think that it is different levels, for example, eHealth could include like self-tracking, application, like fitness apps, and so on, but I think also about booking appointments, or maybe also interventions with healthcare professionals." (Lauren, 30, Female, Germany, P9).

Joni: "Yes, first I'm thinking of 1177 because that's the one I'm most familiar with and have to use the most. And then I have used also an application I think "Kry", and I need to have a recipe or my children have had any crash or something like that we have used also an application and right now I'm at the beginning (Cognitive behavioural therapy) CBT course for getting knowledge of ADHD" (Joni, 37, Finland, P8).

Cultural Background

Patients from foreign backgrounds used to to access the healthcare services in their home country different from the ones in Sweden. Two respondents from Iraq explained that access to health care in their home country differs from it in Sweden as patients prefer to go to private clinics rather than public health services. They reach the clinic or doctor through the recommendation of their friends. Also, patients used to do direct visits to the clinic without booking an appointment. Consequently, ehealth of Sweden is considered be a new system that requires to be introduced as part of a new community to the new immigrants and foreign-born moving to a Sweden as a new country.

Ahmed: "People don't prefer public health care services as before due to the quality of the services. The doctor provides a higher quality of health care services in the private sector more than the public one." (Ahmed, 33, male, Iraq, P2).

Lana: "In our homeland, we used to visit the clinic directly without an appointment" (Lana, 60, female, Lebanon, p11).

In Germany, and even though it is a European country, patients do not have to call a specific number like 1177 to make an appointment. An interviewee from Germany who recently moved to Sweden described her experience:

Lauren: "It depends like to if it's normal hours, usually you have like your general practitioner, but you also have for example gynaecologist, so they know you know that it's always the same person basically. And you do directly with them. You do the appointment, so you know them and they know you so you don't use like 1177 Yeah, it's, it's different. A bit." (Lauren, 30, Female, Germany, P9).

Pros and Cons of eHealth

In order to understand the perception of the interviewees about their experience of ehealth services, a question about the pros and cons of ehealth was asked.

Pros

Some mentioned the benefits of e-health, such as Rohi who said: "I can book an appointment through the app when I want and when I can. I had to call the health centre to book an appointment early in the morning and did not have time to wait in the queue". Also, Joni seems to consider ehealth as a valuable option.

Joni: "you don't have to go anywhere {Laughing}... I do not have to take the bus and I do not need to sit in the waiting room and then feel disappointed when they participant who is what I did if it's of course not like first time when my daughter had fractured as she's allergic I can't of course if she has an allergic reaction then I must go of course there but in all the cases I can I try to do it online" (Joni, 37, Finland, P8).

Karolina appreciated the existence of ehealth as a tool for people suffering from chronic diseases and for people living in rural areas. On the other hand, she linked the effectiveness of such a tool to the skills of the users and the ease of use of the tool itself.

Karolina: "I think ehealth is a really good, complementary tool. And I think it could also be a great tool for people with chronic diseases to like, follow up, track their health parameters, and so on. And it could also have caused a great chance for people in the countryside who have maybe, like bigger troubles to like access health care, because they live in the countryside and Sweden is a huge country. But yeah, I think it could be a really good complimentary. If it is user friendly, and if people have the right skills" (Karolina, Sweden, 45, P14)

Ehealth offers patients the possibility to book an appointment via a mobile phone app such as Alltid oeppet, which is available in Stockholm, which is seen as time-saving by some respondents.

Rohi: "I can book an appointment when I want and when it is possible for me. I had to call the health care centre in order to book an appointment in the early morning and I was not able to have time to wait in the queue." (Rohi, 30, Bangladesh, P6).

Jodie, who is from the Netherlands, appreciates eHealth for minimising gender inequalities and for not having to face the same problems when presenting with her partner or filling out a document compared to her home country.

Jodie: "When I had an operation in my home country once I asked if my wife could be there, and they were like, huh, and I just knew that if I would ask it, can my husband be there? It was like, Oh, sure. (...) But I'm not afraid for example, filling an upload an online application or information in Sweden." (Jodie, 25, Netherlands, P10).

Karolina: "It was effective during Corona. For example, it was helpful to be able to order the covid test online. As well as booking the vaccination and getting the certificate." (Karolina, Sweden, 45, P14).

Cons:

E-health can be considered a useless tool if it is used by people who do not have the skills and abilities to use it and if they do not have anyone to help them. Zahra is 50 years old and takes care of her husband who often falls ill. She completed secondary school and was unable to realize her dream of studying nursing or art due to old considerations and traditions, as her father refused to allow her to continue her education. Eventually, she found herself in a modern world that requires more qualifications than she has to maintain her own health and that of her husband himself:

Zahra: "My son is studying and sometimes he is not available to help me and I have to wait for him. If I am sick but I have to wait for my son to be available and not busy to book an appointment for me, that is not good for me. I must know how to do that by myself. Sometimes, I become sick or my husband without having no one around." (Zahra, 50, Syria, P5).

Linguistic skills as a barrier

The socioeconomic level seems to be one of the main determinants of the capabilities, competencies, and skills of the individuals to proceed with accessing ehealth services, especially for those who moved recently to Sweden. The better the socioeconomic level is, the higher education the individuals have and the better knowledge, ability to learn, and digital literacy they own. On the other hand, linguistic skill is still a barrier to all of those new comers to the country and to some of those who are living here for example for six years.

Some of the surprising results is the relationship between self-efficacy and the linguistic skills of the individual. As one of the interviewees was concerned to express her language skills due to not believing in her ability to communicate in Swedish. Likewise, a person's ability to speak a foreign language, declines when he feels sick, and it can be in a worse situation while talking to someone via phone call instead of face-to-face meeting.

Fatima: "When I try to contact, for example, 1177, I talk to myself that maybe I will not be able to communicate or explain the pain I have, do not call them now, my be my language level is not enough to communicate." (Fatima, 33, Somalia, P4).

Lauren: "So if the language is a problem or a barrier, not anymore. Like it was stronger when I was actually sick." (Lauren, 30, Germany, P9)

Hossam: "I cannot explain the symptoms to the nurse or the doctor in Swedish and I am not able to understand their Swedish language when they speak to me during the phone conversation. Then I prefer to meet the doctor face to face at their clinic." (Hossam, 55, Egypt, P15).

Rohi: "I tried to book an appointment for my third dose of covid vaccination but the nurse couldn't understand my Swedish and she couldn't communicate in English. After a week, a colleague helped me. Also, I cannot book an appointment by myself for my children so I asked my husband to help." (Rohi, 30, Bangladesh, P6).

Jodie: "Yeah, I have tried to search about information related to Covid and the guidelines. But I have to say that it was, for me at least very hard to find information in English. I did find some page, but then you have to pay for it, which felt ridiculous. It was like a newspaper kind of thing for international" (Jodie, 25, Netherlands, P10).

Farah: "(...) maybe my mom as she has lack of Swedish language. (...) also, my friend, who doesn't speak Swedish, her father was really sick with different types of diseases. She had no knowledge about contacting healthcare services. He is an old man, she needs to always be there around him. While she had an emergency situation it is difficult for her to convince the emergency services to come directly as she needs to give much information which takes a long time." (Farah, 21, Palestine, P3).

Digital literacy as a barrier

Digital literacy seems to be an essential requirement that patients must have in order to use e-health tools and access health services. Respondents' answers about their ability to access e-health services using digital devices, their life history before moving to Sweden, age and level of education are some factors that cause a lack of digital literacy. Moreover, socialism and individualism seem to play a significant role in whether the person is pushed to learn about digital skills or depends on others to help. As living in a family, having more social contact with no distance gap can encourage relying on others to help instead of having their own digital literacy. Lana, who lived in Sweden for 30 years expressed her entire self-motivation to explore and try to use the digital devices to access ehealth independently. This can be explained as a piece of evidence explaining that living in a country with an individualistic pattern such as Sweden can encourage the person to be more independent and have the concept of self-responsibility.

Fatima: "Well, I don't contact services such as 1177. My husband always does it and he knows everything about that. (...) The problem is I have no idea how to use the computer. I do not know what to do and which website to visit. The difficulty is when I visit 1177 through my mobile phone or the computer, I have no idea which page to open in order to for example, book an appointment" (Fatima, 33, Somalia, P4).

Diala: "The problem is that I am not good at this and my sons help me. For example, they book an appointment and contact the emergency. (...) I can not use the mobile phone application to reach healthcare services by myself. I need someone to teach me the steps." (Diala, Syria, 55, P1).

Hossam: "They are always my daughters who help me to contact 1177 or when I need to book a doctor appointment, I have no idea how to use this app that you mentioned." (Hossam, 55, Egypt, P15).

Lana: "First time, I used it to book the covid-19 test. Then, we used it in order to book an appointment for the covid vaccination. It was easy. I was afraid at the beginning. Then I tried to use it and I found that the app itself helped me to complete the process step by step." (Lana, 60, female, Lebanon, p11).

The use of mobile phones as part of daily life can play a useful role in facilitating the use of e-health tools such as mobile health apps. When observing her parents' use of their computer and mobile phone, Farah found that they were more likely to ask her for help when it came to using the computer to access e-health services.

Farah: "Well, even the computer I think using the mobile phone applications is much easier as they are having and using their mobile phones as part of their daily life. I think it is more difficult for the elderly to connect through the computer compared to those who do not know." (Farah, 21, Palestine, P3).

Karolina: "It is difficult for old people to use digital devices and seek health care. Absolutely, they will not need to go to the local health centre which is good on the other hand it is difficult for them to use digital healthcare platforms and services." (Karolina, 45, Sweden, P14).

Bank ID

The absence of the e-identification tool, which is known in Sweden as "Bank ID" is an app on the mobile phone, can lead to limited access to digital health services, causing stress for patients who do not yet have access due to a variety of reasons. During the Covid 19 pandemic, other health services such as booking appointments for Covid 19 tests, vaccinations and issuing vaccination certificates were added and carried out through the ID bank depending on the patient's identification.

Jodie: "But when the whole vaccine issue, I felt quite stressed, because now my vaccine passport to say so is expired, because I had my vaccines very, very early. And now I have my booster. So it shouldn't be expired anymore, but I can't put it in because I still don't have a bank ID. So that's kind of stressful because if I want to travel home because of my family or something, I have to first take a test and I can leave immediately. And that is kind of stressful." (Jodie, 25, Netherlands, P10).

Lack of knowledge and information

Some participants were able to access healthcare information through the Swedish National Board of Health (Folkhälsomyndigheten) website and by observing advertisements, e.g. on public transport such as trains. On the other hand, the majority of the participants in this study were not positive about the knowledge and information about existing digital health services. One of them wondered about the existence of a mobile health app, another wished for an app to book a doctor's appointment. Also, other participants consider emergency services and local health centres, as well as the hospital as the healthcare services, as all that they knew about without having any knowledge about other services that are available through digital devices

such as the mobile phone and computers. Another mentioned the knowledge about having experience using another private app that differs from Alltid öppet which is called "Kry". Furthermore, some participants referred to the services of booking Covid-19 vaccination that was introduced during the pandemic.

Farah: "No No, I didn't here about it before, it is my first time to hear about it. Also, I didn't see any advertisement or information about it. The one I knew is another application "Kry" that allows us to contact the doctor directly while being sick." (Farah, 21, Palestine, P3).

Rohi: "I had to book an appointment for the covid test after I came back to Sweden. I had to use 1177 or Alltid öppet to book an appointment. That was long process as I had to use both the mobile phone for the app and the laptop in order to open 1177." (Rohi, 30, Bangladesh, P6).

Access to health information:

There is a lack of publicly available information about health services in Sweden. The participants in the study showed their self-reliance to identify and access the health care they need in several ways, including using the Google search engine, and blogs available on websites to benefit from the experiences of others. While some were unable to quickly and easily access the information that they need to know due to the language barrier, which prompted them to search for information through websites available in the English language, such as the website of the newspaper Aftonbladet. Other could know more information through TV, printed ads, and SMS, due to engaging in a working environment and their competencies of speaking Swedish.

Diala: "I use Google to search about what I need to know." (Diala, Syria, 55, P1). Lauren: "I'm reading blogs, about like people who also recently moved to Sweden sometimes, you know, to like read how they experience was and where and what they did." (Lauren, 30, Female, Germany, P9).

Rohi: "Through SMS, TV, advertisements, and posters on the street and train stations. Also, I work in Sweden so it was easy to get the information." (Rohi, 30, Bangladesh, P6).

Jodie: "Yeah, I have tried. (...) very hard to find information in English. I did find some page, but then you have to pay for it, which felt ridiculous. It was like a newspaper kind of thing for international". (Jodie, 25, Netherlands, P10).

Ahmed: "No! For example, I moved to Sweden in a legal way, let's say that there was supposed to be a manual for guidelines about health care services that I can read and have some background about the situation in Sweden as a new country to live in. Even for tourists, I think they need some sort of manual to reach such services including the health care services. For example, if someone face a problem or maybe from a real situation that happened to me, a fight between two persons and they don't speak Swedish and have no idea who to call...how will they know about 77 or I don't know what is called. This means that it will be difficult to access health care services so the result will be worse health outcomes." (Ahmed, 33, male, Iraq, P2.

Social inequalities

Despite its benefits, eHealth can increase social inequalities as part of the population struggles with accessing the ehealth services successfully. For example, those who with less linguistic skills, besides the appropriate digital literacy and those who are really sick. Moreover, some categories are expected to be excluded from the health care system despite their greatest need for care. The elderly are the most in need of healthcare and to access it, contrary, digitalization of health services increases what is required from them to deal with the modern technology. Even if electronic devices and mobile phones are part from their daily lifestyle, the requirement of managing ehealth extends beyond that. Since they need to have digital literacy at an advanced level in order to manage their own health. Moreover, old people who do not speak the appropriate level of Swedish language will face more struggles during the process of communicating with ehealth. Karolina provided an example of a digital video call with the doctor when the patient is really sick thinking that it can be impossible for them to proceed with the digital meeting.

Karolina: "I think it is ehealth can cause inequalities (ojämlikhet) in the health care system. For example, let's say that some local health centre allows only digital video appointments with the doctor. As I think that those who can conduct a video meeting with the doctor are not actually sick, and those who are really sick cannot actually do that by themselves while being so sick and they are the ones who are really in a need receive the healthcare." (Karolina, Sweden, 45, P14)

Stress symptoms and other psychological barriers

eHelth can cause some psychological issues to those who find it difficult to reach ehealth services. Some participants feel hesitant, afraid, lack self-confidence, nervous, and anxious about their ability to choose the right words in Swedish to explain the symptoms she has through the phone while calling 1177. One of the participants shared her experience during contacting 1177 as she explained that she struggles the self-confidence and prefers to seek external help because of hesitating about her Swedish language skills. Another finds it difficult to contact the healthcare services by herself because of the language, as a result, she cries and pushes herself to try again and again!

Diala: "When I don't understand something, find some difficulties, and can't find someone to help me, I cry. (...) Then I try more than once and if I find more difficulties, I ask for external help." (Diala, Syria, 55, P1).

Rohi: "Yes. As I am not so fluent in Swedish and I have to translate everything to the doctor. Many cannot understand my Swedish and I am not able to understand their Swedish language when they speak to me during the phone conversation. Then I prefer to meet the doctor face to face at their clinic." (Rohi, 30, Bangladesh, P6).

Lauren who is is a nurse and has background in public health mentioned that she is struggling with finding the right words to describe her symptom via phone which makes her nervous:

Lauren: "Yeah, it's stressful, because, and you, you have a problem and you try to describe your symptoms as accurately as possible. And on the phone and because I'm a half coworker, like, like, I should have mentioned this, that I'm studying public health, but I have a background as a nurse, so I can describe my symptoms. Well, and, but still, I'm sometimes nervous if, like, you know, like you're missing some sensation, like some you only hear what the other person is talking about, you know, and I like you can like there's no like bodily examination or like direct contact. So, I'm a little bit nervous that I'm not good at describing my symptoms." (Lauren, 30, Female, Germany, P9).

Zahra expressed the symptoms she got while from facing challenges during the process of access healthcare services through ehealth. Stress, self-blame, sleeping issues, overthinking, and anxiety, are some of how her body and mind react during this situation.

Zahra: "I get stressed from blaming myself, I don't even sleep because of thinking about why I couldn't proceed with contacting the healthcare by myself, why didn't I talk to them directly, and why couldn't I book an appointment by myself. I stop doing my normal activities at home for example cooking. I keep overthinking about why couldn't I do that, why didn't I try. If anyone speaks to me I don't pay attention to what they say. If I am not able to do something by myself, I don't feel comfortable. I keep being anxious up to the next day, waiting for my son to book the appointment." (Zahra, 50, Syria, P5).

Phone anxiety and stress appeared in the response of one of the participants who has ADHD. As he prefers to communicate with the healthcare services via video call instead of the phone because he becomes worried about if he hears them correctly or do they hear him?

Joni: "I don't prefer speaking on phone. The video is a bit better because you see the person. (...) I can't relax as good. Maybe I don't hear and maybe they don't hear me. So, it becomes like that...Stress." (Joni, 37, Finland, P8).

visual doctor's appointment/communication

Some interviewees reflected about worrying about safety and security concerns. Some cultural aspects and previous negative experiences were connected to having some reservations. For example, a Syrian interviewee mentioned that she worries about the video call with the doctor instead of face-to-face appointment in case it exceeds being with a general doctor. After asking her different questions in an attempt to reach the core reason behind her concerns, she finally revealed that some accidents took place in her home country (Syria) through blackmailing some persons by others and publish videos on social media with damaging information about them.

Diala: "I don't prefer the video call because in Syria, we had many problems. For example, we had some accidents when someone filmed another person to damage his/her reputation and publish it on social media and so. I mean as a offense of a person. So imagine that you are a respectful person and find yourself in a published video on social media and other websites without hurting anybody else. If it is an appointment with a general doctor it will be fine." (Diala, Syria, 55, P1).

External Help

10 out of the 15 participants ask for external help with communicating the ehealth services. According to what they mentioned, and as it was captured from the responses, they received the help from: (My friends, my husband, my teacher at the language school, my colleagues, my son, a relative in another city). Others added: (my ex as she is a nurse, my Swedish boyfriend, my wife's cousin, my daughters, Swedish husband of my wife's cousin, were mentioned by the interviewees).

Lana: "I asked my sons to help me with booking the appointment but I need to be there as well as we need to fill in my personal information." (Lana, 60, female, Lebanon, p11).

Rohi: "My colleague helped me to book an appointment as I tried to book an appointment for my third dose of covid vaccination but the nurse couldn't understand my Swedish and she couldn't communicate in English. After a week, a colleague helped me. Also, I can not book an appointment by myself for my children so I ask my husband to help." (Rohi, 30, Bangladesh, P6).

Jodi: "Yeah. My wife's cousin lives here and she has a Swedish husband. So, if I would really want to know something immediately, I could ask him." (Jodie, 25, Netherlands, P10).

Intrinsic motivation:

Some words were captured and they indicate to the inner motivation that some of the participants have which inspires them to learn, keep trying, and accomplish accessing healthcare services independently. For example, having the patience to keep calling the healthcare services many times in order to reach the required services.

Diala: "I wish to have a computer course to improve my technical skills. for example, to proceed with, for example, applying a report to social insurance authority, and labour services, and to pay a bill, the computer is useful to complete these processes." (Diala, Syria, 55, P1).

A Participant who is 60 years old, living in Sweden for 30 years described her inner motivation to try using the ehealth services by herself. Raising a question about if the long period of living in Sweden which is a country characterized by an individualistic culture teaches the individuals to change their behaviours and be independent.

Lana: "Also, I asked my sons to help me with booking the appointment but I need to be there as well as we need to fill in my personal information. Then, I realized that the healthcare centre will not help me with the process, then I decided to try it by myself...then(Surprised) I am done, I could book the appointment by myself (laughing). The person needs to have the motivation, and not be afraid to try "A push-button". So the person needs to avoid being afraid or having the fear to try." (Lana, 60, female, Lebanon, p11).

Another participant shows her passion to strengthen her competencies by receiving some training about how to access and use the online services.

Fatima: "maybe if someone teaches me and provides me with training about how to access and use online services through a laptop...I will learn immediately." (Fatima, 33, Somalia, P4)

Besides having the inner motivation to develop her digital literacy skills so she can depend on herself, Diala refers to her will to gain more digital literacy for safety and security concerns. By way of preventing her personal information that she has to share with someone else when she requires external help. She attributed this to strengthening her competencies in managing the communication with services in general as she moved recently to Sweden and realized that most of the processes with public services as well as other tasks such as paying the bill are taken place through the electronic services.

Diala: "I told you that I wish to have a computer course to improve my technical skills. for example, to proceed with, for example, applying a report to social insurance authority, and labour services, and to pay a bill, the computer is useful to complete these processes. Because, as you know, maybe I will have to ask someone that I am not confident about so he will know my personal number and private information. Because you cannot trust everyone." (Diala, Syria, 55, P1).

Discussion

This research identifies the barriers to equal access to healthcare through the health services in Stockholm. A qualitative research method was conducted and applied with the participation of 15 interviewees from different municipalities in Stockholm. The thematic analysis method was used in order to analyze the qualitative data collected through the interviews and their answers based on the thematic analysis process. The study criticised some of the Swedish health national strategy 2025 objectives which consider "the individual as a co-creator". As through these results, the individuals seem to differ in the reason why they may have challenges to access healthcare through ehealth equally. While for some particular groups, the meaning of what ehealth is not clear due to different factors including age, education level, not being familiar with the concept of ehealth, having a foreign background, or being foreign-born and moving recently to Sweden.

Barriers found through the study include a blurred understanding of the meaning of health, insufficient linguistic skills and digital literacy, lack of knowledge and information about ehealth services, stress and other psychological symptoms, visual consultation, the need for external help, and intrinsic motivation. An important fact observed during the research work suggests that there is a high need for an information website or booklet in all major languages for immigrants which helps them to understand the medical system of Sweden (in particular the

eHealth system). As part of public health intervention, it should also have a central database about doctors, nurses, clinics and hospitals as well as their services and the languages in which the services are being offered. Efforts from the public health authorities and medical professionals should also be made in creating awareness about the eHealth system for the general public.

The World Health Organization has stated that refugees and migrants have been significantly affected during the pandemic. Supportive factors that consider them to be the most vulnerable group include race, culture, ethnicity, and language which puts them at risk of being outside the dominant population and limit their access to quality healthcare (*COVID-19 Immunization in Refugees and Migrants*, n.d.). Having the appropriate linguistic skills to communicate, reach, and use ehealth services is one of the primary requirements to benefit from health care provided through ehealth and missing it is considered a barrier. Through the results of the study, an important finding indicates to linguistic skills is not only associated with the educational level or with some specific vulnerable group. As there are highly educated individuals with a proficient level of speaking English and with a high level of education, besides having sufficient digital skills, who are still struggling with access to ehealth due to the language of the offered services.

The e-identification or the electronic identification which is known in Sweden as Bank ID, is a necessary tool that allows individuals to enter and use health services. Missing it is a barrier limiting the access to the system of ehealth.

One more important barrier is the lack of knowledge and information about the existing ehealth services. For example, the mobile health application "Alltid öppet" which means always open and it aims to offer the healthcare services at the time of the patient's preference. As it is introduced on the website: "Region Stockholm's app for digital healthcare contacts is always open. Here you can meet the care in a way that suits you, and at a time of your choosing"(*Alltid Öppet - Vård På En Tid Och Plats Som Passar Dig*, n.d.). Despite the website is offering sufficient and detailed information about the mobile application and how to use it as well as offering the language preferences to translate its contents into different languages through the google translator option, most of the respondents of this research were unaware of the existence of the app. This means that more promotional activities and information need to be provided to the public in order to introduce the app.

Psychological barriers including stress, anxiety, self-efficacy, fear to try, fear of being misunderstood, and intrinsic motivation, and distrust, seem to be barriers limiting access to ehealth. Moreover, the development of some symptoms such as stress and anxiety while

contacting ehealth services such as booking an appointment while missing the appropriate capabilities including language and using digital devices may worsen the patient's health status. On the other hand, intrinsic motivation seems to be important to inspire the individual towards using ehealth effectively. As some findings indicated the ability of the individual to proceed with using technology independently despite not having previous knowledge or the appropriate level of literacy. This may explain why service programmers are recommended to consider some psychological aspects and individual situations during the planning process for new E-Health tools including: Fear and concern, distrust, motivation, and misunderstanding (Potančok et al., 2015).

Finally, eHealth can be considered as part of a new community for those who moved recently to Sweden. In other words, there is a strong need for health literacy among the diverse population in Stockholm before providing the responsibility for them to manage their own health.

Strengths and limitations of the study

Strengths of the study: The study includes participants from various categories of the society in Stockholm. Besides, new findings resulting from this study can add more knowledge to developing ehealth services in order to match the diversity of the population in Sweden. Finally, the study merges the knowledge that the researcher has in the field of digital media, communication, and international business management into public health sciences.

Limitation of the study: The number of interviewees (sample size) could have been larger, but given the limited timeframe for finishing the study, 15 interviewees were deemed enough given how diverse the selection was. In addition to that, the inclusion of concerned authorities in the data collection phase was neglected in the study, however, it can be considered in future research to strengthen the findings.

Conclusions

eHealth is a new notion in the field of public health that merges health with technology. Based on the observations and findings, it is concluded that the problems involving access to eHealth are relative and depend upon several factors such as the cultural background of an individual, language skills, age group as well as the willingness of a person to understand and access the system. In our rapidly changing world, most of the conventional services are migrating to digital space such as digital currencies, literature, university lectures as well as some medical care

services which help an individual to easily access them using their smart devices. In an era of pandemics (COVID-19) and wars (Russia-Ukraine, etc.) the need for eHealth is more than before as it includes less human interaction thus reducing the risk of spread of viruses and helping medical practitioners to remotely monitor and suggest remedies for common diseases to their patients. There is a high room for development in the eHealth system as our study suggests that people belonging to the elder age group with limited knowledge of cyberspace finds it very hard to access or understand such a system, hence the system should be modified by considering such a population in mind. Since Sweden is a multicultural country where people from almost all social and cultural backgrounds are living their lives, therefore, in order to cope up with the language barriers, the eHealth system should be offered in all major languages of the world which will help a big number of migrants to get the most of it.

Access to eHealth is associated with different factors that were partly mentioned through the literature as well as the analysis of the qualitative research method and the interviews. These factors differ from one person to another. Whatever the education level they have, they still face barriers to access health services through ehealth such as being skilled in the Swedish language and not having the e-identification which is known as Bank ID in Sweden.

eHealth system in Sweden can be considered as part of a new community and culture to those who moved recently to Sweden. Development is required from both sides, the system providers as well as the users in order to benefit from the revolution of electronic services in general, particularly ehealth. As the system providers need to rethink about the barriers limiting the equal access to the population and pay more attention to the considerations of the diversity aspect of the population.

Moreover, the government need to pay attention to the residents in order to avoid increasing the social health disparities. Some recommendations are providing more information about the ehealth. Besides, language schools need to inform the students about healthcare services in Sweden as part of "SFI" the Swedish language education program, introduction courses, integration activities, courses at the non-profit organization, and brochures for new migrants groups whatever their nationality is. Migrationsverket is a good starting point to deliver the information to newly arrived people in Sweden to inform them about healthcare services. As a part of integration efforts, digital literacy along with the Swedish language should also be made essential. Since it will not just help individuals understand and access the electronic services alongside with eHealth system but will also help them in finding good jobs to contribute their share to the Swedish economy.

References

- Alltid öppet—Vård på en tid och plats som passar dig. (n.d.). Retrieved May 23, 2022, from https://www.slso.regionstockholm.se/vard-hos-oss/alltid-oppet/
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research* in *Psychology*, 3, 77–101. https://doi.org/10.1191/1478088706qp063oa
- Calderón-Larrañaga, A., Vetrano, D. L., Rizzuto, D., Bellander, T., Fratiglioni, L., & Dekhtyar, S. (2020). High excess mortality in areas with young and socially vulnerable populations during the COVID-19 outbreak in Stockholm Region, Sweden.

 BMJ Global Health, 5(10), e003595. https://doi.org/10.1136/bmjgh-2020-003595
- COVID-19 immunization in refugees and migrants: Principles and key considerations:

 interim guidance, 31 August 2021. (n.d.). Retrieved May 23, 2022, from

 https://www.who.int/publications-detail-redirect/covid-19-immunization-in-refugeesand-migrants-principles-and-key-considerations-interim-guidance-31-august-2021
- E-hälsa. (n.d.). Socialstyrelsen. Retrieved May 11, 2022, from https://www.socialstyrelsen.se/kunskapsstod-och-regler/omraden/e-halsa/
- Eysenbach, G. (2001). What is e-health? *Journal of Medical Internet Research*, 3(2), e20. https://doi.org/10.2196/jmir.3.2.e20
- Järvinen, M., & Mik-Meyer, N. (2020). Qualitative analysis: Eight approaches for the social sciences. Sage.
- Latulippe, K., Hamel, C., & Giroux, D. (2017). Social Health Inequalities and eHealth: A

 Literature Review With Qualitative Synthesis of Theoretical and Empirical Studies. *Journal of Medical Internet Research*, 19, e136. https://doi.org/10.2196/jmir.6731
- Lupton, D. (2017). *Digital Health: Critical and Cross-Disciplinary Perspectives*. Routledge. https://doi.org/10.4324/9781315648835

- Norgaard, O., Furstrand, D., Klokker, L., Karnoe Knudsen, A., Batterham, R., Kayser, L., & Osborne, R. (2015). The e-health literacy framework: A conceptual framework for characterizing e-health users and their interaction with e-health systems. *Knowledge Management and E-Learning*, 7, 522–540.
- Potančok, M., Vondrová, D., & Andera, M. (2015). Psychological Aspects and Barriers of Ehealth Implementation.
- Rodrigues, J. J. P. C., Sendra Compte, S., & de la Torra Diez, I. (Eds.). (2016). Copyright. In *E-Health Systems* (p. iv). Elsevier. https://doi.org/10.1016/B978-1-78548-091-1.50014-2
- Royal College of Nursing. (n.d.). The Royal College of Nursing; The Royal College of Nursing. Retrieved March 31, 2022, from https://www.rcn.org.uk/clinical-topics/ehealth
- Sweden Population (2022)—Population Stat. (n.d.). Retrieved May 15, 2022, from https://populationstat.com/sweden/
- Valeriani, G., Sarajlic Vukovic, I., Lindegaard, T., Felizia, R., Mollica, R., & Andersson, G. (2020). Addressing Healthcare Gaps in Sweden during the COVID-19 Outbreak: On Community Outreach and Empowering Ethnic Minority Groups in a Digitalized Context. *Healthcare*, 8(4), 445. https://doi.org/10.3390/healthcare8040445

Appendices

Contact Information

This research has been reviewed and approved by Stockholm University. Regarding any further questions or concerns about this study, kindly contact:

Name of researcher: Eman Silmy Abougazar

E-mail: esilmy.se@gmail.com

Tel:

Interviewees' consent form for interview

My Name is *Eman Silmy Abougazar* and I am a student doing public health master's program at Stockholm UniversityMy area of study is

• "Barriers to equal access to ehealth" I am therefore asking if you would agree to participate in my study. The interviews can be conducted depending on your preference so it is possible to be online, face to face, or via phone call. The interview will be taped and no one of the participants in the study will be identified without their consent.

I am fully aware of the nature and extent of my participation in this study as stated above.

I hereby agree to participate in this research.

Signature of participant	Printed name of the participant
Signature of researcher	Date

Questions:

Patients interviews questions:

- 1. Could you please introduce yourself to me?
- 2. How long have you been living in Sweden? Did you arrive before, during, or after the pandemic?
- 3. What languages do you speak? How do you evaluate your level of Swedish language?
- 4. What do you know about eHealth or health care services through digital technology? Do you know which services you can use in Sweden?
- 5. Could you please describe your experience with health care services in Sweden? Before and during the pandemic and how do you reach these services?
- 6. How was your experience with booking an appointment, meeting a doctor via a video call, and using the app "Alltid öppet"? How was your experience while calling 1177? and Which language do you use while contacting the healthcare services?
- 7. What was the positive side while contacting health care services?
- 8. Could you please describe some issues and difficulties while communicating with health care services? Please give concrete examples.
- 9. Did you feel any stress while using the health care application and other online services?
- 10. What do you think, do they offer equal health care services for all? Does the background of the person who seeks help matter? Could you give me concrete examples?
- 11. How did you try to get help to communicate with and access the healthcare services you need? Can you tell me more about this in relation to your latest contact? What happened and how the process went? Were there any moments of difficulty?
- 12. Which improvements do you wish to see in the future when it comes to long-distance health services? Can you give concrete examples and describe this more?

Thank you for your time and your valuable participation.

Hej!

- 1. Kan du snälla presentera dig för mig?
- 2. Hur länge har du bott i Sverige? Anlände du före, under eller efter pandemin?
- 3. Vilka språk talar du? Hur utvärderar du din nivå i svenska språket?
- 4. Vad vet du om eHälsa eller hälso- och sjukvårdstjänster genom digital teknik? Vet du vilka tjänster du kan använda i Sverige?
- 5. Kan du beskriva din erfarenhet av hälso- och sjukvård i Sverige? Före och under pandemin och hur når du dessa tjänster?
- 6. Hur var din upplevelse av att boka tid, träffa läkare via ett videosamtal och använda appen "Alltid öppet"? Hur var din upplevelse när du ringde 1177? och vilket språk använder du när du kontaktar sjukvården?
- 7. Vad var det positiva med att kontakta sjukvården?
- 8. Kan du beskriva några problem och svårigheter när du kommunicerar med hälso- och sjukvården? Ge gärna konkreta exempel.
- 9. Kände du någon stress när du använde vårdapplikationen och andra onlinetjänster?
- 10. Vad tycker du, erbjuder de lika vårdtjänster för alla? Spelar bakgrunden för den som söker hjälp någon roll? Kan du ge mig konkreta exempel?
- 11. Hur försökte du få hjälp för att kommunicera med och få tillgång till den sjukvård du behöver? Kan du berätta mer om detta i förhållande till din senaste kontakt? Vad hände och hur gick processen? Fanns det några svårigheter?
- 12. Vilka förbättringar vill du se i framtiden när det gäller långdistanssjukvård? Kan du ge konkreta exempel och beskriva detta mer?

مر حبا:

١- هل يمكنك تقديم نفسك لي من فضلك؟

٢- منذ متى وأنت تعيش في السويد؟ هل وصلت قبل الجائحة أو أثناءها أو بعدها؟

٣- ما هي اللغات التي تتحدثها؟ كيف تقيم مستواك في اللغة السويدية؟

٤- ماذا تعرف عن الصحة الإلكترونية أو خدمات الرعاية الصحية من خلال التكنولوجيا الرقمية?
 هل تعرف ما هي الخدمات التي يمكنك استخدامها في السويد؟

٥- هـل يمكنـك أن تصـف تجربتـك مـع خـدمات الرعايـة الصحية فـي السـويد؟ قبـل الجائحـة وأثناءهـا وكنف تصل الي هذه الخدمات؟

آ- كيف كانت تجربتك مع حجز المواعيد ومقابلة الطبيب عبر مكالمة فيديو واستخدام التطبيق
 "Alltid öppet" كيف كانت تجربتك أثناء الاتصال بالرقم 1177 وما هي اللغة التي تستخدمها
 أثناء الاتصال بخدمات الرعاية الصحية؟

- ٧- ما هو الجانب الإيجابي عند الاتصال بخدمات الرعاية الصحية؟
- ٨- هـــ ل يمكنــ ك وصــ ف بعــ ض المشــ كلات والصــ عوبات أثنــاء الاتصــال بخــ دمات الرعايــة الصــ حية؟
 يرجى إعطاء أمثلة محددة.
 - ٩- هل شعرت بأي ضغط أثناء استخدام تطبيق الرعاية الصحية والخدمات الأخرى عبر الإنترنت؟
- ١- مــا رأيـك ، هــل يقـدمون خـدمات رعايــة صـحية متسـاوية للجميـع؟ هــل خلفيــة الشـخص الـذي يطلـب المساعدة مهمة؟ هل يمكن أن تعطيني أمثلة ملموسة؟
- 11- كيف حاولت الحصول على المساعدة من أجل التواصل والوصول إلى خدمات الرعاية الصحية التي تحتاجها؟ هل يمكنك إخباري بالمزيد حول هذا الأمر فيما يتعلق بآخر جهة اتصال لك؟ ماذا حدث وكيف سارت العملية؟ هل كانت هناك أي لحظات من الصعوبة؟
- 17- ما هي التحسينات التي ترغب في رؤيتها في المستقبل عندما يتعلق الأمر بالخدمات الصحية لمسافات طويلة؟ هل يمكنك إعطاء أمثلة ملموسة ووصف هذا أكثر؟

Screenshot of list of Participants registration form including: Name, contact details, languages they speak, Swedish language level, age, marital status, occupation, period of living in Sweden, time and place for the interview, and other notes.

