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Perspectives of Middle Eastern Immigrant Parents Regarding Accessing Healthcare Services for Children During the COVID-19 Pandemic in London, Ontario

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A thesis submitted in partial fulfillment of the requirements for the Master of Science degree in Health and Rehabilitation Sciences

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Abstract

Background: During the COVID-19 pandemic, immigrants have been disproportionately affected and faced difficulties in accessing healthcare services. While it has been reported that the rate of pediatric healthcare utilization decreased during the COVID-19 pandemic, the reasons behind this decline are unclear. It has been suggested that immigrant children might be affected by the COVID-19 pandemic restrictions regarding accessing healthcare services. This study aims to understand the Middle Eastern immigrant parents' perspectives regarding their access to healthcare services for their children in the London, Ontario, area during the COVID-19 pandemic.

Methods: This qualitative study was conducted with an interpretive description methodology and informed by the socio-ecological model. Seven participants were interviewed, and data were analyzed by thematic analysis using NVivo (1.6.1).

Findings: Four main themes were generated: 1) Navigating Health Services: "Limited and Confusing", 2) Being an Immigrant Made it Hard, 3) Less Intention of Utilizing Child Health Services, and 4) Limited/No Mental Health Utilization.

Conclusion: Educational plans for immigrants and healthcare providers, improving effective communication between immigrants and healthcare providers, transferring health information with culturally friendly sources, and collaboration between schools and health services may aid immigrants to have better access to child healthcare services, especially during public health emergencies like a pandemic.

Keywords: COVID-19, pandemic, Middle Eastern, immigrant, children, access to healthcare, interpretive description, qualitative, socio-ecological model, critical realism, SEM

Summary for Lay Audience

Canada is a multicultural country and a destination for immigrants from different regions of the world. In 2020, Ontario had the highest number of new immigrants among all of Canada's provinces and territories, hosting 127,191 new immigrants. Approximately 20% of the immigrant population in Ontario live in London, making up 30% of the London population. The Middle Eastern population is one of the fastest-growing immigrant populations in recent years in London and in Ontario. Before the COVID-19 pandemic, immigrants reported particular barriers to accessing healthcare services, such as language and financial barriers, lack of knowledge, and long wait times. Immigrants have also been disproportionately affected by the COVID-19 pandemic, such as higher rates of infection and hospitalization, and they have faced challenges in accessing healthcare services during the pandemic. It has been suggested that public health restrictions and changes in healthcare services could negatively affect access to healthcare services during the pandemic, and some reports indicate lower rates of child healthcare service utilization during the COVID-19 pandemic, particularly for younger children, compared to the same period of time in the past. However, the exact reasons for this decline are still unclear, and it is important to investigate the experiences and perspectives of parents as to their healthcare service utilization for their children during the COVID-19 pandemic. This study involved interviews with Middle Eastern immigrant parents who have young children (elementary-school children) to understand their perspectives and experiences regarding their access to child healthcare services during the pandemic. This study is positioned to help understand the parents' barriers, challenges, and expectations during the recent pandemic from their own point of view. This knowledge can be used to improve the access to child healthcare services in the future.

Co-authorship Statement

This thesis was supported by my supervisors, Dr. Maxwell J. Smith and Dr. Jacob Shelley. My supervisors were essential to the completion of this thesis through their continuous guidance. They guided me to find my path, define and design my research project in the area of my interest, how to find the best methods to conduct my research project, how to analyze the data, and how to apply the findings to suggest improvements in the area of my research. Through this research project, my supervisors have shared their knowledge and experience with me and have continuously encouraged me with their professional comments and ideas. In addition to their emotional and professional support, they supervised the project to enable me to ensure the accuracy and professionalism of my thesis.

Dr. Shauna Burke helped me with her feedback and comments to accurately define my research questions, aims, and the best methods to achieve my goals.

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List of Abbreviations

CMPA	Canadian medical protective association
COVID-19	Coronavirus disease of 2019
CPS	Canadian pediatric society
ED	Emergency department
ID	Interpretive description
OCT	Over the counter
SEM	Socio-ecological model
TA	Thematic analysis

Chapter 1

1. Introduction

Based on the 1986 Ottawa Charter for Health Promotion, health promotion aims to enable people to increase control over and improve their health (World Health Organization, 1986). Access to health services is one of the important determinants of individual and population health (Public Health Agency of Canada, 2020). During the Coronavirus disease of 2019 (COVID-19) pandemic, every country and health system responded differently to this health crisis based on the capabilities and priorities of their health systems and the health services have been overburdened by infected people. While implementing new health policies and strategies has been a positive step toward controlling the pandemic, concerns have been raised about how these strategies and the health systems' overburden would affect families' and children's accessing healthcare services.

This concern is particularly salient among immigrants, as they already disproportionately faced challenges accessing healthcare services prior to the pandemic (Chowdhury et al., 2021; Gushulak et al., 2011). For example, studies have shown that immigrant children, regardless of origin, are a potentially vulnerable population as they face greater risks to their health compared to non-immigrant children (Mishori, 2020). Younger children also do not have complete control over their health and any changes that influence their health and access to health services since they are not fully capable of decision-making and their health is dependent on their parents/legal guardians (The Canadian Medical Protective Association [CMPA], 2016).

In London, Ontario, immigrants make up to 30% of the population, and Middle Eastern immigrants are a significant part of this population (Statistics Canada, 2019). Despite the growing number of Middle Eastern immigrant families and children in London, there is little

information available about their access to health services, particularly during the recent pandemic when access to in-person health services was impacted for families and children (Jeste et al., 2020). This study aimed to investigate how access to health services for Middle Eastern children (elementary-school age) has been influenced by the COVID-19 pandemic and explore Middle Eastern immigrant parents' perspectives regarding their access to child healthcare services during the pandemic.

1. 1 Problem Statement

Prior to the COVID-19 pandemic, review studies on immigrant healthcare accessibility revealed unmet needs, barriers, and difficulties in accessing health services in Canada, such as language and structural barriers, lack of knowledge, and socio-cultural differences (e.g., Gushulak et al., 2011; Chowdhury et al., 2021). The knowledge that immigrants have already experienced difficulties in accessing healthcare services before the pandemic situation, brings general questions to mind, such as “how has been the experience of accessing healthcare services during the pandemic for immigrant populations?” and “did the policy changes like restrictive measures and virtual appointments have any particular effect on immigrants' access to healthcare services?”

As a result of the COVID-19 pandemic, the government and the health systems have introduced public health policies and restrictive measures to control the pandemic situation, and these changes could affect families and children's lives in different ways (Guruge et al., 2021). For instance, changes such as isolating (e.g., lockdowns, quarantines) and shifting in-person health services to virtual methods may impact access to healthcare services among different populations. According to existing studies, some of the difficulties encountered by immigrants during the pandemic have been lower access to primary care and test facilities, limited access to

non-emergency care, decreased access to healthcare services, mental health services, and community resources, and difficulty in getting appointments from specialists (Benjamin et al., 2021; Etowa et al., 2021a; Wiedmeyer et al., 2021).

Existing studies most relevant to children's healthcare accessibility during the COVID-19 pandemic have primarily shown reductions in the rate of child healthcare utilization during the pandemic compared to the same period before the pandemic in the USA, Germany, Netherland, and Scotland (Antoon et al., 2021; Kruizinga et al., 2021; Ramgopal et al., 2021; Sokolof et al., 2021; Vogel et al., 2021; Williams et al., 2021). In the Canadian context, the study by Saunders et al. (2021) showed a decline in pediatric primary care visits in Ontario and Manitoba and the study by Goldman et al. (2020) reported a decline in pediatric non-COVID-19 emergency visits in 18 emergency departments in British Colombia during 2020. This decline in healthcare service utilization was more significant among younger children and those between the ages of 1 and 12 compared to adolescents (Antoon et al., 201; Saunders et al., 2021). The researchers believed that this decline could be representative of the unmet healthcare needs of children during the pandemic and there should be post-pandemic follow-up plans for children, and particularly vulnerable children (Antoon et al., 2021; Goldman et al., 2020; Saunders et al, 2021; Sokolof et al., 2021; Williams et al., 2021); however, the reasons behind this decline in utilizing primary and emergency pediatric healthcare services are still unclear (Antoons et al., 2021; Saunders et al., 2021). Researchers have suggested that these declines could be associated with changes in healthcare-seeking behaviours or care avoidances in families and further investigation is needed to understand the underlying reasons that made the families limit the healthcare service utilization for their children, particularly younger children, during the pandemic (Goldman et al., 2020; Kruizinga et al., 2021; Sokoloff et al., 2021; Williams et al., 2021).

In summary, our knowledge about existing barriers to accessing healthcare services among immigrants in Canada before the COVID-19 pandemic (Gushulak et al., 2011; Chowdhury et al., 2021), and some evidence of immigrants' difficulties in accessing primary healthcare services during the pandemic (Etowa et al., 2021a; Wiedmeyer et al., 2021), are suggestive of the potential impact of the COVID-19 pandemic on immigrants' healthcare utilization and accessibility. In addition, current evidence of low child healthcare service utilization, particularly among younger children, in different countries and Canada (Antoon et al., 2021; Goldman et al., 2020; Saunders et al., 2021; Sokolof et al., 2021; Williams et al., 2021) is suggestive of unmet healthcare needs among pediatric populations. While researchers have suggested that this decline in primary pediatric healthcare utilization during the COVID-19 pandemic could be related to the pandemic restrictions and changes in healthcare-seeking behaviours in families during this time (Antoon et al., 2021; Goldman et al., 2020; Saunders et al., 2021), no study has investigated the parents' perspectives regarding their experiences accessing healthcare for their children during the COVID-19 pandemic. To fill this gap and examine this issue further, it is important to understand families' perspectives during the pandemic regarding their access to healthcare services for their children and their related experiences, especially in populations who have already experienced difficulties in accessing healthcare services, such as immigrants. This study will investigate the perspectives of Middle Eastern immigrant parents with young children regarding their access to child healthcare services and their experiences during the COVID-19 pandemic in London, Ontario.

1. 2 Research Objective

The overarching objective of this study is to provide a better understanding of Middle Eastern immigrants' access to healthcare services for their young children during the COVID-19

pandemic by generating and analyzing the perspectives of Middle Eastern immigrant parents. This study aims to understand the expectations and needs of Middle Eastern parents from their own perspectives and based on their experiences, how they believe their access to child healthcare services was impacted by the COVID-19 pandemic, whether they believe the restrictions during the pandemic limited their access to child health services, and to provide deeper insights into the consequences of the COVID-19 pandemic and related changes in health systems and policies. I believe this understanding will not only help to promote immigrant children's health and accessibility to health services, but it will also help the health system manage future crises and take immigrant children's health challenges into account for future policymaking.

1. 3 Research Question and Significance of Study

In this study, the primary research question is: "What are the perspectives of Middle Eastern immigrant parents regarding access to child health services during the pandemic?" Consequently, this study aims to explore experiences regarding challenges and barriers related to the COVID-19 pandemic that Middle Eastern immigrant parents report having faced when accessing (or not accessing) child health services. To achieve this aim, I performed an interpretive description (ID) qualitative study with Middle Eastern immigrant parents who have elementary school-aged children in London, Ontario.

The findings of this study are expected to help four groups of people: A) Policymakers responsible for outbreak control will be aware of both positive and negative consequences of the health policies experienced by Middle Eastern immigrant parents and will be able to use this new knowledge in future health crises to manage health systems in a culturally sensitive manner; B) Child health service providers and settlement agencies will be aware of challenges that Middle

Eastern immigrant children would face in accessing healthcare and may as a result try to reduce the barriers for this population; C) School authorities will be aware of the extent of the role they play in immigrant children's health. It is even possible that the parents participating in the study reflect more deeply about their children's health and seek more information on the available services for children after this study; D) Middle Eastern families can be heard, share their experiences, and suggest their expectations about children's healthcare accessibility in Ontario. Finally, the findings of this study may help improve accessing healthcare services among Middle Eastern immigrant children in London, Ontario.

1. 4 Theoretical Framework

This study was guided by the socio-ecological model (SEM) of health promotion (Raingruber, 2014). This model provides a framework to understand the interactive roles of individual and environmental factors in health systems and individuals' behaviour. According to this theory, a system outcome (e.g., in the healthcare system) results from the reciprocal interaction of five levels (or systems): individual, interpersonal (microsystems), organizational (mesosystems), community (exosystem), and public policy (macrosystems). These levels are not separated from each other and resemble nested spheres like Russian dolls, implying that actions at one level influence events at other levels (Raingruber, 2014) (Figure A1). I used this theory as a guide in different steps of my study, as described below.

1. This theory primarily guided me to think about my research question. I believe that access to healthcare services is multifactorial and there is not just one factor that directly influences the accessibility of health services for a population. Access to health services can be influenced by different conditions and factors at different levels, which is reflected in the SEM. Therefore, SEM prompted me to think about

the changes that the COVID-19 pandemic may have made at different levels by restrictive public health measures and health policy changes. Consequently, it raised the question of how these pandemic-related changes might affect access to healthcare services experienced by populations, which is Middle Eastern immigrant children in this study.

2. This theory also prompted me to think broader during data gathering and data analysis. By explicitly thinking about SEM, I tried not to limit my mind to just focusing on a particular level (individual/interpersonal vs. organizational/community) during interviews, data analysis, and creating codes. I explain how I applied this theory in the process of my study in more detail in chapter three.

1. 5 Background

1. 51 Health Care Access in Canada

Based on the Ottawa Charter for Health Promotion (1986), health is considered a holistic concept and a resource for everyday life, defined as “a state of complete physical, mental, and social well-being rather than a mere absence of disease or infirmity” (p.1). Health promotion is the process of enabling people to increase control over and improve their health (Ottawa Charter, 1986).

Access to health services is one of the main social determinants of health (Health Canada, 2020; World Health Organization, 1986), and healthcare access is defined as the ability to navigate health services and communicate effectively with healthcare providers (Cheppers et al., 2006). In order to meet the goal of providing equal access to health services in Canada, there are efforts and policies by the Public Health Agency of Canada and other health authorities to support health equity, which means providing the same opportunities for all people to use health

services and reducing health inequality between different groups of people with different social determinants (Health Canada, 2020). For example, one of the efforts to improve healthcare accessibility is strengthening the evidence base to inform decision-making, which helps health authorities to update health policies consistent with the needs of different populations in the country (Health Canada, 2020). The Ottawa Charter also identifies the importance of health research for reorienting health services based on cultural, social, and community needs (1986).

The Canada Health Act (CHA) is another example that shows the importance of access to healthcare services in Canada. Under the CHA, all Canadian provinces and territories must abide by five principles of universality, accessibility, comprehensiveness, portability, and public administration for health and medical services to be qualified for federal healthcare funding. The goal of this statute is to ensure that the annual funds will be used publicly (publicly administration) for access to necessary healthcare services (comprehensiveness) for all Canadians (universality) regardless of ability to pay (accessibility) and where they live (portability) (Health Canada, 2022).

By providing deeper knowledge on Middle Eastern immigrant children's healthcare services accessibility during the COVID-19 pandemic, this study is poised to help decision-making among health authorities considering Middle Eastern families' needs, expectations, and experiences and promote immigrant children's health in Ontario.

1. 52 COVID-19 Pandemic in Canada

On March 11, 2020, the COVID-19 pandemic was declared by the World Health Organization. As part of the response to the COVID-19 Pandemic in Ontario, public health strategies were introduced, including stay-at-home orders, closure of non-essential services, and closure of public and private schools (Gallagher-Mackay et al., 2021; Wong et al., 2021). The

school closure in Ontario started in March 2020 was the longest, at about 23 weeks, among all provinces and territories in Canada (Gallagher-Mackay et al., 2021).

One of the main strategies of the health system in Canada and Ontario was limiting the primary physicians' offices and increasing the capacity of hospitals and emergency departments to be prepared for caring for infected patients (Goldman et al., 2021; Saunders et al., 2021; Wong et al., 2021). As a result, non-urgent healthcare services were cancelled, and most physicians' offices were closed or operated at a reduced capacity with limited work time. To maintain the restrictive measures and mitigate the challenge of limiting primary healthcare in offices, virtual care was introduced in Ontario (Goldman et al., 2021; Saunders et al., 2021; Wong et al., 2021).

Primary care in Ontario saw large shifts from office to virtual care over the first months of the COVID-19 pandemic (Glazier et al., 2021). Providing virtual healthcare has been helpful in the COVID-19 pandemic as it has provided safe and convenient medical care with a lower risk of transmission and the potential of removing some barriers to healthcare services such as time and transportation challenges and related expenses (Wong et al., 2021). However, characteristics such as age, socio-economic status, level of education, and English proficiency may impact the ability to access and use technologies required for virtual care (Wong et al., 2021). Virtual care may be hard for families with lower virtual healthcare literacy and may even contribute to inequities in access to healthcare or the quality of care (Saunders et al., 2021). Some reports also suggested that restrictive strategies and pandemic-related changes in healthcare service delivery could result in the underutilization of pediatric healthcare services for non-COVID issues during the pandemic in Canada and Ontario (Goldman et al., 2021). This concern is more highlighted when it comes to vulnerable populations' health and accessibility to health services, such as

indigenous, refugees, and immigrants, as these populations have already faced challenges to access healthcare services before the pandemic (Chowdhury et al., 2021; Gushulak et al., 2011).

This study was done between October 2021 and May 2022. During the study period, Ontarians had access to COVID-19 vaccination. The statistics showed that about 75% of people over 12 years old had been fully vaccinated in August 2021 (Katawazi, 2021). In November 2021, vaccination of children between 5 to 11 was approved and the percentage of total Ontarian vaccinated population reached 81% in February 2022 (CBC News, 2022; Government of Ontario, 2021b). During the period of this study, children experienced both online and in-person classes in Ontario (Fitzpatrick et al., 2022). Restrictions started to be lifted during the second half of the study period in the province, such as, reopening in-person school classes and restaurants with half of capacities in January 2022 (Davidson & Alberga, 2022; O'Brien, 2022), and lifting mandated masks in schools and other places with exceptions like healthcare settings and public transits in March 2022 (Ranger, 2022).

1. 53 Pediatric Health and Decision-Making

Compared with adults, children are likely to be more vulnerable to health problems as they might not be fully capable of protecting their interests, seeking professional health services, and acting as an advocate on their behalf for serious health problems in all situations (Vohora, 2018). Even though the age of majority is 18 years old in Ontario (Age of Majority and Accountability Act, 1990), children under the age of 18 can decide on their health and give consent to receive health services if they have been recognized as being capable by health care providers (CMPA, 2016). A capable person is defined as an individual who is able to understand the nature of an illness and treatment and is able to appreciate the consequences of receiving or refusing treatment (CMPA, 2016; Hebert, 1996). Based on medical laws in Ontario, decision-

making in children is case-based and depends on risks, benefits, and children's capability. It is suggested that individuals between 12 and 18 years old are capable of decision-making for their health (CMPA, 2016). According to the Canadian Pediatric Society's (CPS) official position statement (2018), infants and pre-school children have not reached the definition of capacity (Coughlin, 2018). Primary school-aged children can express their assent or dissent towards receiving health services as their self-awareness is emerging. While it is generally agreed that primary school-aged children's agreement or disagreement should be respected, legal guardians are still required to act in the best interests of the child in a family-centred shared decision-making process, getting advice from healthcare providers (Coughlin, 2018).

Hence, pre-school and primary school-aged children do not have complete control over their health. Any changes that influence their health or access to health services are dependent on their parents/legal guardians since they are not fully capable of decision-making. Besides primary caregivers, healthcare providers and schools play a significant role in identifying health issues in children (Mazzer & Rickwood, 2015). The COVID-19 pandemic and its consequent changes at social and organizational levels also limited access to in-person health services for families and children (Jeste et al., 2020). Further, as studies during the pandemic have shown, the decline in child healthcare service utilization was more significant in younger children compared to adolescents (Antoon et al., 2021; Saunders et al., 2021). It is therefore important to investigate how access to health services for younger children, i.e., elementary school-aged children, has been influenced by the recent pandemic.

1. 54 Immigrant Populations

Canada is a multicultural country where permanent resident immigrants make up approximately 21.5% of the total population. Approximately 80% of Canada's population growth

in 2020 came from immigration (Jeudy, 2021). Ontario had the highest number of new immigrants, hosting 127,191 new immigrants in 2020 (Jeudy, 2021), and around 20% of this population lives in London, making up 30% of the London population (Statistics Canada, 2019).

Based on the statistics from the 2016 census, births to immigrant mothers reached 30% of all births in Canada for the first time in modern Canadian history, with Ontario having the highest rate, with 36% of births attributed to immigrant mothers. In 2016, 23% of Ontario's population were individuals born in Canada to at least one immigrant parent (Lee et al., 2020). In addition to the immigrant children born outside Canada, these statistics show that a significant proportion of Canadian-born children are currently from immigrant populations, which highlights the importance of promoting knowledge about pediatric health and child health services among immigrant parents to improve the overall pediatric health in the province.

Immigrant children are arguably a vulnerable population who have faced more risks to their health when compared to non-immigrant children, regardless of their origins (Mishori, 2020). Based on a statement about caring for kids new to Canada by CPS, there are factors related to the migration process that influence the health of immigrant families and children, including policy differences, the presence or absence of a “community of support”, and racial discrimination (Barozzino & Hui, 2013, p. 349).

In the CPS's statement, Barozzino & Hui (2013) indicated barriers to improving immigrant children's health, such as:

assumptions/biases of health care providers, ethnocultural differences, fear/mistrust of authority, financial barriers, health care rationing (complex health insurance eligibility/entitlement), lack of familiarity with the health care system, lack of knowledge

of diseases and cultural interpretation of diseases, language barriers, literacy and education, and magnified effect of social determinants of health. (p. 349)

Therefore, considering that immigrant families and children have experienced different barriers to accessing healthcare compared to the non-immigrant population even before the pandemic, it is becoming increasingly difficult to ignore the impact of the COVID-19 pandemic on immigrants' access to child health services.

1. 541 Middle Eastern Immigrants

In recent decades, the origin of immigration has shifted from European countries to non-European countries. For instance, 68% of newcomers in 2016 were from Asia (including the Middle East). Iran and Pakistan were two of the ten top countries of immigrants' origins in the 2016 census in Canada and Ontario, and the Arab population is the largest minority group (17% of all immigrants) in London (Butler, 2017). The Middle Eastern population is one of the fastest-growing immigrant populations in recent years in Ontario. A study on the immigration trend in Canada in 2007 predicted an increase in immigration from the Middle East in the next quarter century in Canada (Verbeeten, 2007).

Middle East includes countries with shared factors, such as religious beliefs, political history, and ethnic groups, and covers an area from Morocco to Afghanistan (Keddie, 2009; World Atlas, 2022). Since Middle Eastern immigrants make up a major part of the London immigrant population and there is limited knowledge about their perceived barriers to accessing child health services, this research seeks to explore the Middle Eastern parents' experiences of access to child health services during the COVID-19 pandemic and investigate if they experienced changes in access to child health services before and during the pandemic.

Therefore, there are three reasons for choosing Middle Eastern immigrants in this study:

- 1) The growing number of Middle Eastern immigrants in Ontario in recent years (Statistics Canada, 2019);
- 2) Despite this growth, there is limited information and evidence on this population's access to health care in everyday life (Sharifi & Shah, 2019);
- 3) Based on the evidence, this population has struggled with access to health services even before the pandemic.

It is therefore important to determine if proper attention has been paid to this population's unmet needs (Chowdhury et al., 2021; Gushulak et al., 2011).

1. 6 Conclusion

Immigrant populations have experienced challenges accessing healthcare services before the COVID-19 pandemic (Chowdhury et al., 2021; Gushulak et al., 2011). Due to the pandemic and with the implementation of new public health measures and restrictions as a result, immigrants might have experienced changes or difficulties in accessing healthcare services for their children. There is also some evidence that immigrant populations experienced difficulties in accessing health services during the pandemic (Etowa et al., 2021a; Guruge et al., 2021; Wiedmeyer et al., 2021), and child healthcare service utilization among the general population decreased during this time (Goldman et al., 2020; Saunders et al., 2021). However, no studies have investigated the perspectives and experiences of immigrant families regarding access to child healthcare services during the pandemic in Canada to date. Therefore, this study uses a qualitative design to gain a deeper understanding of the experiences and perspectives of Middle Eastern immigrant parents regarding access to child healthcare services during the pandemic. The findings of this study may provide a broader perspective on the COVID-19 consequences and guide the management strategies for the ongoing and future crises by considering the immigrant children's unmet needs and challenges.

Chapter 2

2. Literature Review

The following chapter will discuss the literature review that provided the background and informed this study, and includes the review's search strategy, a summary of the literature review results, and the knowledge gaps in the literature, which highlight the importance of conducting this study.

The literature review itself has been divided into two main parts. In the first part, the main body of research on immigrants' healthcare accessibility in Canada has been explored to provide a general overview of existing knowledge about healthcare utilization among immigrants and their perspectives of and experiences with accessing healthcare services in Canada prior to the COVID-19 pandemic. This first part of the literature review will show that immigrants have experienced difficulties and different barriers in accessing healthcare services before the COVID-19 pandemic in Canada.

In the second part, I explored the current knowledge regarding immigrants' access to health services during the COVID-19 pandemic to understand what we currently know regarding whether there were any changes before and after the onset of the pandemic. This second part of the literature review will show that there is a very limited number of studies on the healthcare accessibility of immigrants during the COVID-19 pandemic, no qualitative studies to explore immigrants' experiences during this time, and no studies on immigrant children or Middle Eastern children during the COVID-19 pandemic in Canadian context, Ontario, and other countries.

2. 1 Search Strategy

To find the existing literature, I searched multiple databases including EMBASE, CINAHL, PsycINFO (Ovid), MEDLINE (Ovid), and PubMed in January 2022. The first two inclusion criteria for the studies were being written in English and being peer-reviewed. No methodology restriction was considered.

The search terms used for identifying relevant studies were “access to health services”, “COVID-19”, “immigrants”, and “children” (see Appendix B: Search Terms and Figure C1: Search Strategy). The studies were first screened based on their titles and abstracts. They were excluded if they did not focus on healthcare access/utilization or barriers to health services, if they did not study immigrants or children, or if they did not consider the COVID-19 pandemic as a factor. I also used the “cited by” feature of Google Scholar and hand-searching of references to find any additional relevant studies. Four studies on immigrants’ access to healthcare during the COVID-19 pandemic were found, and one of them had a qualitative component relating to clinicians’ perspectives. Nine quantitative studies were found on children’s healthcare utilization during the COVID-19 pandemic, and two of them were conducted in Canada. None of the studies examined the experiences of parents, and none of the studies were conducted on immigrant children’s populations.

Since the studies during the COVID-19 pandemic were too limited, and to provide a comprehensive overview of immigrants’ and immigrant children’s health services accessibility and their barriers to health services before the COVID-19 pandemic in Canada, as previously mentioned I also searched for literature on this area of study before the onset of the COVID-19 pandemic. I restricted the search date to the last 15 years (2007 to present) and used the search terms “access to health services”, “immigrants”, “Canada”, and “children” (see Appendix B:

Search Terms and Figure C2: Search Strategy). While I used “children” as one of the variables in the search strategy, most studies that appeared in the search results were still about immigrant adults rather than immigrant children. The studies were screened by the titles and abstracts and were excluded if they did not focus on healthcare access/utilization or barriers to health services, if they did not study immigrant populations, or if the study setting was not in Canada. As many studies were conducted on immigrants’ healthcare service accessibility in Canada, I decided to limit retrieved literature to 1) systematic review studies, in order to capture existing, comprehensive overviews of immigrants’ healthcare service accessibility in Canada; and 2) qualitative studies to provide an explicit overview of immigrants’ experiences from their own perspectives, given the qualitative design of my study. Fourteen studies on immigrants’ healthcare service accessibility in Canada were included, with four of them specifically focusing on immigrant children.

2. 2 Immigrants’ Healthcare Accessibility Before the COVID-19 Pandemic

2. 21 Adults

With the increasing growth of immigrant populations during the last decade, many studies have focused on immigrants’ health and their experiences in the Canadian health system. However, studies focusing on immigrant healthcare service accessibility in Canada have not covered the Middle Eastern population in particular and have rarely covered this population mixed with other migrant populations. Therefore, there is no literature that examines differences between Middle Eastern immigrants and other ethnic immigrants regarding their experiences of accessing adult and child health services in Canada.

According to existing literature, the healthy immigrant effect indicates that immigrants tend to be healthier than Canadian-born citizens upon their arrival, while their health declines

after some years of living in Canada (Asanin & Wilson, 2008; Gushulak et al., 2011). The healthy immigrant effect is stronger among adults compared to children and the elderly; however, further investigation is needed to determine the threshold for when this advantage disappears in immigrants (Vang et al., 2016). It is not easy to find the direct cause of this decline as immigrant health is related to a variety of factors such as country of origin, duration of stay in the host country, ethnicity, and culture (Asanin & Wilson, 2008; Gushulak et al., 2011). However, what seems to be significant in all studies on immigrants' health is accessibility concerns across different immigrant groups in Canada, including permanent residents, temporary residents, and immigrants without official status (Gushulak et al., 2011). As Gushulak et al. (2011) showed in their review study, accessibility challenges could be related to health insurance coverage for different immigration statuses and the immigrants' biologically common diseases.

As a significant number of studies have been performed on immigrants' general access to health services, review studies provide a comprehensive understanding of the major causes of health services' inaccessibility among these populations. A review of 20 studies from 1996 to 2009 conducted by Gushulak et al. (2011) on immigrants' health in Canada revealed new immigrants have difficulties in accessing primary health care twice as much as Canadian-born and the major factors were language barriers and socio-cultural differences. Another systematic review study performed in 2021 on immigrants' healthcare needs in Canada similarly found immigrants struggle with a lack of information and health navigation due to language and cultural barriers (Chowdhury et al., 2021).

Based on the literature on immigrants' health and accessibility, the main areas of concern and underlying reasons for health services' inaccessibility among immigrants can be summarized in different ways. I categorize them below in the five levels of the health promotion socio-

ecological model (SEM) to show how the factors and barriers related to healthcare service accessibility are connected and affect each other. This begins to illustrate how organizational and systematic changes can affect individuals' access to health services.

2. 211 Individual Level

The individual level refers to factors related to individuals' knowledge, education, beliefs, culture, values, characteristics, and personal conditions. Based on the existing literature, I understand healthcare accessibility barriers related to the individual level of SEM among immigrants as follows:

- **Language:** Language barriers were the most frequent factor for health services inaccessibility among immigrants in most quantitative and qualitative studies (Ahmed et al., 2016; Chowdhury et al., 2021; Ghahari et al., 2020; Kalich et al, 2016). As it is predictable, linguistic barriers have been expressed as one of the most important reasons for difficulties in healthcare service accessibilities by both immigrants and healthcare providers in Canada (Ahmed et al., 2016; Chowdhury et al., 2021; Ghahari et al., 2020; Kalich et al, 2016). The language barrier is also one of the main reasons for the lack of knowledge about the health system as it can prevent immigrants from fully understanding available health services and health systems in Canada (Chowdhury et al., 2021; Ghahari et al., 2020; Kalich et al., 2016). Not being able to communicate in English or French can make immigrants feel less confident in expressing their needs, opinions, and complaints, which can result in lower levels of self-advocacy among this population (Ahmed et al., 2016; Ghahari et al., 2020). Studies suggest that healthcare providers believe that a lack of self-advocacy prevents immigrants from being able to effectively navigate the health

system (Ghahari et al., 2020; Guruge et al., 2012, as cited in Kalich et al., 2016; Lindsay et al., 2012).

- **Lack of knowledge:** Lack of information and knowledge about how to navigate the health system in Canada was as important as the language barriers in most studies (Chowdhury et al., 2021; Ghahari et al., 2020; Kalich et al., 2016). Having limited knowledge of which health services are available, how to use the services, how they might be covered by insurance, and navigating the healthcare system is not limited just to the individual level as many other factors at the interpersonal and organizational levels are involved in this problem.
- **Beliefs and cultural differences:** Culture-based beliefs were another factor mentioned in most studies as a barrier to fully utilizing health services and preventing immigrants from continuing their visits or treatments (Ahmed et al., 2016; Ghahari et al., 2020; Kalich et al., 2016). For example, a review of 27 studies on barriers and access to primary healthcare by immigrants in Canada indicated that physician gender is a barrier for most Muslim and Asian immigrants as women prefer to be visited and examined by female physicians with no other individuals in the room (Ahmed et al., 2016). Moreover, it is common that immigrants do not tend to seek help or follow up on the health problems that are considered a stigma in their cultures (Reitmanova et al., 2009 as cited in Ahmed et al., 2016).
- **Financial and structural barriers:** It is common among immigrants to have casual and temporary jobs for a few years after immigrating (Ahmed et al., 2016). Consequently, they cannot take the risk of losing their jobs by missing workdays and visiting a physician (Ahmed et al., 2016; Chowdhury et al., 2021). It is difficult for immigrants to

meet a physician if they cannot afford childcare or eldercare, as many of them do not have any other family members close to provide help (Ahmed et al., 2016). Another barrier related to financial concerns is transportation, especially for those immigrants who struggle with financial challenges, which makes it difficult to access the health centres. Hence, while visiting physicians and accessing primary healthcare are free of charge under provincial insurance, financial barriers can still affect access to health services through these factors (Ahmed et al., 2016; Kalich et al., 2016). It is worth noting that Ontario Health Insurance Plan (OHIP) covers health services including visits to doctors, medical tests and surgeries, hospital visits and stays, emergency services, and most services which are needed for medical reasons (for example, cosmetic surgeries are excluded). People in Ontario are eligible to receive OHIP if they are Canadian citizens, permanent residents (including every type of immigrant who has received their permanent residency status), Indigenous people, temporary workers who are working full-time in Ontario for at least six months, a protected person, or refugee. Therefore, temporary immigrants who are students, do not have a job, and did not work full-time for at least six months in Ontario might face accessibility challenges compared to other immigrant groups (Government of Ontario, 2021a).

2. 212 Interpersonal Level

This level is generally related to the connection between individuals and other people who affect their decisions and behaviours (Raingruber, 2014); for example, family, friends, and colleagues. Existing literature has shown some concerns and barriers related to healthcare accessibility due to ineffective communication between immigrants and healthcare providers.

- **Family Relationships:** As previously mentioned, due to cultural differences, there can be social stigma among immigrant communities that may make it hard to seek help from the health system. For example, immigrants in some communities may feel embarrassed if other family members find out that they have accessed mental health services, and this may influence them to not utilize such services (Ahmed et al., 2016). Women and children are the most vulnerable populations among immigrants who do not use healthcare facilities due to social stigma and cultural beliefs in immigrant families (Ahmed et al., 2016).
- **Patient-provider Relationship:** Based on Canadian medical ethics, the relationship between physicians and patients is a fiduciary relationship. A fiduciary relationship means a relationship built on trust, confidence, and respect. It is expected that health providers accept all patients without discrimination, respect their values, cultures, and interests, and involve them in the decision-making process (CMPA, 2016; Chowdhury et al., 2021). While the fiduciary relationship is the basis of medical ethics in Canada, studies have shown that immigrants sometimes feel discriminated against and think they receive poor quality care due to a lack of attention and ineffective communication from physicians (Chowdhury et al., 2021). Immigrants in Canada usually argue that there is a lack of cross-cultural communication skills among Canadian physicians (Ahmed et al., 2016). This means that physicians communicate with patients irrespective of their ethnicity and culture, which may lead to future avoidance of seeking help from the health system. For instance, a patient from Asia might not be comfortable answering the question “How often do you have intercourse” or an unmarried girl from the Middle East may not be open to respond to the question “Are you sexually active”? Due to these

cultural differences, it is common that immigrants prefer to be visited by a physician of the same gender and ethnic background because they believe that these physicians would better understand their cultural and religious norms (Ahmed et al., 2016). Another significant difference that has led to dissatisfaction among immigrants is the difference in diagnosis and treatment approaches in Eastern health systems and Canadian health systems. Eastern physicians (Asia and the Middle East) usually prescribe medications and use diagnostic tests to diagnose in earlier visits alongside recommendations for changing daily life habits or waiting and resting at home for a few days (Ahmed et al., 2016). Due to the absence of this culture in Canada, patients may not have their expectations met and assume this difference is because of the limited knowledge of Canadian physicians and do not completely trust Canadian physicians (Ahmed et al., 2016; Liu et al., 2007). Furthermore, in a review study by Kalich et al. (2016), seven studies asked health care providers their opinions about health accessibility among immigrants. Health workers believed that immigrants did not follow their advice and were not completely able to navigate the health care system in Canada due to a lack of knowledge, confidence, and self-advocacy. Healthcare providers suggested that immigrant populations need greater health education and workshops. (Lindsay et al., 2012).

2. 213 Organizational Level

This level includes organizational and institutional factors that shape individuals' environments. For example, the facilities, policies, and regulations in health services and organizations, hospitals, and clinics are placed at the organizational level and affect individuals' health (Raingruber, 2014). Organizational factors are deeply linked to upper levels, i.e., community and policy-making levels, because healthcare centres follow the rules, norms, and

regulations enforced by upper levels (Raingruber, 2014). For example, policies by Ontario's Ministry of Health and Long-term Care can influence hospitals and clinics in London and Middlesex region.

Certain factors that prevent immigrants from adequately accessing health services at this level include inadequate training of health providers about immigrants' challenges and specific needs, lack of understanding of how to use health services and resources among immigrants, and lack of health education in community-based health organizations (Chowdhury et al., 2021; Ghahari et al., 2020).

Besides these difficulties, longer wait times in emergency departments (ED) and visiting family doctors and specialists were other challenges that many immigrants have mentioned as barriers that make them abstain from using health services (Bajgain et al., 2020; Chowdhury et al., 2021). Tiaji's study (2016) on healthcare service utilization among immigrants in Canada showed that immigrants tend to visit the ED more often than general practitioners compared to non-immigrant Canadians. Ghahari et al. (2020) suggested this difference can be the result of immigrants' negative perception of the Canadian health system, lack of information about other available services, communication barriers, and earlier diagnosis and treatment in EDs compared to setting an appointment with a family physician.

2. 214 Community Level

The community level is one level higher than the organizational level, which means it captures relationships between institutions. At this level, social and informational networks, media, and collaboration between organizations are highlighted (Raingruber, 2014). Like

organizational factors, community-level barriers may prevent individuals from utilizing the available resources (Ghahari et al., 2020).

An example of a community-level barrier was reported in a study on the barriers to accessing mental health services for ethnic seniors in Toronto (Sadavoy et al., as cited in Kalich et al., 2016). This study suggested that besides immigrants, healthcare workers had limited knowledge about other available local formal mental health services which represent a weakness in the collaboration of health organizations (Sadavoy et al., as cited in Kalich et al., 2016).

2. 215 Policy Level

The policy level influences include all local, provincial/territorial and national health legislation, regulations, and policies that affect all the previously described levels in the Canadian health system. What is important is that individuals do not need to be active at these levels to be affected by the health system as they are already under the influence of health community organizations, laws, and regulations (Raingruber, 2014).

The difficulty in accessing specialists is one of the barriers that was reported by immigrants in several studies (Ahmed et al., 2016; Bajgain et al., 2020). Based on the policies in the Canadian health system, patients are not allowed to directly access specialists and sometimes lab reports, which is different from health systems in other areas like South Asia and the Middle East (NG C and Newbold KB, 2011; Setia et al., 2011; as cited in Ahmed et al., 2016). Harington et al. (2013) analyzed data from Canadian Community Health Surveys' optional content from Ontario regarding access to specialists and reported that difficulty in accessing specialists was three times more likely to report by immigrants compared to Canadian-born populations in Ontario, and it was more significant among newcomers, who have lived in Canada for less than

10 years, compared with those immigrants who have lived in the country for more than 10 years. Harington et al. (2013) classified four variables related to the likelihood of difficulty in accessing specialists when required: 1) time since immigration, 2) highest level of completed education, 3) the number of chronic conditions, and 4) health region type (e.g., urban, rural). Compared to non-immigrant populations, immigrants more frequently reported barriers related to transportation, cost, language, and personal and family responsibilities.

As was previously mentioned, some evidence suggests that immigrants are more likely to think that the Canadian health system is not culturally sensitive and policymakers do not consider their expectations (Ahmed et al., 2016). For example, immigrant women are reported as preferring to have their own physician present during labour, while in the Canadian health system, an “on-call” physician is generally responsible for a woman during childbirth (Ahmed et al., 2016).

It is important to mention that while all of these systemic barriers at upper levels seem like weaknesses or failures in the Canadian health system to immigrants, there can be good reasons behind these differences. Lack of knowledge and the need for systematic educational programs for new immigrants are significant gaps mentioned in most studies (Ahmed et al., 2016).

2. 22 Children

While a considerable amount of literature has been published on healthcare accessibility for immigrant adults, the number of studies on immigrant children is limited. Similar to adults, the healthy immigrant effect also exists among immigrant children (Linton et al., 2019). The literature suggests that most factors discussed as barriers to health services accessibility for immigrant adults are influential on immigrant children’s health services accessibility as well.

Markkula et al. (2018) systematically reviewed the literature between 2006 and 2016 on the use of health services among immigrant children in the world. Among 93 studies that compared health services utilization among immigrant and non-immigrant children in the world (95% in Europe and North America), more than half of the results demonstrated lower health services utilization among international immigrant children compared with native-born children in the host countries (Markkula et al., 2018). They summarized the reasons for lower health care utilization among immigrant children into three categories: 1) Family-related reasons including, language and financial barriers, stigma, cultural differences, new health system navigating problems, and lack of knowledge about their rights, available health services, and services functions; 2) Reasons related to health professionals' attitudes and skills include stereotypes, discrimination, lack of cultural understanding, communication problems, and misunderstandings; 3) Structural problems that are related to the lack of culturally sensitive health policies in host countries (Markkula et al., 2018).

Salami et al. (2020) investigated health services for immigrant children, specifically in Canada. Since children's access to health services is usually involved with the families' integration into care, it seems that most barriers for immigrant adults will be influential on immigrant children as well. In their study of 50 immigrant parents in Canada, the long wait time was the most frequent barrier mentioned by participants (Salami et al., 2020). It can take even a few months to visit a pediatrician. This long wait time prompts immigrants to seek healthcare from EDs, walk-in clinics, and frequent appointments with family doctors. On the other hand, long wait times in EDs are another challenge for immigrant parents as they might miss work, or their other children might miss school due to waiting for hours in EDs for their children. In the study by Salami et al., immigrant parents mentioned they could not visit physicians when their

children were sick as most physicians' offices were open during regular workdays and times that overlapped with their own work hours. Finally, the challenge of long wait times could make immigrant parents not seek help from health services for their children (Salami et al., 2020).

Language barriers and lack of information and familiarity with the health system were also frequently mentioned by immigrant parents. For example, participants stated they do not know exactly when they should attend the ED instead of waiting for a visit by a family doctor or a pediatrician, or where they should seek help for child mental health services (Salami et al., 2020).

Lacking effective communication and relationships with health providers was a significant complaint among immigrant parents who sought healthcare for their children. In the study by Salami et al. (2020), many participants felt that doctors were in a rush and did not listen to their problems patiently. They believed that physicians just cured the symptoms and did not diagnose the disease itself. Besides, most parents preferred to use home remedies for their children as physicians had invited them to give time and rest to their children without any prescription.

Financial challenges were another barrier for immigrant parents to use health services, particularly mental health services. A few parents who tried to seek mental healthcare for their children faced financial problems as most mental services were private and a few affordable services had a long wait time of months (Salami et al., 2020).

Another study on healthcare accessibility among immigrant mothers for their children with autism in Canada showed almost the same results (Khanlou et al., 2017). Mothers of children with autism complained about the lack of information about available services for their

children. It was shown that they had to search for health services, and it was hard to understand what types of services were available as they did not receive related information from the health system. They believed that health services were fragmented and dispersed. In other words, while there were several available services, it was hard to find and use them at the same time since there was inadequate coordination between health services, social services, and school services. This made navigating the health system harder for the parents. Participants also mentioned long wait times and excessive paperwork as barriers even if they could finally find the available services for their children. It was shown that most mothers had to wait for months or even years in the Greater Toronto Area to access healthcare for their children, which is sometimes too late and be equivalent to not accessing the services at all.

As the patient-provider relationship was a challenge for both immigrant adults and children's accessibility to healthcare services, mothers of children with autism also believed that there was a lack of awareness about their children's specific needs among health providers (Khanlou et al., 2017). It was shown that health professionals were not as supportive as mothers expected and did not provide them with helpful information regarding what they needed to do or where they needed to attend to receive specific services for children with autism.

Thus, it seems that most barriers for immigrant adults exist for immigrant children as well, though experiences of and perspectives regarding immigrant children are less well characterized. Among all the barriers, long wait times and difficulty in navigating the health system were more highlighted for immigrant children's accessibility to health services.

2.3 Immigrants' Healthcare Accessibility During the COVID-19 Pandemic

In this section, I will review the existing literature that seeks to understand healthcare accessibility among immigrant children in Canada during the COVID-19 pandemic. Since this

literature was too limited and no qualitative studies have been conducted on immigrant children's or even non-immigrant children's access to healthcare services in Canada during the COVID-19 pandemic, I included studies on immigrant adults' access to health services as well. Therefore, this section begins with a discussion of the existing literature on immigrants' healthcare accessibility during the COVID-19 pandemic, and it will then go on to explore the existing knowledge about the accessibility of health services specifically among children and immigrant children's populations during the pandemic in Canada.

2. 31 Adults

In an international context, studies have shown the disproportionate effect of the COVID-19 pandemic on immigrant populations (Doan et al., 2021; Vilar-Compte et al., 2021). A study on the effect of COVID-19 on immigrant communities in the USA indicated a higher incidence of COVID-19 infection, hospitalization, and death in immigrant populations (Doan et al., 2021). This study also showed the negative impact of the COVID-19 pandemic on immigrants' health determinants, including job safety, housing, mental health, economic status, healthcare service accessibility, and education (Doan et al., 2021). Doan et al. (2021) recommended that addressing the social determinants of health and increasing immigrants' engagement in health and community programs will fill the gap between this population's health and the general population.

A systematic review of COVID-19 outcomes among migrant populations in 15 countries, including Canada, revealed that migrants are at greater risk of COVID-19 infection and death (Hayward et al., 2021). However, low-income immigrants without job safety and undocumented immigrants without health insurance were affected more by COVID-19 than other immigrant populations (Hayward et al., 2021). The study showed that the risk factors for the higher rate of

exposure among immigrants were high-risk jobs, housing, and healthcare barriers, including lack of knowledge and language barriers (Hayward et al., 2021).

In the Canadian context, there were studies on the different consequences of the COVID-19 pandemic on immigrant populations. For instance, Guruge et al. (2021) studied the burden of COVID-19 on immigrant parents in Toronto and showed that immigrant parents reported a heavy burden from school closures, and more parenting responsibilities 24 hours, seven days a week while trying to maintain the quality of education for their children.

Regarding access to healthcare services among immigrants during the pandemic, Wiedmeyer et al. (2021) studied the impact of COVID-19 among immigrant populations with different immigration statuses and reported that, compared to immigrants with permanent residency and citizenship status, people with temporary immigration status in British Columbia experienced a higher rate of COVID-19 infection and this was related to lower access to primary care and test facilities among this population. Therefore, it was suggested that helping immigrants extend their status to permanent residency would increase their access to health services (Wiedmeyer et al., 2021).

In Canada, Etowa et al. (2021a) performed a study on the accessibility of healthcare services during the pandemic among immigrants and visible minorities, using and comparing Statistics Canada's data including impacts of COVID-19 on Canadians and the experience of discrimination. This study had two relevant findings. First, it showed that difficulty in accessing healthcare services was frequently reported by the general population during the COVID-19 pandemic (Canadian-born and immigrant people), and this difficulty was significantly higher than relevant statistics before the pandemic. For example, previous studies showed that 22% of Ontarians (both Canadian-born and immigrants) reported difficulties in accessing specialists in

2013 (Harington et al., 2013) and 16% of Canadians reported difficulties in accessing non-emergency surgical care between 2005 and 2014 (Sommer et al., 2020). Etowa et al. (2021a) also reported that 46% of respondents (including native-born and immigrant populations) reported difficulties in accessing specialists, and 35% of them reported difficulties in accessing non-emergency surgical care during the COVID-19 pandemic. This finding suggests that the COVID-19 situation possibly affected different populations' access to healthcare services in Canada.

Second, Etowa et al. (2021a) compared the statistics for two populations of non-visible minorities, native-born and visible-minority immigrants. They found that compared to the native-born group, visible-minority immigrants were less likely to report difficulties in accessing non-emergency surgical care, non-emergency diagnostic tests, dental care, mental health care, and making an appointment for rehabilitative care, but more likely to report difficulties in accessing emergency services/urgent care. The researchers reported being surprised as the literature before the pandemic showed that immigrants had difficulties in accessing preventive care, mental health care, and specialist care (Harington et al., 2013; Sommer et al., 2020). Etowa et al. (2021a) proposed two explanations for these findings. Their first explanation was that people's access to healthcare can be constructed based on their past experiences. So, visible-minority immigrants might not report difficulties in accessing healthcare services as they compare the Canadian services with their experience in less developed countries and see their access to healthcare as equal or better than in their countries (Etowa et al., 2021a). Their second explanation was that visible-minority immigrants might not have enough health literacy to identify a lack of care or difficulty in accessing health services. Etowa et al. (2021a) thought that visible-minority immigrants should improve their knowledge to navigate the health system in Canada and identify the barriers and challenges. Based on this study (Etowa et al., 2021a), it can be suggested that

there might be different patterns and reasons for difficulties in healthcare accessibility among different populations. Etowa et al. (2021b) conducted another study on available data about the burden of COVID-19 on immigrant and racialized populations in Canada. They stated that it is hard to measure the extent to which immigrants and racialized communities have been impacted by the COVID-19 pandemic and the pandemic-related measures due to the lack of adequate data and information on immigrants and race-based populations (Etowa et al., 2021b).

A limited number of qualitative studies have been conducted on immigrants' needs and health services in Canada. A study with mixed methods from clinicians' perspectives found that clinicians reported an increase in the incidence and exacerbations of mental health conditions among their refugee patients who requested healthcare services, but the overall refugee clinic visits, their access to healthcare services, and their access to community support such as childcare decreased during the first six months of the pandemic. The most common reported reasons for this reduction in utilizing healthcare services by the refugees were fear of exposure to the virus and a lack of information on available services among refugees and immigrants (Benjamin et al., 2021). Another qualitative study on birth and prenatal health in resettled Syrian refugee women showed that women experienced difficult healthcare interactions, cancelled or unavailable in-home services, and socially and personally isolated delivery (Cameron et al., 2021).

2. 32 Children

The eight studies on children's healthcare accessibility during the COVID -19 pandemic mostly focused on 1) providing and comparing quantitative data about the rate of healthcare utilization among children and the youth, and 2) the general children population rather than immigrant children populations.

In Scotland, researchers compared pediatric healthcare utilization during the year 2020 after the start of the national lockdown in March with data from 2016 to 2019 (Williams et al., 2021). They found that pediatric emergency care utilization reduced during the national lockdown, starting from March 2020, while the severity of clinical scores and child death rate had not differed. The researchers suggested that this reduction is associated with changes in healthcare-seeking behaviours (Williams et al., 2021). Similarly, a 35% decrease in families' utilization of well-child clinics and pediatrics practices attendance in 2020 compared to 2019 was reported in a study in Germany (Vogel et al., 2021).

A study on 44 pediatric hospitals in the USA revealed that besides a decline in non-respiratory healthcare utilization, there has been a decrease in healthcare utilization for respiratory disease. It varied for different pediatric age groups as adolescents had a less significant decrease and returned to the usual levels faster than younger children (Antoon et al., 2021). The researchers suggested a need for further investigation on the reasons for this reduction and changes in the healthcare-seeking behaviour of families. Another study in the USA observed ED utilization in 37 pediatric hospitals from 2010 to 2019 to construct a model to forecast the most common diagnoses in ED and the most common diagnoses for admission in 2020 (Ramgopal et al., 2021). They compared the real data during the year 2020 with the forecasting model to find if there were significant changes in these two variables. The results showed that care utilization for almost all common diagnoses in the ED was lower than the model based on the last decade. The authors of this research believed that the decline in some non-communicable diseases might be representative of unmet healthcare needs during this time for children and further investigation is needed (Ramgopal et al., 2021).

A further USA study described pediatric ED utilization during the pandemic in New York City (Sokoloff et al., 2021). They reported that ED visits for common ED diagnoses and low-acuity diagnoses had decreased during the first half of 2020, but the hospitalization rate, patient-acuity, and visits for self-harm and suicidal thoughts and attempts have risen. Therefore, the researchers concluded that health systems need to be prepared for disproportions, such as abuse and self-harm, among vulnerable pediatric patients during a pandemic or health crisis (Sokoloff et al., 2021).

In the Netherlands, a review of the literature was conducted on the impact of lockdown on pediatric ED visits and hospital admissions during the pandemic in the Netherlands and the international context (Kruizinga et al., 2021). It was concluded that overall pediatric ED utilization and hospitalization decreased in the Netherlands and 13 different countries during the COVID-19 lockdown period. The researchers believed that while lower utilization for infectious diseases could be related to lockdown and a lower probability of being infected, lower healthcare utilization for other conditions was due to care avoidance during that time (Kruizinga et al., 2021).

In the Canadian context, a study in British Columbia showed a significant decline in non-COVID-19 emergency visits among children under 18 during the pandemic (Goldman et al., 2020). It was revealed that compared with the same period in the prior year, a higher proportion of children admitted to ED had serious conditions (Goldman et al., 2020). It may be inferred that the lower emergency care utilization was related to stay-at-home orders and limited health services during that time.

Finally, Saunders et al. (2021) performed a population study to investigate pediatric primary care in Ontario and Manitoba after the onset of COVID-19 in Ontario and Manitoba.

They found that primary care visits significantly declined among three million children in Ontario and over 300,000 children in Manitoba during the first nine months after the pandemic onset. It was also found that the greatest decline was for children from 1 to 12 years old. While the exact reason for the decline is not clear, the researchers believed there are concerns about the consequences of not utilizing pediatric health services during the pandemic and there is a need for a post-pandemic plan to visit and follow up on children in low-income and rural populations.

2.4 Conclusion

The literature showed that there have been disparities between immigrant and non-immigrant populations regarding access to healthcare in Canada before the COVID-19 pandemic. However, no studies were identified that directly sought to understand the perspectives and experiences of Middle Eastern immigrants regarding access to healthcare services even before the pandemic to investigate if the barriers were different among Middle Eastern immigrants from other immigrant populations in Canada.

The most frequent barriers experienced by immigrants before the COVID-19 pandemic were language and cultural barriers, lack of knowledge about available services and how to navigate the health system, long wait times, ineffective patient-provider relationships, lack of insight into immigrants' needs and challenges among healthcare providers, and lack of education about the reasons for policies, regulations, and differences in the Canadian health system.

During the COVID-19 pandemic, studies mostly examined the pandemic's effect on immigrant populations and reported a greater risk of COVID-19 infection, hospitalization, and death among immigrants (Hayward et al., 2021; Wiedmeyer et al., 2021). While studies investigated the overall effects and burden of the pandemic on immigrants' health during the pandemic, little attention has been paid to exploring immigrants' experiences and perspectives

regarding access to healthcare during this time. Regarding children's populations, quantitative studies on healthcare utilization and accessibility during the pandemic indicated a lower rate of healthcare utilization in pediatric populations in both international and Canadian contexts. While researchers had different suggestions for this decrease in pediatric healthcare utilization, many of them believed that it is necessary to examine the unmet healthcare needs of children and the reasons behind this decrease. It is predictable that communicable and infectious diseases could have been less common during the pandemic as most people were isolated and followed social distancing, but the decrease in healthcare utilization for non-infectious diseases can be considered as the presentation of difficulties in healthcare accessibility and unmet needs for pediatric populations. It is worth noting that the research on pediatric healthcare utilization during the COVID-19 pandemic has tended to focus on general child populations rather than immigrant children. Therefore, the knowledge gaps can be summarized as follows:

1. To date, little attention has been paid to exploring the experience of access to healthcare services in Canada from Middle Eastern immigrants' perspectives.
2. During the COVID-19 pandemic, studies have produced estimates of the risk of COVID-19 infection and hospitalization in immigrant populations and suggested that these populations faced difficulties in healthcare service accessibility, but there is still insufficient data on immigrants' experiences of access to healthcare services during this time, and no data specifically about the Middle Eastern immigrants in Canada.
3. All the studies on healthcare utilization of children during the pandemic have been conducted on general children's populations and no study specifically examined immigrant children's healthcare utilization.

4. Quantitative studies reported a decline in healthcare utilization of pediatric populations in different countries, including Canada and specifically Ontario; however, no qualitative method has been applied to investigate the experience of parents regarding access to healthcare services during the COVID-19 pandemic. Moreover, there is no general agreement about the reasons behind this change, and more investigation is needed to understand the experience of parents to access healthcare services for their children during the COVID-19 pandemic and find out if they preferred not to use the services, or if they have faced difficulties in accessing health services.

Accordingly, this qualitative study attempts to provide knowledge on Middle Eastern immigrant parents' accessibility to child healthcare services during the COVID-19 pandemic. A deeper insight into Middle Eastern immigrant parents' perspectives can guide the health system on how they think about and use healthcare services and what factors they have found as barriers to healthcare utilization during the pandemic. It will also help the health systems provide more efficient policies and strategies for the future.

Chapter 3

3. Methods

3. 1 Design

3. 11 Methodology

The perspectives of Middle Eastern immigrant parents regarding access to health services for their children during the COVID-19 pandemic were studied using Interpretive Description (ID) methodology. ID is a qualitative methodology that focuses on describing and generating an interpretation of human health experiences (Thorne et al., 2004; Thorne, 2008; Thorne, 2010). ID seeks to provide characteristics, patterns, and an interpretation of the phenomenon of interest in a way that might be applicable to practice (Thorne, 2008; Thorne, 2010). In this study, I aim to provide an interpretation of parents' perspectives based on their experiences in a way that may inform the health system and services to make modifications needed to improve the health services accessibility for Middle Eastern immigrant children. Ideally, the product and object of ID are supposed to be potentially applicable because it seeks to provide a basis for assessing and planning future strategies in the field (Thorne et al., 2004). Therefore, ID is a useful methodology to apply for the exploration of the phenomenon of interest with the aim of informing the disciplinary insight and decision-making for future changes that might be required in the real world of health care application (Thorne et al., 2004).

ID was chosen as the methodology for this study as it can help understand the multilevel barriers that Middle Eastern immigrant parents have experienced when trying to access health services for their children during the COVID-19 pandemic and aid the health system to address the needs of this population. Through describing and interpreting the perspectives of Middle Eastern immigrant parents regarding their experiences of accessing child health services during

the COVID-19 pandemic, this study aimed to guide strategies to improve healthcare experiences for Middle Eastern immigrants in Ontario. Therefore, the ID approach in this study allows for generating knowledge that is sense-making in the real world and extends the insight for health system decisions (Thorne et al., 2004).

3. 12 Paradigm

My perspective on reality and how to generate knowledge about it is consistent with the critical realism paradigm, which is one of the possible approaches in a post-positivist view. The key feature of critical realism is the distinction between ontology and epistemology (Cruickshank, 2012). Critical realism does not limit reality to what we can empirically know (positivism), and at the same time, critical realism does not consider reality as something entirely constructed from human perspectives (constructivism) (Fletcher, 2017). Critical realism considers knowledge as a lens to help us understand the reality that independently exists. This reality has not been built by humans and cannot be easily found just through empirical experiences (Fletcher, 2017). In this paradigm, knowledge can be gained in different ways and constructed through different perspectives; however, human knowledge captures small parts of a greater reality, and our understanding of reality might be less or more correct and change over time (Erlandson et al., 1993; Guba et al., 1990, as cited in Moschkovich, 2019; Haigh et al, 2019; Maxwell, 2012).

Critical realism distinguishes this epistemology from ontology (Cruickshank, 2012) and is rejects the idea of multiple realities (Erlandson et al., 1993; Guba et al., 1990, as cited in Moschkovich, 2019). Critical realism ontology accepts that there is an independent reality, but it is not reducible to our knowledge of reality (epistemology) (Sayer, 2000, as cited in Haigh et al.,

2019). Different perspectives and knowledge can lead to different theories, and each of the theories can be a part of an independent reality (Keller, 1992, as cited in Maxwell, 2012).

In summary, critical realism acknowledges that there are different ways and perspectives to understand reality, but all these versions of knowledge are changeable and a part of a greater and deeper reality that independently exists (Maxwell, 2012).

The idea of critical realism is that social reality is a layered open system with three domains: real, actual, and empirical (Cruickshank, 2012; Haigh et al., 2019) (Figure A2). The empirical domain is the observable experiences resulting from actual events' effects. The actual domain includes the events and effects that caused experiences. The effect of actual events can be explained by the real domain, which is the unobservable powers and mechanisms that activate actual events (Cruickshank, 2011; Haigh et al., 2019).

A common perspective between the ID approach and the critical realism paradigm is that neither of them claims that they will generate a definite reality, but rather try to provide knowledge close to reality to improve health strategies and address the problems. As Thorne et al. (2004) note, ID is different from those methods that seek to generate a whole original truth. It intends to provide a feasible claim and a backdrop for assessment and planning strategies and inform clinical reasoning. Critical realism similarly does not claim that it will provide the whole independent reality. It rather seeks to become closer and bring light to a greater reality that we might not completely observe, by explaining causation between events, to suggest practical policy recommendations to address problems (Fletcher, 2017). Therefore, critical realism represents the epistemological commitments in this study, and ID represents the methodology used within the commitments.

In this study, I will collect perspectives of Middle Eastern immigrant parents regarding their access to child health services during the COVID-19 pandemic, describe and interpret the data, considering different levels of SEM that might be involved in the experiences, in a way to generate knowledge that is sense-making in the real world to become one step closer to the reality of access to child healthcare among this population during the pandemic. Therefore, this study can help design and plan strategies and policies related to Middle Eastern immigrant children to improve their experience of accessing health services in Ontario.

3. 13 Framework: Socio-Ecological Model

In this study, the Socio-ecological Model (SEM) informed the research question, data gathering, and data analysis. This model focuses on how individuals and the environment influence one another at different levels and ultimately affect behaviours and outcomes in a system (Raingruber, 2014). There are five levels in this model, including individual, interpersonal, organizational, community, and public policy, which cannot be separated and have a reciprocal influence on each other (Figure A1).

Examples of the individual level include people's knowledge, education, culture, and attitudes toward a concept or behaviour. The interpersonal level refers to the roles that individuals play within social contexts, such as brother, sister, parent, student, neighbour, family, peer, employer, or employee (Raingruber, 2014). Examples of the organizational level are workplaces, companies, churches, schools, health services, and supports from such organizations and their members. The community level consists of community influences, for instance, standards, norms, connections, media, and social networks. For the public policy level, the examples in a health system can be the national, provincial, territorial, and municipal laws and policies that influence health in a society (Raingruber, 2014).

This theory focuses on the importance of considering multilevel factors that influence health outcomes. For designing and evaluating health promotion programs and strategies, the SEM suggests examining multiple facets of a health outcome and various conditions at different levels that shaped the outcome (Raingruber, 2014).

In this study, the research question and interview guide were generated through the lens of SEM. In light of this theory, I see access to health services as the result of reciprocal interactions between individuals, interpersonal roles, health organizations, communities, and health policies. This lens prompted me to think about the influence of changes at different levels of SEM related to the COVID-19 pandemic on access to healthcare services for populations.

SEM is also aligned with the application of ID in this study because this health promotion model encourages looking at health outcomes as a combination of individuals and the environment to make a comprehensive overview for designing and evaluating health promotion strategies (Raingruber, 2014), and ID aims to describe and interpret the experiences of participants to guide health strategies that might improve healthcare experiences in a way that can be sense-making in the real world (Thorne et al., 2004).

3. 14 Sampling and Recruitment

In alignment with the ID approach (Thorne et al., 2004), purposive sampling was used in this study. After recruiting two participants, snowball sampling was added to the sampling method. The sample size for the majority of studies with an ID approach has been considered relatively small (e.g., between 5-13 participants) to employ rich data collection and generate the ID of themes; however, sample sizes can be smaller or larger based on the data needed to satisfy the purpose of the study (Thorne et al., 2004; Thorne, 2016). In this study, the sample size was

not predetermined but determined through the data collection and data analysis process to achieve a data saturation point when no new codes and themes could be generated (Patton, 2015). Accordingly, the sample size of seven participants was sufficient for this study as no new codes were generated after completing all seven interviews.

3. 141 Participation Announcement

The recruitment process started once the study was approved by the Western University Health Sciences Research Ethics Board (see Appendix D). The study participation announcement was advertised – in English and Farsi – on Facebook public pages and groups related to specific Middle Eastern communities in London, Ontario, including “Iranian community in London Ontario”, “Canadian Arab society of London Ontario”, “Afghans of London Ontario”, “LondonOn4Palestine”, “Pakistani community London Ontario”, “Syrian Canadian community”, and “South London Neighborhood Resource Centre – SLNRC”. The announcement was posted on Facebook through a private Facebook page owned by Sarvenaz Mehrabi (account name: Sarvi Mehrabi) and created just for this study with no personal activity, friends, and followers on this page. Moreover, the research team contacted settlement agencies in London, Ontario to ask them to partner with the recruitment process as they are constantly in contact with immigrant populations. The settlement agencies and organizations contacted via institutional email included “The London Cross Cultural Learner Centre”, “LUSO Community Services”, “Northwest London Resource Centre”, “South London Neighbourhood Resource Centre”, and “YMCA of Southwestern Ontario”. If the agencies agreed to help with the recruitment process, the research team would ask them which types of participation methods were well aligned with their organizational policies (e.g., posters, emails, etc.). The research team would send them a poster or an email script, including an informed consent form, to be shown or sent to potential

participants. However, none of the agencies ultimately helped with the study recruitment process, and the only method that the participants of this study were recruited was the Facebook advertisements followed by snowball sampling. The Facebook advertisement was posted in the above-mentioned groups and public pages two times (October 12, 2021, and February 11, 2022) during the study, and snowball sampling was applied in between.

The Facebook advertisements (see Appendix E and Appendix F: Facebook Recruitment Announcements) provided a link to the online consent form (Appendix G: Letter of Information and Consent Form). Within 48 hours after receiving a signed and completed consent form from potential participants, they were contacted via an institutional email (Western University) to be informed if they were eligible to participate in the study based on their answers to the eligibility and demographic questions at the end of the informed consent form, and the date and time for interviews were arranged at the participants' convenience. Participants had the choice to have an interview in person or virtually. Zoom invitation links were sent to the participants' email when they had chosen the virtual interview, More details on the in-person interview circumstances have been provided in the "COVID-19 Impact, Health, and Safety Measures" section of this chapter. However, all participants in this study chose the virtual interview option.

3. 142 Participants

In this study, seven participants were ultimately included. The inclusion criteria were as follows:

- 1) Being a legal Middle Eastern immigrant currently living in the London area, Ontario.

2) Living in Ontario for at least one year before the start of the pandemic restrictions in the province (start date was considered March 2020). This was deemed necessary to ensure participants could make a comparison between access to child health services before and during the COVID-19 pandemic.

3) Having at least one child who was enrolled in elementary school, as this study aims to focus on younger children as they are not fully capable of deciding for their health and are dependent on their parents to access health services, and existing studies have shown that the decrease in healthcare utilization during the COVID-19 pandemic was greater among younger children compared to adolescents.

4) Being able to communicate in English or Farsi.

Middle Eastern countries in this study were considered Turkey, Syria, Lebanon, Iran, Iraq, Cyprus, Israel, the Gaza Strip, Jordan, Egypt, Sudan, Libya, Saudi Arabia, Kuwait, Yemen, Oman, Bahrain, Qatar, the United Arab Emirates, Afghanistan, and Pakistan. Some definitions of Middle East exclude north African countries like Libya, Sudan, and Egypt, and eastern countries like Afghanistan and Pakistan (World Atlas, 2022), and it was tried to use an inclusive definition in this study. There was no gender limitation on which parent/guardian of a child decided to participate in the study. The parents/guardians were informed about the purpose and the significance of the study through the informed consent form and consented to the gathering of demographic data, recording interviews, and using data from the interviews for analysis and publishing of the results. Participants were also made aware of their right to refuse to continue participating in the study.

3. 2 COVID-19 Impact, Health, and Safety Measures

The COVID-19 pandemic and subsequent restrictions in Ontario impacted this research study in different ways. The COVID-19 situation limited participant recruitment to online and virtual methods rather than in-person recruitment methods such as communicating with potential participants in the walk-in clinics, community centres, and settlement agencies. Since not all potential participants might have access to or be comfortable with the internet and the virtual world, potential study participants could possibly be lost due to this online recruitment method.

The research team considered both options of virtual interviews via Zoom video calls and in-person interviews at an office on the Western University Campus based on the participants' preferences. All participants of this study ultimately chose the virtual interview method.

3. 3 Data Collection

Data collection for this study consisted of semi-structured interviews. The demographic data were collected when the participants consented to participate in the study. If the potential participants clicked on the option "I do consent to participate in this study" on the consent form, they were guided to the next page consisting of the survey questions. Demographic data collected included age, gender, nationality, and duration of living in Ontario as well as the age and gender of the participants' elementary school-aged children.

3. 31 Interviews

To generate data on Middle Eastern immigrant parents' perspectives regarding their experiences accessing health services for their children during the COVID-19 pandemic, semi-structured, one-on-one interviews with participants were employed. Interviews were completed through Zoom video calls and were 25 to 30 minutes in length. The interview language could be

English or Farsi based on the participants' preferences because I, the interviewer, am a bilingual Farsi-English speaker, and this flexibility ensured potential Farsi-speaker participants were able to join the study and share their perspectives. I translated the interviews conducted in Farsi to English transcriptions.

The semi-structured interview guide iteratively evolved based on the interviews through the process of data gathering and analysis. During the study process, new questions were generated, and the interview guide was modified twice to increase the depth of the interviews (Willis et al., 2016) (see Appendix H: Interview Guides). The first participant was interviewed in October 2021, and the last participant was interviewed in May 2022. This schedule let me have enough time between the interviews to start initial reflection and analysis of data and make changes in the process of data collection if it was needed.

The questions were designed to be open-ended to allow participants to describe what they found relevant to the question. This minimized the potential risk of bias toward collecting data that is closer to researchers' expectations and might be predetermined to emerge (Patton, 2015). To achieve this aim, I also tried to use strategies to provide a safe and open environment for the participants and promote trust and engagement. First, I introduced myself, noted my appreciation of their participation, and explained that there is no time limit, and they can freely discuss what they find relevant to the subject and the questions. I also encouraged them to ask any questions they might have that are relevant to the study at any time during the interviews, and repeated that they were free to refuse to answer any question and free to ask to end the interview if they need to leave. After these initial explanations, I asked for their permission to start recording the interview. Although the priority of the study was making video Zoom calls to make it possible for the interviewer to see the participants' body language, understand their emotions, and

establish a deeper relationship between interviewer and interviewee throughout the interview process, the participants were free to disconnect video if they felt uncomfortable at any time. However, all participants decided to continue with video calls except for some moments when they needed to have privacy, such as when their children called them or wanted to talk to them.

3. 32 Data Confidentiality

Participants' consent, responses to demographic questions, and contact information were collected through a secure online survey platform called Qualtrics. Qualtrics uses encryption technology and restricted access authorizations to protect all data collected. The data were then directly exported from Qualtrics and securely stored on a Western University server behind institutional firewalls. Participants' direct personal identifiers (names, contact information, and demographic data) were retained separately in a master list on an institutional drive (Western OneDrive, a secure server behind an institutional firewall) and were accessed remotely by the research team members. Participants' demographic data were collected for descriptive statistics and to understand the population under study. Participants' contact information was requested to contact them to set an appointment for the interview.

The audio was recorded by the "Windows Voice Recorder" application during the interviews. The audio files were immediately transferred to a Western OneDrive folder to be stored for data analysis and were permanently deleted from the initial device (a laptop) right after the interviews. The device was kept in a locked drawer in a locked room during the data gathering process as long as it contained any confidential data.

The audio was transcribed and organized by numbers instead of the names of the participants to make the study data de-identified. The transcriptions were directly typed into a

Western OneDrive document. All data collected remained confidential and accessible only to the investigators of this study and to the Western Research Ethics Board if it was required.

3. 4 Data Analysis

Clarity around the process and methods of data analysis and decisions made in each step of analysis is crucial for the trustworthiness of qualitative studies. In this study, the 6-phase guide to doing thematic analysis (TA) by Braun and Clarke (2006) was applied. TA is a qualitative analytic method for identifying and analyzing patterns within data and reporting them. It can be flexibly used with different ranges of approaches and paradigms as long as researchers make the process of identifying codes and analysis clear (Braun & Clarke, 2006, 2019). Braun and Clarke (2006) provide a flexible systematic approach and a wide-ranging guide that can be applicable to qualitative research with TA that lets researchers perform each phase based on their research questions, theoretical frameworks, paradigms, and aims. They emphasize the importance of explicit expression of researchers' presumptions, theoretical assumptions – if any exist – and ontological assumptions and “specify their particular orientation to TA” (2019, p. 333). Each step of TA in this study followed Braun and Clarke's 6-phases instructions to have a concise and systematic analysis process (Braun & Clarke, 2006).

Phase 1 - Familiarizing with Data

In this phase, I familiarized myself “with the depth and breadth” of the data (Braun & Clarke, 2006, p 87), and read and re-read the dataset. Braun and Clarke (2006) suggested reading the entire data set at least once before analysis even if the aim of a researcher is to analyze just particular aspects of the dataset and search for latent themes. This phase helped me to immerse

myself in the data and start making ideas for the coding process. Therefore, this phase is a key phase of data analysis as the analysis starts and meanings are created in researchers' mind.

In this study, the data were collected through interviews and had to be transcribed. The analysis in this study started during the data collection process as handwritten field notes were taken throughout the interviews. The fieldnote taking had two main parts. First, I recorded actions such as body language and facial expressions, emphasizing participants on particular words or sentences by putting stress on them, and the feelings they showed, such as surprise, concern, happiness, disappointment, etc. I tried to reflect this fieldnote in the transcripts by using punctuation marks and writing the acts or feelings, such as laughing, in parentheses. Second, I reflected on the notes overall and considered what I observed. For example, I wrote down what I had expected and what I had not expected, what questions remained unanswered for me, or what new questions arose in my mind based on the participants' answers. This fieldnote reflection helped me to develop interview questions in the process of the study and also start my initial analytic thoughts.

Immediately after each interview and reflection on the field notes, the transcription process started. The audio was transcribed word by word, and the transcript included all the verbal elements of the interview as well as some nonverbal elements, such as feelings and expressions. Through the transcription process, punctuation was carefully used to show the true meaning of the data and avoid misunderstanding. For the interviews in Farsi, it took more time and effort to transcribe the verbal data into written form. All details were mentioned in the transcripts of the Farsi interviews; for example, when a participant used a Farsi idiom, I mentioned that the term is an idiom in Farsi and what it means. After transcribing the data, I checked the transcripts back to the original audio for accuracy. A day after the transcribing

process for each interview, I read the entire data set for the interview once again to develop an understanding of the data and note down initial ideas for codes to use in the next phases. Since the data were verbal and collected through an interview in this study, familiarizing with the data started from the first moment of verbal data collection, through the interviews and the transcribing process.

Phase 2 - Generating Initial Codes

After familiarizing myself with the data and generating initial ideas, the production of initial codes started, and the NVivo (1.6.1) software was used in this phase. The process of generating initial codes was more about organizing the data into meaningful groups than interpreting the data at this stage.

As Braun and Clarke emphasize (2006, 2019), researchers' approaches to generating codes are different based on their research questions, aims, and the area of research and can be from a completely inductive approach to a completely deductive approach. In this study, a few aspects of the phenomenon of interest are partially known based on the literature review. For example, there has been existing knowledge about immigrants' experience of and barriers to accessing child health services in Canada before the pandemic, and this prompted me to have ideas and presumptions about the potential barriers and perspectives that the participants might discuss. This also prompted me to search around the data set to find data items related to that existing knowledge. On the other hand, the COVID-19 pandemic was a new situation, and there has been limited knowledge about immigrants' access to child health services during this time. While existing studies have found a decrease in child healthcare utilization in the general population (Antoon et al., 2021; Kruijinga et al., 2021; Ramgopal et al., 2021; Saunders et al., 2021; Sokolof et al., 2021; Vogel et al., 2021; Williams et al., 2021), the reason behind this

decrease is not fully known. Therefore, the experiences and perspectives of Middle Eastern immigrant parents' access to child healthcare services during the COVID-19 pandemic is an under-researched area and the participants' views on this subject are unknown. Therefore, although the ID methodology suggests generating codes inductively, I decided to generate codes in two steps and with two approaches.

In the first step, I started coding the entire data set inclusively and inductively. I tried to generate codes to reflect the content of the entire data set. I did not focus on a particular aspect of the data set based on my pre-existing knowledge and presumptions. So, the codes were linked to data without trying to fit them into pre-existing codes. After completing the first step of generating initial codes, I had an overview of all the datasets and had an understanding of the data even if they were not directly related to my research question because they were parts of the participants' views on the health system and healthcare service accessibility in Canada. Therefore, the data items that were not related to my research question could give me a view to interpreting the data in the next phases. At the end of this step, I had 126 codes.

In semi-structured interviews with open-ended questions, not all the data is strongly linked to the exact question as this kind of interview intentionally provides a situation to let the participants freely express what they find relevant. So, researchers may have some codes that do not seem to belong to any themes or are directly related to their research questions. However, I believe that every piece of data may help the researchers' interpretation even if they are not directly relevant to the research question. Similarly, in this study, the participants tended to share their experiences and views about access to healthcare services referring to years ago before the pandemic or related to themselves rather than their children in some parts of the interviews. While this data might not directly answer the question of this study, it helped me gain a deeper

understanding of the participants' perspectives. Therefore, I did not ignore any inductively generated code and categorized the initial codes into three categories. The first category of codes (n=23) related to the experiences and perspectives of participants prior to the pandemic situation. The second category of codes related to experiences and perspectives that were common prior to and during the pandemic (n=21). Lastly, the third category of codes referred to experiences and perspectives specifically during the COVID-19 pandemic (n=72). After this categorization, I merged some codes in each category as they were almost identical. I then had 79 codes across the three categories.

In the second step of generating initial codes, I went through the two last categories of codes related to the pandemic situation. This time, I checked the codes and the related data items and tried to focus on details and patterns related to accessing healthcare services for children during the COVID-19 pandemic to generate ideas for potential themes in the next phases. I tried to find similarities and differences between the initial codes and the existing knowledge in the literature, if the immigrants' perspectives and experiences repeated, got worse or better during the pandemic, or if new patterns emerged. In this step, I tried to fit the patterns found within the dataset with different SEM levels. In this phase, I noted down my findings and reflections to use in the next phase and generated five new codes as well.

Phase 3 - Searching for Themes

I started phase three when all the data had been collected and coded. I had an overview of the entire data set and insight into participants' ideas, perspectives, and experiences. I had already noted down my thoughts and ideas about the relation of data and codes to the research questions, existing knowledge, and the SEM. Based on the insight I had gained in the first two phases, I started sorting the codes into potential themes and sub-themes. In this phase, I tried to

think about my research questions and search for themes around the particular aspect of data related to the participants' experiences and views about access to child health care services during the COVID-19 pandemic; however, I did not abandon any codes as I wanted to review all potential themes in the next phase. I had also thought about different levels of SEM in this phase to broaden my perspective on the data and capture not only the themes that appeared in most of the data set, but also the themes that appeared in little of the data set while capturing something important in my view – based on my existing knowledge, new knowledge from the entire data set and preliminary codes, and theoretical assumptions (Braun & Clarke, 2006).

In this phase, I used the mind map feature of NVivo to organize my thoughts, potential themes, and sub-themes. The visualization of the data helped me to sort the codes into potential themes and think about the relation of codes, themes, and different levels of themes. At the end of this phase, I had five potential themes and potential 14 sub-themes.

Phase 4 - Reviewing Themes

I started this phase with a set of potential themes. Reviewing themes had two steps. The first step was reviewing the codes and data items for each theme to find if they formed a coherent pattern. In this step, I checked the themes to ensure that coded data 'fit' into and support the candidate theme. The second step was reviewing all themes related to the entire data set and checking whether the themes reflected the entire data set. In this step, I asked myself: 1) if I see the themes and the entire data set separately as a third person, can I easily understand that these themes are related to this data set? and 2) have my presumptions changed the nature and essence of the data and led to themes that are not a reflection of the data set?

In this phase, I merged two themes into one as I believed they collapsed into each other, and I could not explain one without borrowing data from the other. I also generated two new codes in step two of my review and added them to the data items in one of the candidate themes and updated the themes with changes in sub-themes. At the end of this phase, I had four themes and ten sub-themes that I could consider coherent with an accurate reflection of the data set.

Phase 5 - Defining and Naming Themes

This phase is to “define and refine” the themes (Braun & Clarke, 2006, p. 92). Braun and Clarke explain that this step involves identifying the ‘essence’ of each theme and the main ‘story’ that each theme tells. Researchers should ask whether this story that emerges aligns with the broader story that they are going to tell about the data. This is the phase in which researchers must ensure there is no overlap between the themes and each theme has its own essence and story.

I tried to describe each theme’s story in a couple of sentences and check if every theme had a story for itself and if the data in the themes supported a coherent concept. Even though the final themes indicated related concepts, as all of the themes were part of a broader data set, they were generated in a way to have the least overlap with each other. I included words from the data set in the names of themes and subthemes as I felt they could give the reader a sense of what the theme is about.

Phase 6 - Producing the Report

Braun and Clarke suggested researchers provide a “concise coherent, logical, non-repetitive and interesting account of the story the data tell within themes” (2006, p. 93). For writing the final report, sufficient support with the data must be provided for each theme.

Examples and extracts that capture the point of the themes should be provided as well. After reporting the themes, it is important that researchers go beyond the narration and discuss the findings and make arguments about the finding and research questions. I provide my report and discussion in the next chapters.

During these six phases of analysis, I used some strategies to record my thoughts, ideas, plans, decisions, and actions taken for generating patterns to avoid getting confused within lots of data and deviating from the study's aim. Besides the field notes after each interview, I noted down my reflections on codes, questions that came to my mind about data, thinking about evolving interview questions, and my plans for generating themes. Therefore, I had brief informal memos that helped me summarize and organize my thoughts during the study process and have critical thinking.

Finally, I audited the data and recorded some details, such as what codes were clustered together, when they were generated, how they changed, what codes were added later, which decisions I made through data gathering and analysis, etc. Besides this record, I transparently described and documented all the steps taken in this research study throughout this thesis to show readers how the steps were taken throughout this study to collect data and generate the findings from the raw data.

3. 5 Presumptions and Reflexivity

This research is my thesis project of my Master of Science degree in health promotion. I am a 30-year-old female with an MD degree from Iran and clinical and research experience in pediatrics. My motivation for this research, thoughts about the topic, presumptions, and

theoretical framework are briefly explained below in order to make the readers aware of my position and the potential influence that I could have on any stages of this study.

I believe that health equity is not achievable just by applying equal health services to a population. When I worked as a physician in an underprivileged city near the border of Iran, Afghanistan, and Pakistan in the Middle East (Saravan, Sistan and Baluchestan Province, Iran), I found that people had a lower level of health compared to other cities in Iran, while they had the same level of health services, such as the number of radiology services, family doctors, and specialists available for their population. One of the main factors that kept the population less healthy was the different definitions of health and many diseases in that region. For example, while autism existed independently of their definitions or ideas in that population, they accepted that their children had autism just when they could see observable symptoms such as abnormal body posturing or if it was presented by mental retardation. Therefore, many of them did not visit a physician in case of more general or less serious symptoms or refused to receive care for their children. I believe that children are one of the most vulnerable populations that can be damaged in a health system as their health is dependent on their parents' knowledge and decisions. As a physician, I found that the patients that I visited had different perspectives about disease and treatments. Some patients believed they would be treated only with the injected form of medications at the first visit, and some thoughts that they will not be treated if they do not use antibiotics. Some of them defined the common cold necessarily as a bacterial infection, some had a negative perspective about the health services, and some had a positive view; while the services and the healthcare workers were the same. I tried to improve the knowledge of my patients by providing information about diseases, even basic information, treatment, and the consequences of antibiotics for their children. I spent more time and effort explaining to my patient alternatives

approaches and broadening their perspective. After a while, I found I should consider their culture and stay with their beliefs and cultural frame while explaining a concept to them. The population highly valued and was informed by their culture, religion, and beliefs, and you could make a change in their perspective if you consider their values. It is worth noting that I could see the result of my effort in my patients after two years as improvements in taking care of their health, their health service-seeking behaviour, their knowledge, and their ability to navigate the health system and use health services effectively. Besides their knowledge and attitudes, they had barriers to accessing health services as many of them could not afford a taxi to come to the hospital or medication which was not covered by insurance. So, I believe that healthcare accessibility is the result of many factors at different levels from individual to organizational and policy levels rather than just the available health services, and this is why I chose the SEM as a guide for myself in this study.

This experience made me think that we need deeper insight into different populations' needs and attitudes towards the health system and should modify health systems and networks in every region based on these needs and attitudes. As an immigrant who is a professional in the health field, I have talked to many Middle Eastern immigrants about the health system in Canada. Unbelievably, most of them convey that health services in Canada are hard to reach and it takes a long time to access health services such as imaging and paraclinical examinations; however, in my experience, it seems that more facilities and services are available in Canada compared to Iran. I found that many of them do not believe that they have a better level of health or better access to health services in Canada compared to their own country. I, personally, believe that this perspective would not be the result of a lack of services in Canada; rather, it might be related to circumstances in different levels of SEM that are influential on accessing

healthcare for a person, including knowledge, culture, communities, interaction with healthcare providers, and health policies.

With this knowledge and view, I have been interested in finding out how the COVID-19 pandemic affected immigrants from the Middle East with almost the same culture, beliefs, and level of health services as in their home countries regarding access to healthcare. I find the impact of health policy and health system management very important to the overall health status of a population. I thought that the Middle Eastern population in London, who usually had difficulties in using health care services before the pandemic, might have faced new challenges during the COVID-19 pandemic. As pediatrics is my favourite field in medicine, and because I visited thousands of children during my work, I decided to put the focus of my study on the children population among Middle Eastern immigrant families in London to understand how the pandemic and the restrictions affected their child health and their access to child healthcare. I expect that this pandemic might affect their children's health and access to health care in both negative and positive ways.

My experience as a physician made me see the whole story of this research as a healthcare worker, while my experience as an immigrant who does not practice in Canada allowed me to see the story as a health service user as well. Applying SEM in this study also helped me to broaden my views on different aspects of accessing healthcare services and made me avoid being one-dimensional.

3. 6 Quality Criteria

I ensured and evaluated the quality and rigour of this research study using the eight criteria of quality in qualitative research outlined by Tracy (2010). I believe Tracy's guideline is

a set of criteria that are flexible depending on the research's goal, methodology, and approach. Compared to the rigid criteria designed for specific methodologies, it opens space for researchers to ensure the quality of their research by the methods that fit best with their studies, abilities, and skills. I used Tracy's eight "Big-Tent" criteria for evaluating and critiquing my research before readers.

3. 61 Worthy Topic

The topic of this qualitative research is timely and relevant to the field of health promotion. Healthcare accessibility is one of the priorities in the health promotion field, and the topic of this study emerged from a timely social situation: the COVID-19 pandemic. This topic can provide "educative authenticity" as it would improve awareness in the field. Based on the literature and the research gap, child healthcare accessibility and utilization in the immigrant population of Canada is a little-known phenomenon (Tracy, 2010).

3. 62 Rich Rigour

Tracy (2010) defines this criterion as providing appropriate, sufficient, and abundant context, sample, the process of data collection and analysis, time, theoretical construct, and data in the study. In this research, the sample, participants, and research context were appropriate based on the research goal and study questions. Appropriate time was spent conducting each step of this research, from the first steps of data gathering to generating findings and discussing the results. The theoretical framework, methodological process, study design, paradigm, and assumptions in this study are clearly stated. The methodological process, study design, and decisions related to analysis are clearly documented and are logical and repeatable (Emden & Sandelowski, 1998; Thorne et al., 2004). The details about the transcripts, participants, number

and length of interviews, types of questions asked, analysis process, decisions related to analysis, and how raw data transferred to the findings are also documented throughout the thesis (Tracy, 2010). Tracy (2010) also indicates that rich rigour and sincerity are connected in some respects. For example, the transparency of the process of data gathering and analysis in detail shows both the rigorous analysis and the sincerity of the study.

3. 63 Sincerity

Tracy uses the term sincerity to refer to the research honesty and transparency that can be achieved through different strategies. In this study, I tried to be as transparent as possible by indicating my motivations, background, thoughts, ideas, biases, and goals. Besides my fieldnotes, I took reflexive notes and reported the research activities, plans, and decisions made for each step, including the data analysis through this thesis (audit trail). The first-person voice was used in this thesis to remind readers of the active presence of the researcher throughout the scene in every stage of data gathering and analysis.

3. 64 Credibility

I tried to use thick descriptions and provide enough details to make readers feel trustworthy to have their own conclusion and judgement about this research. I started the thick description of the data from the first steps of data collection by trying to show feelings and the true meaning of sentences in the transcripts and noting down fieldnotes to provide more details for myself about what I observed. I tried to show enough detail in the transcripts as well. It is important to be familiar with the cultural vocabulary and grammar of the language of interviews to understand idioms, jokes, and hidden meanings (Tracy, 2010). I was familiar with these features of both languages of interviews and specified any idioms or hidden meaning in

parentheses in the transcripts. For example, when one of the participants said “his doctor does not use answering machines anymore, thank God! (laughing)” in Farsi, I understood that the combination of the term “thank God” with laughing about something in Farsi means reproaching and blaming something that should have happened or not happened. Or when a participant said it was like a “dead end”, I know that it is an idiom that people use in Farsi when they feel there is no solution and want to show their desperation.

Besides the transcripts, I tried to provide thickly described findings and discussion sections to let readers decide about the meanings and form their own judgment. I tried to be as specific as possible by providing examples, explicit descriptions, and even quotations to make a clear picture of the events in every step of this study for readers.

3. 65 Resonance

Tracy uses the term “resonance” to show the study’s impact. She suggested transferability and generalization as ways to show the resonance and believed that resonance can be achieved through “the study’s potential to be valuable across a variety of contexts or situations” (2010, p. 845). Therefore, I provided a rich description of the participant characteristics and an in-depth description of the study setting to increase the potential for this study’s findings to be applicable to further research involving immigrants’ access to child healthcare in normal situations, during the COVID-19 pandemic, or other situations. In this way, I could let other researchers make a comparison and decide if any part of this research is transferable to their own circumstances, actions, studies, or population of interest.

3. 66 Significant Contribution

Tracy suggests that the significance of studies can be judged by asking questions such as whether the study extends knowledge, improves practice, generates ongoing research, and contributes to our understanding of a phenomenon. As explained in Chapter 1, this study has the potential to extend our knowledge about child healthcare accessibility among immigrants during the COVID-19 pandemic and improve practice by making health policymakers, health service providers, and settlement agencies aware of the consequences of the COVID-19-related policies on immigrant children, their specific needs, challenges, concerns, perspectives, and expectations. This knowledge can be used in general and for future health emergencies to manage health systems in a culturally-friendly way. It is also possible that the participants of this study think more deeply about their children's health and seek more information on the available services for children after this study. Suggestions for future study are also explained in the next chapters.

3. 67 Ethical

The procedural ethics of this study was approved by the Western University Health Sciences Research Ethics Board (see Appendix D) on October 4, 2021, and the actions considered for data confidentiality in this research have been described in the “data collection” section of this chapter.

3. 68 Meaningful Coherence

This study is meaningfully coherent as its purpose has been achieved and all the proposed steps have been completed. The methodology and study design were used coherently with the theoretical framework and paradigm. Finally, the findings were discussed in connection with the literature review, research focus, aims, and method (Tracy, 2010).

3.7 Conclusion

In this study, I aimed to investigate the perspectives of Middle Eastern parents regarding their access to child health services based on their related experiences during the COVID-19 pandemic, using the ID methodology. To achieve this aim, I interviewed seven parents with young children (elementary-school children) via Zoom meetings. During this study, I was committed to critical realism ontology and epistemology and guided by the SEM. To analyze the data, I used the 6-steps of TA outlined by Braun and Clarke (2006, 2019), and to ensure the quality of the study, I used the quality criteria outlined by Tracy (2010).

Chapter 4

4. Results

In this chapter, I will report the results of this study based on the analysis of the data and explain each theme and its associated sub-themes. Seven parents participated in this study and their characteristics are presented in Table 1. Analysis of the data collected from interviewing the participants led to generating four key themes and ten sub-themes (Table 2) that provided insight into Middle Eastern immigrant parents' perspectives on accessing child healthcare services based on their experiences during the COVID-19 pandemic in London, Ontario.

Table 1

Participants' Characteristics (n=7)

Categories	Frequency
Gender (Participant)	5
Female	2
Male	
Ethnicity	
Iranian	4
Afghan	1
Lebanese/ Iranian	1
Lebanese	1
Number of Years Living in Ontario	
2-4 years	4
5-8 years	3
Age (Participants)	
30-35	4
36-40	3
Gender (Children)	
Female	3
Male	3
Preferred not to answer	1
School Grade (Children)	
Grade 1	2
Grade 2	1
Grade 3	2
Grade 4	0
Grade 5	1
Language of Interview	

English	4
Farsi (Persian)	3

Table 2
Themes and Sub-themes

Theme	Sub-theme
Navigating Health Services: “Limited and Confusing”	<ul style="list-style-type: none"> • Limited Access to Physicians: “Answering Machines” • Confusion: “It Was Like a Dead End” • Emergency Department: “the Only and the Last” • Disruption in Health Services: “Unsupportive and Disorganized”
Being an Immigrant Made it Hard	<ul style="list-style-type: none"> • Unfamiliarity with the System • Lack of Family Support
Less Intention of Utilizing Child Health Services	<ul style="list-style-type: none"> • Fear of Infection: Unknown and Scary Situation • Lack of Trust in Telemedicine: “Ineffective”
Limited/No Mental Health Utilization	<ul style="list-style-type: none"> • Late Understanding of Mental Issues • Accessibility Challenges

4.1 Theme 1 - Navigating Health Services: “Limited and Confusing”

Participants found the journey of navigating healthcare services for their children challenging during the pandemic. Navigating healthcare services during the pandemic for participants involved accessing physicians, figuring out the most accessible healthcare services available to them at that moment, and seeking help from healthcare workers to give them information and guide them on which action(s) should be taken for their children when there are limitations and barriers to accessing a healthcare professional. These findings centred on the participants’ experiences when they encountered difficulty in navigating and utilizing healthcare services for their children during the COVID-19 pandemic. The following four subthemes will

explore their experiences in detail related to the healthcare system when attempting to use healthcare services.

4. 11 Limited Access to Physicians: “Answering Machines”

Participants reported facing obstacles when they needed to get an appointment with a physician for their children. One of the most challenging parts was accessing their family doctors. They mentioned that accessing a family physician was not easy even before the pandemic due to the long wait time for getting an appointment. One participant described the long wait time said, “You must wait, wait, and wait!”, [7], and participant two explained that: “Overall, about the health system in Canada, I usually complain because we have a problem setting an appointment with our family doctor, and it takes one or two weeks to get an appointment.”

Despite these existing challenges, participants felt it was more difficult to access and get an appointment with their family doctors during the pandemic compared to prior to the pandemic, noting that office work hours, workdays, and capacity were limited, and most participants faced answering machines when attempting to contact a physician’s office. One participant described his experience:

I think our family doctor, like all family physicians, did not accept patients like in the past. They limited the work hours and days. We wanted to get an appointment with our family doctor, but we couldn’t because she was not in the office. You know, we needed our doctor, but there was no response. It was terrible, you cannot believe it. [6]

Another participant explained the situation as follows:

I think it was more difficult to see the doctor then than in the past. It was harder to get an appointment because my son's doctor did not answer. It was about two months that the pandemic started. My son got sick, and we called his doctor's office, but it was an answering machine. I expected better and faster responses during the pandemic. I thought they would hire more people to detect and treat people, but our family doctor worked fewer hours than normal. [7]

Almost all participants felt that accessing a physician for their children was more difficult during the pandemic. Participant one explained his experience, saying "Even though we contacted the physicians, they did not accept us very easily." Likewise, participant five explained: "It was hard, especially because the family doctor has not visited patients in person, you have to explain everything on the phone, and they were not in the office every day." Another participant complained about the late response from their family doctor for getting an appointment during the COVID-19 pandemic:

The working days are fewer, and she always complains that they have 100 calls a day and cannot respond to all of them. It is difficult, particularly during the pandemic. For example, I have to call my family doctor multiple times, when the situation is a kind of emergency, but not that much urgent that I want to go to the ED. One time, it took a week for them to respond to the answering machine. [4]

This difficulty was not limited to getting an appointment from their children's family doctors. Participants encountered the same difficulties when attempting to get an appointment from a walk-in clinic during the pandemic. One participant who tried to get an appointment for her son from walk-in clinics explained her experience as:

Physicians did not work and visit patients. They said if you have any symptoms or problems, go to the hospital. There were just a few online walk-in clinics, and you could not even get an appointment for those online visits. I submitted online applications for walk-in clinics two times, and they never called me. [3]

While participants reported facing more difficulties getting appointments for their children during the pandemic, it seems that the limitations of physicians' offices got better over time as the pandemic progressed, and they noted they could access family doctors easier than they could during the first year of the pandemic. For example, after he complained about the difficulty with accessing physicians, participant one noted: "It improved over time, it was easier for parents to go to a doctor." Participant six similarly mentioned that the difficulty with accessing their physician was "Just for the six or seven months at the first." After this, the access improved, but for telephone visits, he noted, "I am still not satisfied with these visits by phone, but it is better than nothing." [6]. Participant seven also noted that the situation improved over time:

I think at first, family physicians did not want to see patients. They limited their office work hours and just answered with an answering machine, but it is better now. We are not scared of COVID-19, we can manage it, and his doctor does not use answering machines anymore, thank God! (laughing). Recently, my child was sick again, but his doctor gave us an appointment for the day after. After a year, the situation gets better, and many centres take rapid tests.

4. 12 Confusion: "It Was Like a Dead End"

Limited access to physicians during the pandemic was a reason that made the parents think about what other health services they should use for their children in the pandemic

situation. In addition to the difficulty in getting an appointment with family physicians, other circumstances made the parents confused about making the best decision for utilizing healthcare services for their children.

Alongside the challenge of “access to physicians”, parents faced the issue that physicians did not accept visiting children with flu-like symptoms when parents could contact physicians’ offices or walk-in clinics to get appointments. This issue made the parents confused about what actions they should take when their children had flu-like symptoms, which are common in children even in non-pandemic situations.

One participant mentioned her doubt about which services she could access for her son’s flu-like symptoms and described her experience as follows:

Physicians’ offices are more organized now, but if your child has one of the symptoms like nose running, sneezing, or any flu-like symptoms, you are not allowed to go and visit a doctor as you must stay at home for a period. You do not know what exactly to do, go to a hospital and wait a long time there or do anything else. This is not good. Especially for some symptoms like fever, it is not always COVID-19. [3]

The second participant who discussed this conflict first recounted a story from her friend:

Physicians said if the child has a fever, we cannot accept her and she should go to the ED. Thank God, we did not experience that, but my friends experienced it. My friend said when their children had cough and fever in daycare, the doctor’s office said not to come here at all and go to the ED. On the other hand, in EDs, you should wait six hours and you might be infected by being there for six hours. [4]

This participant also had a personal experience when her child faced complications of an ointment prescribed by her family physician, and the parents faced a dilemma between seeking healthcare service from the child's family physician or visiting an ED:

I could not find the doctor. I called her staff and said the case is an emergency, please tell me where the doctor is, so I can bring my child for her visit. Because, in the ED, they said we could not do something, her doctor should come. After two days, I could reach her, and she said my staff did not tell me that the situation was an emergency, now come here. [4]

Then, the participant repeated her conversation with the doctor:

We could not find you; your staff didn't connect us to you, we didn't have any other phone calls, and in the ED, they said we should find you. It was like a dead end [an idiom], and no one gave us a solution. God helped us. [4]

Therefore, it seemed that the implementation of public health measures also caused some confusion as to how to appropriately use healthcare services. Participant six described the situation:

We didn't know we should visit our physicians or go to hospitals. The doctor did not accept my child with a fever and referred us to the ED. In the ED, they recommended visiting a family physician for more medications. You know, COVID-19 symptoms are somethings that always exist in children when they get sick. So, what should we do?

Another participant described their experience as:

Every time, we had doubts about calling our doctor or going to the ED. The doctor did not visit my child with a fever, cough, or any COVID-19 symptoms, but children always get fever and cough! It doesn't mean that all of them have COVID-19. Even if it is COVID-19, they should do something. [7]

4. 13 Emergency Department: “the Only and the Last”

Participants' reports of their experiences suggest that they utilized emergency healthcare services frequently during the pandemic due to the previously mentioned shortcomings, including limited access to physicians and confusion about the appropriate healthcare service for their children. Except for one participant who decided to use the ED without first reaching the child's family doctor, others stated that they had no choice. They had to attend the ED as it was the only and last option for their children at that time.

One participant whose son needed dental healthcare services during the COVID-19 pandemic faced financial and accessibility challenges and described their experience as:

My son had a dental problem, and they told us it would cost around \$5000. It was very difficult to get an appointment with a dentist. My son had too much pain and suffered, so we had to bring him to the ED with an abscess. [3]

This participant could not access dental health services due to the limited access to healthcare professionals, and finally, they felt they had no choice except to use the ED due to the complications. Another participant, whose daughter had a fever and their family physician refused to accept them because of the flu-like symptoms, explained:

So, we had to go to the ED. It was scary because I think even if my child does not have COVID-19, she might get infected in the ED. We had to wait about five hours there.

During this time, my child was suffering and crying. They took a test from her and injected some drugs to reduce her fever. She was better that night, and we were happy, but the next day, she got a fever again. Her doctor didn't give us an appointment again, and we went to the ED again. [6]

This participant continued to explain using the ED in another part of the interview:

We did not want to go to hospitals where we could be infected. We wanted to go to a safe place, in an office, not the hospital. In the ED, you must wait many hours. Finally, they just give you medications for that moment. You still need to see your family doctor for medications at home. [6]

The dissatisfaction expressed by participants about using the ED as their last choice can be interpreted that participants did not intend to use the ED if they could access their family physicians. Similarly, another participant, who used the ED for their child as they could not access their family physician, expressed:

We could get infected in the ED. It was a bad experience. We waited for five hours, and just one parent could go inside. We had to go to the ED multiple times. We preferred to visit our doctor in her office. In the ED, they tried to be sure that we did not have COVID-19, so they responded well. I think they acted better than family doctors. [7]

It seems that the participants of this study did not tend to use the ED during the pandemic, and the limited access to family physicians made them utilize the ED for their children as they believed they did not have any other choice during the pandemic.

4. 14 Disruption in Health Services: “Unsupportive and Disorganized”

In continuation of previous sub-themes, participants reported feeling that the health systems and services had been disrupted and disorganized during the pandemic, and healthcare workers did not provide enough support and information. Participants believed that healthcare providers were afraid of the pandemic situation and were not clear about the new process for the pandemic situation, which made the healthcare providers unsupportive, and the health systems disorganized in their opinions. As participant one said: “I believe, in the beginning, the process was not clear to the doctors. They did not know what process they needed to follow for precaution.” Another participant explained:

I still do not feel comfortable. During the first months of the pandemic, the healthcare providers were not ready to provide services and were not organized to give us time for visits. They are more organized now. [3]

These feelings could arise from their experiences of difficulty in accessing physicians. Participant six described: “I think they did not know what they should do at first and were not ready for this situation. I think doctors were stressed and scared and did not accept patients.” And participant seven explained:

Physicians are not scared of COVID-19 symptoms like in the past and have more time. I think at first, family physicians did not want to see patients and did not have a rule for themselves. Because they referred us to another. My friends’ family doctors, some of them gave appointments, some of them did not.

Besides these perspectives and experiences, participants showed that they expected a better performance of the health system in Canada compared to what they experienced during the

pandemic. For instance, participant seven showed her expectations by noting, “I expected better, I mean faster responses, I thought they will hire more people to detect and treat people.” Another participant expressed his expectations as:

The situation was sometimes ridiculous and worse during the pandemic. I thought they would hire more health providers during this time, but they did not. You could not get an appointment for your child, but children could not wait. Children suffer from pain and illness. I didn’t expect it in a country like Canada, where people cannot visit a doctor immediately when they are sick or have pain. [6]

Similarly, a participant whose daughter experienced a drug side-effect complained about a lack of coordination between their family physician and her staff. As was previously mentioned, they could visit the physician after two days and the physician said, “My staff did not tell me that the situation was an emergency.” [4]. This participant also believed that the health services had been disrupted during the pandemic as the family doctor explained a limitation in getting appointments as a result of a shortage of health staff. The participant found it “not rational” and explained her feelings about this experience and finding healthcare providers unsupportive as:

Her staff not only didn’t sympathize with and understand us, but she also didn’t help us. Her temper was bad. If I had time, I wanted to sue all of them together [the staff and the doctor], but the process is too long again. If I came back to that time, I would sue them. [4]

Another significant complaint that made the parents see the health system as unsupportive and disorganized was the lack of information when they needed it. However, this

lack of information was not something new that emerged just during the pandemic. As one participant explained:

I think if you ask about services, they will answer, otherwise, no one says about them to you. No one says it is your right or these are the available supports. If someone wants to search in detail, she will find, wow, this service was also available, it is interesting, I didn't know. They don't give you this information and this awareness. Yes, when I ask health workers "Is it also included?" They will say yes, but I expect they should have said it to me without any need to ask. I should not search in detail for the rules and regulations, I cannot, THEY should inform me about them. [4]

While this challenge apparently existed before the pandemic, it seems that parents felt there was a need to get explicitly informed about navigating health services in the new situation of the COVID-19 pandemic as well. As one participant mentioned:

There were some rules, wearing a mask, and being quarantined for 14 days at home after infection. I had no problem with this information, but nobody said what to do when your child gets sick, and your physician did not answer. [7]

Participant three had to defray thousands of dollars for her son's dental expenses due to the lack of information about dental coverage regulations and circumstances. She explained that the health staff informed them about the approximate expenses and provided no information on dental coverage for children [the parents did not ask about the insurance either]. After treating her son, they found that the expenses could be covered under some circumstances and if they went to specific health centres to examine the teeth before the treatment. She compared this experience with her experience in Montreal as:

I compare it with the health system in Montreal. They clearly say that a child's dental care is covered by insurance until a specific age and wrote it on children's health cards. I think there should be a system for announcing this information. Not like this, which is like hiding something! Many people around me do not know this information. [3]

All these experiences made the parents believe that the health system was not supportive enough and healthcare services were disorganized and disrupted in the pandemic situation, especially when they expected better and more organized services.

Finally, most challenges and barriers related to the first theme, health service navigation, reported by the parents were mostly at the organizational level. The participants' views showed that most challenges with health service navigation were in the health service settings, including limited work capacity in different health centers, changes in health service operations, and lack of expected support from healthcare providers. In addition to the organizational level, the dilemma between keeping trying to get an appointment from a physician or attending EDs for their children can be referred to the relationship between organizations and represent a challenge at the community level of the socio ecological Model (SEM).

4. 2 Theme 2 - Being an Immigrant Made it Hard

Parents faced particular problems that they attributed to their status as immigrants. Participants explained how being an immigrant affected their access to healthcare generally and during the pandemic. On one hand, participants reported believing that the available services were the same for both immigrants and non-immigrants. Similarly, participants believed that particular barriers are the same for immigrant and non-immigrant people such as long wait times in the Canadian health system. As participant six said, "They give appointments late to all

people. It is not because we are immigrants, I heard this kind of problem from Canadians as well.”

On the other hand, participants felt discrimination from healthcare workers due to their appearance. They thought that healthcare workers acted more responsibly toward Canadians. Participant three explained her thoughts as: “You cannot say that dark hair and the Middle Eastern face are not influential. Maybe they do not let themselves treat people with European faces or Canadians, like us.” Another participant explained it in more detail:

Sometimes, I feel health staff treat Canadians better and with more respect. Our appearance, you know, shows that we are from the Middle East. They think we are lower than them or do not understand. They answer the questions of Canadians more patiently, but they answer our questions with just one word. [6]

Similarly, it was echoed by a mother:

They are nice, but I sometimes think they are nicer to whites. For example, my husband has an appearance like them. I mean white skin and brown hair. I think they treat him better sometimes. I have darker skin, so you can find I am not from here, even if you do not talk to me. [7]

Despite mentioning this kind of racial discrimination, parents did not relate this experience to their access to child healthcare services and did not find it any more of a challenge during the pandemic. They also did not report the language barrier as being a factor that might affect their communication with health staff, neither in general situations nor during the pandemic. However, they experienced other immigrant-related challenges that made accessing healthcare services harder for them during the pandemic.

4. 21 Unfamiliarity with the System

A factor that made accessing healthcare services difficult for children was the participants' unfamiliarity with the health system in Canada. While lack of knowledge can be a potential barrier for even Canadian non-immigrant people, participants believed that it is more highlighted for immigrants. When I asked one participant, "Do you think that these experiences, for example, lack of knowledge, are related to your immigration status? In other words, if you were a Canadian, did you face the same challenges?", she responded with:

No, I did not face it because an immigrant has limited knowledge. We start again from zero [it is an idiom in Farsi that means start over]. Whatever I know, it is not enough. I am the type of person who usually helps and guides other people, but I sometimes find that I do not know enough information. If I was Canadian, I would not have faced these challenges for sure. I have been here in London for three years and haven't known it [information about child dental coverage and nobody told me. [3]

This challenge, unfamiliarity with the health services due to being an immigrant, is a factor at the personal level in the SEM and could act as a barrier for individuals to access healthcare services. It seems that most participants were struggling with the lack of information and familiarity with the systems and services. They mentioned their need to be informed about available services multiple times and commonly complained about not receiving information from healthcare providers. Some of their opinions were mentioned in the sub-theme "*Disruption in Health Services: Unsupportive and Disorganized*". Even though not all participants reported this lack of information or unfamiliarity related to immigration, another participant seemed to believe that this lack of familiarity was related to being an immigrant:

Some things here are harder for us. They do not understand that the system is new to us. I think the situation is the same for all people, but Canadians get used to it and we do not. Canadians know what they should do in each situation, but we do not. I think they should give us information about what we should do in which situations. For example, where to go if we have insurance, if we do not have insurance, if our children are sick, or if the doctor does not answer. I think these things are different for us, but overall, the system is the same for both Canadians and immigrants. [7]

4. 22 Lack of Family Support

Participants reported issues with having no relatives close to them in the city. Participants felt they needed this support during this specific time. They found having relatives during the pandemic could be a great help for their children.

Participants compared their children with those children who have cousins and could play and communicate with other children during the time of school closures: “We have no friends and family here, she has no cousins here like Canadian children, she was alone.” [6]. They had concerns about their children’s mental well-being and believed if they had relatives to communicate with during the pandemic, their children would be happier and healthier. Even one participant decided to send his son to their home country:

For my son, it was tough here because we are immigrants. We do not have our own community or family here, but during the pandemic, I think it was very difficult for my son to stay here. At some point, I had to send him back home because I saw that he was losing his confidence and communication skills. [1]

The challenge of not having a close family was echoed by another participant:

Other children had someone to play with during this time, but we have no relatives here. I have my brother in Canada, but he is in British Columbia, and we do not see each other. I think if we had relatives, it would be easier. So, I could ask them to take care of my children for some days, or they could play with their cousins. [7]

This immigrant-related challenge was not reported as a barrier to accessing healthcare services for children by the participants. Rather, they found it as a negative factor for their children's health overall. It is worth noting that it was not the only factor that impacted the children's health from the parents' perspectives. The parents in this study believed that while school closures did not directly impact their access to child healthcare, they had negative effects on their children's health. All participants believed that school closures affected their children's mental well-being as the children did not have any family members around and lost their other social interactions in school. They reported that their children missed school, teachers, and their friends. The parents reported that their children experienced emotional and mental issues such as loneliness, low self-confidence, lower moods, feeling isolated, and not being interested in communicating with others. In addition to mental well-being, the parents reported physical health concerns as a consequence of the children's isolation during the pandemic.

Therefore, it seems that the lack of other family members around children and their social networks were the challenges at the interpersonal and organizational levels that negatively affected the children's health. While it was not necessarily reported as a barrier to accessing child healthcare services during the pandemic, most parents reporting believing that schools could help them if they collaborated with the health services. Several participants in this study suggested that schools should play a role in children's health and access to healthcare by

providing regular physical examinations for children in schools and collaborating with health providers if a child has a health issue.

4. 3 Theme 3 - Less Intention of Utilizing Child Health Services

Alongside the difficulty in accessing healthcare during the pandemic, participants reported having less intention of using healthcare services for their children during the pandemic. Participants reported purposefully reducing their healthcare service utilization as they felt fear of infection, particularly for their children, and found virtual visits and telemedicine ineffective. Parents described that they would not use health services for their children during this time unless it was serious.

4. 31 Fear of Infection: An Unknown and Scary Situation

All parents stated that they felt fear and scared mostly during the first year of the pandemic. They described the situation as “scary” and “unknown”. Participants explained that in the first months of the pandemic they feared contracting the virus in environments such as hospitals and walk-in clinics. They believed that those places were the first places someone with a COVID-19 infection would attend. Parents were particularly concerned about their children getting infected as they saw their children as weaker than themselves, and there was controversial information about the risk of infection in children at first. One of the fathers expressed his feelings about using the ED during the pandemic:

We had to go to the ED. It was really scary, and I was worried about my child. We did not want to go to hospitals as we could be infected. We want to go to a safe place, in an office, not the hospital. [6]

Another participant explained:

Even though my child had flu or some problems that needed a doctor's attention, we were scared of going to the doctor. It was like an unknown situation in the beginning. So, we were scared and preferred not to visit a doctor at first. [1]

Similarly, another participant stated:

I was scared and preferred to handle the situation myself, like if my son had a cold. Because that time was very challenging, and we were scared to check our health. We thought that maybe we interact with people with COVID-19. [2]

When a parent was asked why she did not use healthcare services for her child, like in the past, she answered: "Firstly, I do not use services to protect my children from the COVID-19 virus. Secondly, the waiting time is too longer than in my country." [5]. It appears that the unknown situation and the fear of infection acted as a factor at the personal level that prevented the parents to use healthcare services for their children, particularly in the first months of the pandemic.

4. 32 Lack of Trust in Telemedicine: "Ineffective"

Besides the fear of infection, it seems that participants gradually limited the visits by family physicians for their children as they encountered challenges accessing physicians and did not find it effective enough over the pandemic period.

One major cause of this perspective appeared to be a lack of trust in virtual appointments with family physicians. This lack of trust in telemedicine and finding the visits by family physicians ineffective during the pandemic seemed to be two-fold. First, participants believed that physicians could not diagnose well through telemedicine without a physical examination of the child. Compounding this, they have already had a negative view of attending family

physicians and receiving treatments based on their previous experiences. This pre-existing negative perspective triggered the parents' lack of trust in telemedicine.

Participants expressed their negative perspectives that existed prior to the pandemic in interviews. One participant, who had negative experiences with visiting family physicians in Canada, explained that her daughter had a respiratory problem before the pandemic, and they attended the family physician and the ED multiple times with no significant improvement. They finally went to their home country for treatment, where the child was treated. She described her view:

The health system is too bad! Regarding getting appointments and accessibility, when you get an appointment and go for a visit, they cannot diagnose correctly, and finally, you should do something for yourself. Sometimes, they even diagnose wrongly or get an appointment too late, which leads to complications. [4]

She continued in another part of the interview:

I think that doctors here – I do not know that case studies are few or they do not have enough experience – are completely inexperienced compared to my country, Iran. They approach it by experimenting and failing! They say, “Take this medication and wait to see if it shows side effects or not. If it fails, use another one.” Even the symptom therapy is too slow here. At least in Iran, symptom therapy is very fast. It seems physicians, here, do not have enough experience, so they cannot diagnose correctly. [4]

Similar negative views existed among other parents as well. Most parents believed that family doctors usually treated them with over-the-counter (OTC) medications that did not meet their expectations, so they can try OTCs themselves. Participants had some factors when

considering a physician a good or a bad doctor. They variably found a doctor supportive if the doctor “listens” carefully to them, “examines” children, “explains” completely, “prescribes” medication in the first visit, does not need “multiple visits”, and prescribes “antibiotics” if it is needed. In between, one parent, who was completely satisfied with her child’s family doctor, explained why she did not intend to visit a family physician for her child during the pandemic based on her overall experience [not related to the pandemic]:

The loong process, getting an appointment and going to the office. They even say using OTC medications. They usually take it easy. Generally, the health system in Canada made me do self-treatment as far as it is possible rather than visit a doctor. I usually decide to do self-treatment with OTC medications, and if the illness does not get better after three or four days, then I go to see a doctor. [3]

In addition to this existing negative perspective among the participants, the parents noted their lack of trust in the effectiveness of virtual visits was a reason for having less intention to utilize child healthcare services during the pandemic. Almost all participants believed that telemedicine was not effective, and physicians could not completely treat their children by phone. Parents stated their negative feelings or dissatisfactions with telemedicine in different ways as participant one said: “It was over the phone. And they were just asked some basic and fundamental questions. There was no check-up, they could not even see the kid, I think maybe they would have guessed what happened.” Participant two also described: “Regarding telemedicine, it is very hard. Physicians do not visit your child and diagnose via telephone. Sometimes, you must call again later, two days later, or a few days later.” Similarly, a parent explained her thoughts in more detail:

For example, she [family physician] said, “Look at the child’s throat, how is it?” We should do it all by ourselves. It is definitely different when a doctor does these things from when I do. I do not have any familiarity with them. I cannot say exactly what the symptoms are. Maybe, if the doctor observed in person, she could diagnose better. Definitely, her diagnosis is much better than mine. [5]

As a result of this decrease in intention to get help from the family physicians during the pandemic, parents applied alternative strategies such as using OTCs, herbs, home remedies, going directly to the ED without trying to visit their family physicians and consulting with doctors in their home countries. In the end, the lower intention of using telemedicine during the pandemic can be considered a result of the interaction of factors at different levels of SEM. The parents’ negative attitude towards telemedicine was a factor at the personal level, however, it arose from their previous experiences, such as not meeting their expectations regarding diagnosis and treatments from health services and interaction with health providers in the past, which are factors at the organizational level.

4. 4 Theme 4 - Limited/No Mental Health Utilization

One of the significant findings of this study was that all parents reported what they considered to be signs of mental issues in their children following the start of the pandemic and had concerns about their children’s mental well-being. Despite this concern, most of them did not seek mental healthcare services and help for their children, and a few parents reported using other strategies to improve their children’s mental well-being.

All participants reported believing that, besides the public health restrictions during this time, school closures caused mental health issues for their children and negatively affected some of their abilities. Parents compared their children to the time before the pandemic and believed

that their children had issues including: “feel shy and scared toward people”, [3, 7], “tendency to be alone”, [1, 2, 3], “less intention to play with peers, more intention to play videogames”, [2, 6], “miss their friends and teachers”, [3, 4, 5], “low-confidence, deterioration in their English-skills and communication skills”, [1, 3, 6, 7], “less intention to talk”, [1, 2, 3], and “get aggressive” [3].

Participant three explained that her son was very social and “loved to go out” before the pandemic and school closures. She continued that her son changed into a shy child with low confidence after a while and experienced bullying by other students when schools opened again. She said, “My son hated his teacher and students for a time and cried every day before going to school”, and she found her son “aggressive”.

Similarly, another participant explained, “My son feels shy and does not want to talk to people. Maybe he does not feel comfortable speaking English. He is not like in the past.” [7].

Participant six also noted:

I think my daughter was less confident after the schools closed for a while. Regarding her English skills, she was not at school and did not speak English for a while. It has affected her confidence. She speaks less and does not want to communicate with other people. She just wants to be alone and play with her tablet and computer.

The same problem was stated by participant two who felt his child does not intend to communicate with others like in the past.

My son likes to be at home rather than go outside. He prefers to stay at home and play with his tablet or X-box. It is terrible for parents because my son was spending less time going outside and communicating with his friends during the pandemic, and I was worried about his emotions.

Such experiences among all the participants could represent the need for seeking help and using mental health services, however, most participants did not seek help for this issue.

4. 41 Late Understanding of Mental Health Issues

During the interviews, efforts were made to understand why parents did not seek formal help for their children's mental well-being during the pandemic. One of the immediate answers to this question was that they noticed the changes in children late, after one or one and a half years when some restrictions did not exist anymore, and schools were opened again. So, they did not seek mental health services during this time. Participant two stated:

During that time, my son did not have problems with his body, but I understand that time was mentally very hard for him. However, we did not understand his situation at that time. Now, we found the effect of the pandemic and school closure on him. Maybe, at that time, we did not understand there was a problem.

When another parent was explaining her concerns about her child's mental issues, she mentioned: "I didn't notice during that time, but now, he has started school again and I can see his problems." [3]

Similarly, a parent explained the first reason he did not use mental health services to improve his child's mental well-being: "First of all, because we found it recently. Because we did not know at first. Now, after two years, we understand that she changed." [6]

This late understanding of mental health issues suggests the parents' lack of awareness about this probable consequence and the symptoms during the pandemic. Even though it is a factor at the personal level, factors at other levels could be influential on the parents' awareness. For instance, their interactions at the interpersonal level and getting informed by the healthcare

providers and communities at the upper level could affect parents' awareness and help them notice their children's mental well-being during the pandemic. While the late understanding of children's mental issues was an interesting underlying reason for not using mental health services by the parents, other factors were involved. The parents interviewed reported not utilizing formal health services even after finding that their children were experiencing emotional and mental challenges.

4. 42 Accessibility Challenges

While a few participants did not seek help for mental issues as they did not find it a serious condition and tried to improve the situation by providing a better environment for their children, parents generally reported believing that it is hard to access mental health services in Canada. This existing perspective was raised from their previous experiences or what they have heard from other people. They described mental healthcare service utilization as "expensive" and "a long process" [2, 6, 7]. Every participant took an alternative strategy for improving children's mental well-being, from interacting with children and improving their environment to getting consultation from their countries.

One participant described the process of accessing a specialist in Canada as "exhausting" based on his previous experiences. Another participant described her thoughts:

In my opinion, the health system here is not good. I heard from my friends that it takes about one year to be on a waiting list and get an appointment for mental health services. It is too long, and I cannot tolerate waiting this much time. We moved to London, and we had the challenge of finding a family doctor. If we wanted to see a doctor for mental issues, it would take too much time. [2]

Another participant similarly stated that he did not use mental health services as he believed services were expensive, needed long wait time, and could be ineffective:

You know, mental health services here are so expensive. If you want to get a consultation, it is so expensive. Besides, I know that if you want your doctor to refer you to a psychotherapist, it will take a year to visit a specialist. For one year, whatever wanted to happen, happened. [6]

As can be seen from these quotes, parents found mental health utilization for their children difficult based on their previous experiences and perspective about accessing mental health services. This perspective prevented some parents from using mental health services; however, some others tried to use formal help by sharing the problem with the children's family physician. They received advice from the family physicians but did not receive any follow-up or referral, and ultimately, they could not access any child mental health services in Canada. Participant seven described:

It is a long, long process. I said to his doctor about his confidence. She said, "you should help him", "you should wait", and "it is normal during this time", or something like this. She did not give us any suggestions or treatment. She did not refer us to someone. You cannot do anything in Canada without a referral. Everything will be expensive.

When this participant was asked "If her son's mental issue got worsened, would he ask the doctor another time for help?" he continued:

I am not sure. Maybe yes, but I know they do not do anything. They will refer you, and after a few months, maybe you can get an appointment with a specialist. I think if I see my son or daughter feeling very bad, I will search for an Iranian consultant here or in my

country. It's because they are more accessible and cheaper. I can virtually get an appointment from Iran at a reasonable price. Here, consultation is too expensive. Waiting for a specialist is also time-consuming. [7]

An almost similar experience was explained by another parent who sought help from her child's family doctor:

I contacted his doctor and said I feel overwhelmed. I do not know what I should do. This kid's personality has changed, he has even been beaten in school by other students and could not defend himself. He became aggressive, and it seems he wanted to release the stress and pressure at home. His doctor said, "you should spend time with him" but she did not refer me anywhere. I talked to his teacher, and she helped a lot. She collaborated and said there is a system in schools to monitor and talk to students. She tried to find friends for him. Finally, I was in touch with a consultant in Iran, and we are still in touch. [3]

When this participant was asked if she searched for other mental health support services for her children in London, she answered:

Actually, I asked my friends, but I did not search for it myself. There was not enough information about it, and nobody knew more. Now, you talked about searching on Google, and I thought why I did not do that. I usually search for everything, but I thought someone should have referred me for this special situation. [3]

Finally, it seems that the participants did not utilize child mental health services or gave up seeking help due to particular structural barriers, mostly at the organizational and community levels, including not being followed up by the health providers, not having a physician referral to

mental health experts or services, expensive consultation, and long wait times for mental health services.

4.5 Summary of Findings

The four major themes generated in this study illustrate different aspects of Middle Eastern immigrant parents' experiences and perspectives related to their child/children's use of health services during the pandemic. The parents described their experiences of accessing and navigating healthcare services during the pandemic, their perspectives on the health system's performance, the problems they encountered, and their expectations.

In theme one "Navigating Health Services: Limited and Confusing", parents described the challenges of getting access to children's family physicians due to public health guidelines for healthcare services and centers. They explained the feeling of confusion due to changes in the process of getting appointments, and their need for more clear information to help them navigate the health system and services. Participants also explained why they found the health system and health workers unsupportive in some situations during the pandemic.

In theme two, "Being an Immigrant Made it Hard", parents explained challenges that they believed they would not face if they were not immigrants. They explained the need for more information about the process and services in the Canadian and local health systems for immigrants and their feelings about having no family support during the pandemic.

In theme three, "Less Intention of Utilizing Child Health Services", participants mostly showed their feelings and perspectives about using healthcare services during the pandemic. They expressed their fear of using healthcare services for their children and their perspective on services such as telemedicine during this time.

In theme four, “Limited/No Mental Health Utilization”, parents talked about their concern for the mental well-being of their children, and the reasons why they had not used or could not use mental healthcare services for children during the pandemic.

Finally, in this chapter, the findings of the study were described and provided an overview of the perspectives of the participants about accessing child healthcare services during the pandemic based on their experiences. In the next chapter, I will discuss the key aspects of the findings and their relationship with the existing literature and the SEM, as well as the limitations and implications of this study.

Chapter 5

5. Discussion

The overarching aim of this study was to explore the perspectives of Middle Eastern immigrant parents regarding access to child healthcare services during the COVID-19 pandemic based on their experiences in London, Ontario. By achieving this aim, I was able to get a better understanding of how Middle Eastern immigrant families' reported their needs and expectations; how they think their access to child healthcare services was affected by the pandemic; if changes in public health policies, health systems, and services restricted their access to child healthcare; and provide a deeper insight into the consequences of avoidable and unavoidable changes in health systems and services during the COVID-19 pandemic on Middle Eastern immigrant populations in Canada. I believed this understanding helps future health policymaking and strategies and improves Middle Eastern immigrant families' access to child healthcare services by understanding their unmet needs and expectations. As the literature showed, pediatric primary and emergency healthcare utilization decreased during the pandemic compared to the same periods in the past, and it was significant in younger adults, particularly children between 1-12 years old in Ontario (Saunders et al., 2021). While researchers suggested some reasons for this reduction, such as accessibility challenges, unmet health needs, changes in healthcare-seeking behaviours, or fear of the pandemic situation, they believed that more studies on the reasons behind this phenomenon, particularly on vulnerable populations, are needed (Goldman et al., 2020; Kruizinga et al., 2021; Sokoloff et al., 2021; Williams et al., 2021). The findings of this study shed light on the reasons that prevented the parents from using child healthcare services and the challenges they faced in accessing healthcare services from their perspectives.

In this chapter, I first aim to discuss the key aspects of the findings and how they relate to the existing knowledge and broaden the current view on Middle Eastern immigrants' access to child healthcare services during the pandemic situation. I believe that the findings of this study contribute to our understanding of Middle Eastern parents' perspectives and experiences with access to child healthcare in four key areas: 1) The multifaceted role of knowledge and the necessity of education; 2) Improving effective communication in health systems and services; 3) Prediction of the potential challenges and consideration of alternatives; and 4) The importance of unified health services.

After discussing the findings, I will situate them within the socio-ecological model (SEM) and will address the limitations and implications of this study to provide suggestions for future studies and expand the current knowledge of immigrants' healthcare accessibility during the COVID-19 pandemic.

5.1 Multifaceted Role of Knowledge and Necessity of Education

The findings of this study suggest how important the role of knowledge about health services and systems is in accessing and navigating healthcare services for immigrants as different complaints and challenges stated by participants were directly or indirectly related to low levels of knowledge about available services and navigating them. As previous studies on immigrants' access to healthcare services in Canada have shown, the lack of knowledge about health systems and navigating health services was one of the first common barriers among immigrants (Chowdhury et al., 2021; Ghahari et al., 2020; Kalich et al., 2016). Salami et al. (2020) studied 50 immigrant parents regarding their access to child healthcare services before the pandemic and reported that the lack of information and familiarity with the health system was frequently mentioned by the parents as a challenge. The immigrant parents in their study

reported not having much information about child mental health services as a barrier, and they sometimes doubted whether they should use certain healthcare services (Salami et al., 2020). Similarly, this study showed that limited knowledge reported among participants played a preventive role in accessing child healthcare services among immigrant parents. The parents reported believing that they were not familiar enough with the health services, which made it hard to utilize healthcare services overall. They encountered problems during the pandemic due to a lack of explicit information about dental coverage for children, limited knowledge about available supportive child mental services, or not being informed about the best alternative healthcare service when access to physicians was limited. Similarly, based on a study in Ottawa during the COVID-19 pandemic, the most common reasons for not seeking healthcare reported by immigrants were fear of infection and lack of knowledge about available services (Benjamin et al., 2021).

5. 11 Understanding of the Healthcare System

The findings illustrate how immigrant parents explicitly stated their lack of knowledge about different sections and details of health systems and the need to gain more information regarding healthcare service approaches and processes during the pandemic. As described in theme two (Being an Immigrant Made it Hard), the parents reported believing their unfamiliarity with the health system and services acted as a barrier that made it hard to access and navigate health services for their children. Further, according to the first theme (Navigating Health Services: “Limited and Confusing”), the parents felt confused due to changes in healthcare service operations, limited access to physician offices, and faced a dilemma in choosing which healthcare service for their children during the pandemic – EDs or family physicians and walk-in clinics. Therefore, they expected information and guidance from healthcare workers and

providers, and they found healthcare providers unsupportive when they did not meet this expectation. These findings show that the immigrant parents felt the absence of complementary information about healthcare service operations and approaches during the COVID-19 pandemic. It can also suggest a possible avenue for improving access to healthcare services among Middle Eastern immigrant populations. These findings are supported by the existing literature, which shows that immigrants experienced difficulties navigating health services due to a lack of knowledge about health services, insurance coverage, and approaches in the health systems (Chowdhury et al., 2021; Ghahari et al., 2020; Kalich et al., 2016; Khanlou et al., 2017; Markkula et al., 2018, Salami et al., 2020). Previous studies indicated that immigrants needed accurate, timely, and culturally-friendly health information (Kreps & Sparks, 2008) and had difficulties in adapting to the new health system and culture in Canada (Zanchetaa, 2006). A review study on health literacy among immigrants indicated that lack of information about available services was one of the most cited reasons for difficulty in accessing health services among new immigrants (Zanchetaa, 2006). In the current study, participants similarly felt that they could better access and navigate health services if they were knowledgeable about and familiar with the process of using different services, alternative services, and insurance coverage. While this barrier has existed even before the pandemic situation, participants reported that it was highlighted during the COVID-19 pandemic due to the changes in public health policies and local healthcare service operations.

Therefore, the parents' perspectives in this study represent their insight into their unfamiliarity and their desire to gain knowledge about health services and systems in Canada. It should be considered that if it was a challenge for immigrants in non-pandemic times, it is likely even more difficult during the pandemic, and so extra effort should go into meeting this need

when accessing health care has been even more confusing during the pandemic. However, it was evident that nearly all participants expected to gain the required knowledge and information from healthcare workers and providers. None of the parents checked the official websites for more information during the pandemic, and most of the parents followed the pandemic-related policies and news through social media. It identifies a need for further discussion about communication between healthcare workers and immigrants and the methods of informing immigrants about health services and systems in Canada.

5. 12 Knowledge of Mental Health Services

In this study, it was found that parents reported limited or no utilization of mental health services even though all of them had some extent of concern about their children's mental well-being during the pandemic. While parents stated that one reason for not using such services during the pandemic was that they had not identified the issues in time and, therefore, they did not seek help, the participants noted they still did not seek help from mental health services and experts when they realized there were issues because they found mental health services hard to reach. They reported believing that accessing a psychologist takes months, and visiting a consultant is expensive. In the study of Benjamin et al., (2021), clinicians reported that while the rate of seeking mental health support increased among their visited refugee patients during the first six months of the pandemic, overall healthcare utilization decreased during that time. They interpreted that their refugee patients needed more mental health support during that time, but their access to healthcare services and community resources, and availability of mental health services were limited during the pandemic (Benjamin et al., 2021). As the literature showed, it cannot be ignored that both immigrants and Canadian-born people find accessing psychologists and other specialists very time-consuming in Canada, and this barrier has existed even before the

pandemic (Harington et al., 2013). However, psychologists and private consultants are just one part of the mental health services available in Canada that most immigrants are aware of, and there are other supportive mental health services that all participants in this study did not seem to be aware of.

According to the findings of this study, it seems that none of the parents reported having much information about child mental health supports in London and Ontario, and their knowledge of mental health services was apparently limited to psychologists or private consultants. None of the parents reported an attempt to use other support mental health services for children while there are available supportive centres specifically for child mental health in London, Ontario. For example, Vanier Children's Mental Wellness is a mental healthcare service in London that provides a range of services for infants, children, and youth up to 14 years old to support children and families with social, emotional, and mental issues in London and Middlesex communities. Community services and tele-mental health services are available in this center, and most services are covered by provincial funding at no cost to families. Similarly, the Middlesex-London Health Unit website provided local support and services for children's mental health, and Children's Mental Health Ontario provided different resources and services for parents to help child mental well-being. It is not clear that even if the parents were aware of these supportive services, they would access and use them immediately. However, it is probable that being informed about these supportive mental health services could persuade them to utilize the services and help them to have better management and perspective on using mental health services, improve their children's mental well-being, and prevent serious mental issues as a consequence of the pandemic situation.

Therefore, the participants' experiences and perspectives suggest their unmet need to be informed and educated about available supportive child mental health services, especially during the critical situation of the COVID-19 pandemic for children.

5. 2 Improving Effective Communication in Health Systems and Services

Existing research has demonstrated that one of the barriers to receiving healthcare mentioned by immigrants was an inefficient patient-provider relationship, and they believed that healthcare providers did not communicate with respect to their culture and felt discrimination (Ahmed et al., 2016). The literature also reveals that immigrants think they receive subpar care because physicians do not pay as much attention to their problems (Ahmed et al., 2016; Chowdhury et al., 2021). According to existing research, people accessing health care in a second language preferred when health providers speak slowly and in simple terms, and newcomers in Canada felt discomfort asking further health professionals for more information (Zanchetta, 2006). It was proposed that a number of reasons are at play in this problem, including language barriers, cultural differences, and a lack of cross-cultural knowledge among healthcare workers (Zanchetta, 2006). Even though all these investigations were carried out prior to the pandemic, this study indicated that there may have been some instances of inefficient communication between immigrant parents and healthcare providers during the pandemic. Further, it can be assumed that communication with health providers might be even more difficult for immigrants during the pandemic due to using tele-medicine and lack of in-person access to health staff.

Participants in the current study reported feeling that healthcare workers were not as supportive as expected during the pandemic. It was also revealed that several parents had pre-existing negative perspectives about healthcare providers. They described a supportive physician

as someone who listens carefully and explains completely. Conversely, they did not find their family physicians and healthcare workers supportive, especially during the pandemic. Similar to this, the study of immigrants in Canada before the pandemic showed that parents felt physicians did not patiently listen and instead tried to cover their children's symptoms with medications (Salami et al., 2020). In another study by Khanlou et al. (2017) on immigrant mothers of children with autism in Toronto, the participants believed that health professionals were not as supportive as expected and did not provide them with helpful information regarding specific services for children with autism.

Based on the current findings, it seems that immigrant parents had challenges effectively communicating with healthcare workers during the COVID-19 pandemic. When parents expressed their confusion about navigation health services due to the changes in the routine process of visiting patients by family physicians, they mentioned that the health staff did not guide them completely to what the best approach was at that moment. Participants needed more support from health staff working in family physicians' offices. It seems that parents needed health staff to explain more about the steps they should have taken during the situation when offices had limited capacity and physicians did not accept children with flu-like symptoms. However, they reported facing answering machines more than gaining information from the health staff and ending up going to the ED most of the times. Some statements and descriptions from participants are suggestive of ineffective communication between immigrant parents and healthcare workers and show their expectations from a conversation with health staff, such as: "nobody said what to do when your child gets sick"; "the staff didn't sympathize and understand us"; "the doctor's office said not to come here at all and go to the ED"; "it was like a dead end, and no one gave us a solution"; "I expected they should have said it to me without any need to

ask”; “I should not search in detail for the rules and regulations, they should inform me about them”; and “family physicians did not want to see patients”. It appears that the parents’ expectations from conversations with healthcare workers were not met, especially when they needed assistance to find available services for their children. The parents in this study might have had a better understanding of the situation, even with the existing limitations, if they had been informed about the reasons behind the limitations and guided to alternatives that would ensure their child received appropriate health care.

This lack of effective communication between patients and health staff could also be seen when a mother could not find clear information about dental health coverage by attending to health services and said, “it is like that they are hiding something”, or when another parent believed that healthcare workers do not give patients much information about services in detail.

Another example that demonstrates the lack of effective communication between the immigrant parents and health staff is when participants talked about feeling discriminated against by healthcare workers. Parents believed that healthcare workers did not treat them and answer their questions the same as Canadian people. As was mentioned in chapter four, one participant showed this feeling by stating “they answer the questions of Canadians more patiently, but they answer our questions with just one word”. While there is no direct evidence that such experiences were due to social issues such as racism or the result of the language barrier and cultural differences, it appears that participants have not experienced effective communication and could not have their expected conversation with the healthcare workers. This issue was problematic for them during the COVID-19 pandemic as this time was challenging and confusing, and parents needed the support of healthcare workers more than in the past. While the reasons behind this ineffective communication cannot be found through the results of this study,

the findings showed that this issue had some negative consequences. The parents found the healthcare workers unsupportive and believed they did not want to help and provide them with information, and this experience triggered their negative perspective on healthcare providers. Due to this lack of effective communication, parents did not completely trust the health providers and systems and did not find their family physicians supportive.

The patient-provider relationship has two sides, and in this study, the findings are based only on parents' perspectives and experiences. Therefore, it cannot be concluded that the health staff intentionally did not provide information or collaborate with the participants. Healthcare workers might not be aware of the immigrants' expectations and assume that the immigrant patients will access the required information from other sources. Different factors might be influential when patients and providers cannot have a constructive conversation. A study indicated that health professionals faced difficulty transmitting risk-taking concepts to patients when working with diverse ethnocultural groups (Hughes, 2004). The literature showed that healthcare workers believed immigrants do not take their advice, are not informed and knowledgeable, and need to be educated about health service navigation in Canada (Kalich et al., 2016; Lindsay et al., 2012).

Based on the existing literature, studies report health staff as mostly believing that immigrants should improve their knowledge of the health system and services and be educated (Kalich et al., 2016; Lindsay et al., 2012), but in this study, the participants expected to receive information about available services, how to use them, insurance coverage, alternative services, and new policies and regulations from the healthcare workers. While most if not all of the information that the participants in this study expected to hear from health staff has been provided on official related websites of the health services and insurance companies, such as the

Public Health Ontario and the Middlesex-London Health Unit websites. Participants did not tend to check the websites for more information and expected to be supported and informed by health staff or find the related information on social media rather than official websites. Similar to this finding, a review study revealed that despite the available health technology-based information, people with language barriers do not reach and use the information (Zanchetta, 2006). It showed that people with a second language prefer to receive health information through sources with images, captions, subtitles, and audio, within time (Zanchetta, 2006).

Finally, consistent with the literature and the findings of this study, it is important to improve communication between immigrants and healthcare workers to build a trusting and supportive relationship between immigrants and healthcare workers, especially during a health crisis, when the situation is unknown and stressful for patients and critical for the health system. To better the patient-provider relationship and facilitate effective conversations between immigrants and health staff, it is helpful to understand both sides' expectations, and this study showed how immigrant parents expected to be supported by healthcare workers generally and during the pandemic.

5. 3 Prediction of the Potential Challenges and Consideration of Alternatives

In health crisis management and policymaking, it is important to consider the existing shortcomings in the health systems and services and predict the consequences of new strategies and policies. While one a priority in the COVID-19 pandemic management has been to control the spread of the virus and make the health services ready to combat this crisis (Government of Ontario, 2020), it is also better that health authorities consider the consequences of the changes in health policies, public health restrictions, and health service regulations and introduce alternatives to manage negative outcomes. The literature shows that immigrants have already

faced difficulty in accessing healthcare services in Canada (Ahmed et al., 2016; Chowdhury et al., 2021; Ghahari et al., 2020; Gushulak et al., 2011; Kalich et al., 2016), and immigrant children are one of the potentially vulnerable populations as they have faced more risks to their health, compared to non-immigrant children (Mishori, 2020). The existing knowledge of healthcare accessibility among immigrant families could help to predict the potential challenges that the pandemic situation and the changes in the health system and services would bring to immigrants. The findings showed that the challenges encountered by the participants included 1) existing challenges which were studied before, and 2) new challenges which were the consequence of the COVID-19 pandemic situation. However, both groups of challenges were relatively predictable.

5. 31 Existing Challenges

The findings revealed that existing barriers have been more prominent for participants during the COVID-19 pandemic. As was discussed earlier, the need for more information, support, understanding, and sympathy from healthcare workers, a lack of effective communication in patient-provider relationships, and a lack of knowledge were highlighted during the pandemic. Similarly, the literature supports that all these barriers had already existed before the pandemic (Chowdhury et al., 2021; Ghahari et al., 2020; Kalich et al., 2016; Khanlou et al., 2017; Markkula et al., 2018; Salami et al., 2020). For example, as Khanlou et al. (2017) mentioned, mothers of children with autism in Toronto complained about the lack of information about available services for their children and thought that there was a lack of awareness about their children's specific needs among health providers, and believed that healthcare providers were not as supportive as they expected and did not provide them with helpful information regarding available health services and how to access the services. Therefore, while these barriers have existed and been studied before among immigrants, it was expected to see them

worsen during the COVID-19 pandemic as it was a new, unknown, and critical situation. Ideally, the need for more information and effectively communicating with immigrants during the pandemic, particularly when in-person healthcare service access was limited, could be considered a priority in policy making.

In addition to these barriers, participants mentioned other challenges that were exacerbated during the COVID-19 pandemic, such as longer wait times for offices and hard-to-get appointments with family doctors. Due to the contagious nature of the COVID-19 virus, limiting in-person visits and services was inevitable and necessary to control the spread of the virus. However, health systems should have tried to minimize the disruption in the treatment and management of other diseases and provided strong support for patients through virtual health services to compensate for the lack of in-person healthcare services. Unfortunately, the findings showed that participants could not easily receive healthcare support, even by telemedicine, as they faced answering machines more than responses from health staff, especially during the first six months of the pandemic. Participants frequently mentioned the challenge of contacting and finding their family physicians and even getting a response from walk-in clinics. The limitations of family physician offices and walk-in clinics in terms of workdays and hours made it difficult to schedule appointments and access virtual healthcare services. Therefore, it can be concluded that while it was foreseeable that access to healthcare services would be more difficult due to restrictions on in-person health services, alternative methods of providing healthcare services could not meet patients' needs during the pandemic. It is worth noting that there is no evidence to show that these challenges were specifically related to immigrants, and it is expected that other people, even Canadians, might face these difficulties as well.

5. 32 New Challenges

The COVID-19 pandemic raised new challenges that had not existed before, but the consequences were still predictable and could be prevented or minimized. During the pandemic, public health restriction policies and school closures were two main influential factors on children's mental and physical health (Public Health of Ontario, 2020). On one hand, stay-at-home orders and closed public facilities such as parks, playgrounds, and restaurants made people isolated (Public Health of Ontario, 2020). However, because most immigrants are likely to not have many family members in Canada or their city of residence (Ahmed et al., 2016), this isolation could be more difficult for immigrant families and children. In this study, the parents believed if their children had their cousins or grandparents close to them, they would not feel isolated and alone as much as they did during the pandemic. Therefore, since there was existing knowledge about the lack of family support among immigrant populations (Ahmed et al., 2016), the consequent mental well-being concerns among immigrant children were predictable.

On the other hand, school closures were one of the major changes during the pandemic experienced by children, particularly elementary-school children, as they are more dependent on teachers and in-school friendships compared with teenagers, who usually have more intimate and mature friendships outside schools (Berndt, 1992). Participants described that during the school closures, children spent more screen time for online learning and playing computer games rather than physical activities, felt alone, had low moods and less intention to communicate, had a regression in English skills, and lost self-confidence. These potential consequences of the restrictive measures during the pandemic could have been predicted by experts, some preventive considerations could have been provided, such as following up on children's mental well-being and improving parents' awareness about the potential mental effects of the public health policies

by their family physicians. Participants in this study stated that the late understanding of children's mental health issues by their parents was one reason for not utilizing mental health services for children. It suggests that parents did not expect the mental issues and were not aware of the potential mental consequences of the pandemic situation. Among participants, those who decided to share their concerns with their children's family doctors complained that the physicians did not consider their issues serious, did not refer them to other supportive mental health services, and did not follow up on the children's mental issues. While there is no information on the participants' family physicians' perspectives and clinical approaches, it can be suggested that they did not take priority to prevent probable child mental issues as their effort was mostly to provide care and control the COVID-19.

5. 4 The Importance of Integrated Health Services

One common complaint among the participants was the lack of a defined rule about health services' operation during the pandemic. Participants found that walk-in clinics and family physicians' offices did not follow a common rule about workdays, hours, and getting appointments. It appears that some clinics were more flexible in accepting patients, while some others wanted the patients to submit an online application and wait for their response. These different approaches and different levels of response to patients from health offices could be found in participants' descriptions, such as: "they referred us to another"; "my friends' family doctors, some of them gave appointments, and some did not"; and "you could not even get an appointment from online walk-in clinics. I submitted online applications for them two times, and they never called me"; and "my friends told me the walk-in clinics were great". Another participant explained that it took one week to receive a response to her message on the answering machine for getting an appointment from her child's family physician. Participants believed that

while the rules and regulations about public health restrictions and policies – such as wearing masks and vaccination – were clear during the pandemic and they could easily find related information and news on social media, they could not find much information about the changes in health service operations. This lack of a defined rule for health services in a city, London in this study, made participants think that health providers have not followed a united approach and decided to limit health services because they were afraid and preferred not to visit the patients. The parents showed this perspective with explanations such as “I believe the process was not clear to the doctors at first”; “they were not ready to provide services and were not organized to give us time for visits”; “at first, they did not know what they should do”; and “I think physicians did not want to see patients and did not have a rule because they referred us to another”. This perspective among the participants, that healthcare providers follow their own rules instead of an integrated approach to operating offices during the pandemic, can be a reason for not trusting healthcare providers to provide the best possible services to their children. Moreover, this lack of an integrated approach in health centers and services during the pandemic made it hard for immigrant parents to seek healthcare and utilize health services for their children because they believed they had to contact different health centers to find an available healthcare provider.

This lack of integration between health services, limited access to family physicians, and not being accepted by physicians due to the overlap of children’s symptoms with COVID-19 symptoms, often resulted in parents using the ED for children during the pandemic. However, the participants in this study expressed their hesitation about using the ED during the pandemic due to the risk and fear of infection. The findings of this study showed all participants tended to care for children at home and use OTCs if they did not find their children’s illness serious because of limited access to physicians, difficult health service navigation, and fear of infection.

The parents utilized EDs when they found their children's symptoms more serious, and it can be suggested that limited access to physicians during the first months of the pandemic increased pressure on EDs. However, it is unclear if overall healthcare utilization in EDs increased during the pandemic as parents did not tend to use EDs unless they felt it was a necessity for their child's health. A number of studies in Canada, the USA, and other countries showed decreases in pediatric healthcare utilization in EDs during 2020 compared to the same periods before the COVID-19 pandemic (Antoon et al., 2021; Goldman et al., 2020; Ramgopal et al., 2021; Saunders et al., 2021; Vogel et al., 2021; Williams et al., 2021). In these studies, it was suggested that less healthcare utilization could be due to restrictions, fear of infections, unmet healthcare needs, and care avoidance (Goldman et al., 2020; Kruizinga et al., 2021; Ramgopal et al., 2021; Saunders et al., 2021; Sokoloff et al., 2021). In this study, it can be seen that the parents limited their children's healthcare utilization, particularly in EDs, as long as they could manage the symptoms or have access to family physicians. As a result of less child healthcare utilization during the pandemic, a concern might be raised about the long-term health consequences of this phenomenon (Saunders et al., 2021; Sokoloff et al., 2021). As can be seen in this study, the parents did not utilize child mental health services while they could detect symptoms of mental issues in their children. It is not clear what long-term complications will be experienced by children, and as other researchers suggested, there is a need for a post-pandemic plan to follow up on children, especially in vulnerable populations (Saunders et al., 2021).

5.5 No Language and Structural Barriers

According to the existing literature, there were other common barriers to accessing healthcare services among immigrant adults and children in Canada that I expected to be mentioned by the participants, including language, structural, and cultural barriers. However, the

parents did not report finding these challenges to be of particular concern during the COVID-19 pandemic. The findings showed that the participants did not report language barriers and found themselves capable of communicating in English. However, it does not guarantee that healthcare workers have the same idea and could fully understand the parents in this study or other Middle Eastern immigrant parents who did not participate in this study has the same idea with the participants of this study. It can also be thought of as finding other barriers more important than language during the pandemic or not feeling a significant change regarding the language by the participant to express and consider it a problem.

Besides the language barriers, structural and financial barriers have commonly been mentioned by immigrants as challenges to accessing healthcare services (Ahmed et al., 2016; Chowdhury et al., 2021). It can be inferred that changes such as virtual visits, work-from-home, and school closures could surmount some structural and financial challenges for parents. These changes made it easier for parents to get a visit from physicians without paying for transportation, getting some hours off from their work or putting their job at risk, and getting a sick day off from school. They could seek help for their children from home with more flexibility. Similarly, Wong et al. (2021) suggested that virtual healthcare services can be a safe and convenient method and has the potential to remove some existing structural barriers to access healthcare services. This positive consequence of health service changes during the pandemic can be helpful for future health policymaking. For example, telemedicine could remain an option for patients even after the pandemic if more studies show that it could remove structural obstacles to accessing healthcare services for immigrants.

There are other barriers frequently reported in other studies, such as cultural barriers and stigma, but the participants of this study did not consider them a problem for accessing child

healthcare services during the COVID-19 pandemic. For instance, a systematic review showed that most Muslim and Asian immigrant women in Canada preferred to be visited and examined by female physicians (Ahmed et al., 2016). It also showed that immigrants are less likely to use health services if the health problem is a stigma in their culture, such as certain types of mental issues. In this study, the findings did not represent physician gender or ethnic preference among the parents or stigma towards child health issues.

However, the participants showed some extent of cultural differences in this study similar to the literature. Previous studies discussed that Middle Eastern and Asian immigrants tend to take diagnostic tests and receive medications and antibiotics during their visits with physicians due to the culture and approaches in eastern health systems (Ahmed et al., 2016; Liu et al., 2007). In this study, some participants showed their negative perspectives about prescribing OTCs by physicians and did not find them effective treatments.

Ultimately, the findings of this study represented the needs, expectations, and experiences of Middle Eastern immigrant parents regarding their access to child healthcare services, particularly during the COVID-19 pandemic. The findings showed that access to healthcare services for the participants was a multifaceted phenomenon and factors at the different levels of SEM were influential on accessing health services, such as their personal knowledge and perspectives at the personal level, healthcare providers' performance at the interpersonal and organization levels, and the health service and system regulations at the community and policy levels.

5. 6 Implications

5. 61 Implications for Education and Practice

Based on the findings, a fundamental understanding from this study was the role of knowledge and the necessity of education in health services and systems among immigrant parents. This understanding is suggestive of implementing strategies/plans/interventions to improve knowledge and health information among immigrant parents to enable them to use the full potential of health services for their children. My understanding from the findings of this study was that immigrant parents need to receive information and improve their knowledge mostly related to two main contexts: 1) information about available supportive and alternative child health services and how to navigate them; and 2) the reasons behind health strategies, treatment approaches, and limitations, if any, generally and during a specific situation like the COVID-19 pandemic, to increase trust in the health system and services and ensure that their children receive the best care available.

While health information and knowledge are factors at the personal level and it might seem that interventions to improve immigrants' health knowledge should be performed at this level, I think that interventions in upper levels will be more effective as they can target populations rather individuals. According to the findings, it appears that receiving this knowledge and transmitting health information to the participants mostly relied on providing 1) an effective patient-provider relationship, which is a factor at the organizational level, and 2) alternative culturally-friendly sources to deliver health information to immigrant populations that needs interventions mostly at the community level.

As mentioned, other studies also pointed out that most ethnic immigrants are not clear about health services and health information that are already available to them and underscored

the necessity of improving health communication (Zanchetta, 2006). Health communication contributes to all aspects of health promotion and is connected to a variety of settings, including health professional–patient relations, individuals’ exposure to, search for, and use of health information, the construction of public health messages and campaigns, representations of health in the mass media and the education of healthcare service utilizers about how to gain access to the public health and health care systems (Kreps & Sparks, 2008). This study provides recommendations for implementing educational and communication strategies and interventions in the future:

First, informing and educating ethnic immigrant groups on the common sources, such as official websites, that include required health information in Canada and encourage them to use these sources for correct information and guidance rather than solely relying on the information gained from healthcare workers and providers. For instance, targeting immigrants’ social networks at the interpersonal and community levels, health service centres at the organizational level, and community centres and media at the community level can be considered a source to inform and educate immigrant populations about using current available sources.

Second, improving the knowledge of health providers about immigrants’ expectations, values, perspectives, and needs has the potential to increase health literacy, health information, and quality of care among immigrant populations (Kreps & Sparks, 2008; Zanchetta, 2006). It can be helpful to educate healthcare workers and providers on culturally sensitive health communication, which includes different contexts. A strategy should be educating health providers on immigrants’ needs to be informed even about basic health information, available services, and the navigation process. Health providers should be aware of their important role in providing immigrants with the health information they need to preserve their health, the

immigrants' expectations, and how much they rely on the information gained from health providers. To achieve this aim, interventions at the organizational level would be helpful as they target health staff, and health services and organizations.

This study suggests that the parents did not receive information and guidance on further health services when they were unable to access family physicians. It is important that in practice, if there is any limitation to providing care for immigrant children at a time or further care is needed from other health services, healthcare providers ensure that immigrant parents receive adequate information and understand how to access proper healthcare for their children. To reach this aim, it would be helpful to target the organizational level by implementing educational programs and interventions for the health staff and providers in health services centres and organizations.

Third, educating healthcare workers about ethnic immigrants' perspectives and expectations is a strategy at the organizational level and even community level that can target healthcare staff in a health service or multiple health organizations in a city. Different methods of education can be offered for care providers, such as online tools, modules, and workshops to improve their health communication skills with ethnic immigrants. In this study, the parents expressed their feeling that physicians do not listen carefully, explain properly, or provide needed information. Healthcare providers should be aware that immigrants need to be patiently heard by the healthcare providers and feel the health staff's sympathy and support. One strategy can be to provide explanations for immigrant parents about the reasons behind their treatment approaches and to identify differences in treatment approaches that may occur in the Canadian health system when compared to other health systems. For example, the participants noted they had limited access to specialists due to the referral process in the Canadian health system and

saw the referral system as a barrier to accessing specialists. Parents also complained that family physicians did not consider antibiotic therapy for children when they expected the family physicians to prescribe antibiotics. These instances demonstrate the need for better communication with immigrants, explaining the reasons for treatment strategies and describing why the child does not need a specialist or there is no need to start antibiotic therapy at the time.

Considering the discussed educational implications, this study suggests that implementing evidence-based educational opportunities for care providers on health communication with ethnic immigrant populations can bring benefits to these families and children in terms of improving health literacy, their ability to navigate health services, and better accessing health services for themselves and their children.

Forth, based on the findings, suggestions for the implementation of collaborative practice for immigrant children can be discussed. This study showed that a number of parents tried to get help from schools and teachers for their children's mental issues. One participant even stated that the teacher's performance was significantly helpful in improving the child's mental concerns while his family doctor did not find the mental concern serious and did not consider any care for this issue. Participants also believed that schools should be more involved in children's health by providing regular basic check-ups and being connected with health services. The findings suggest that collaboration between parents, care providers (family physicians), and schools (teachers) should be considered a helpful strategy for immigrant children's health. It can increase parents' awareness and ensure that immigrant children receive adequate attention and have the support of schools to access primary health services. Therefore, it can be argued that an intervention at the community level to increase collaboration between health services and schools helps improve immigrant children's healthcare accessibility.

5. 62 Implications for Policy

The public policy level, as the uppermost level of SEM, covers and affects all the other four levels. Therefore, any knowledge that can inform public policymaking can make a change in the lower levels and make a significant change in the outcome of the health systems. The findings of this study showed that most barriers that immigrant parents experienced existed before the pandemic or could be anticipated as the result of public health restrictions and pandemic-related changes in health services and systems. The findings also help policy making and implementation in critical and health emergency situations like the COVID-19 pandemic. This study emphasized the importance of considering existing shortcomings in immigrants' accessibility to child health services in decision-making for new policies and restrictions. For instance, considering the fact that immigrants had difficulty in accessing family physicians, limiting office and walk-in clinics' work hours and days could trigger this challenge for immigrant populations, in addition to other consequences, such as shifting the pressure on EDs. Identifying, assessing, and understanding the potential consequences of new health policies will help to consider alternatives to the probable complications. In terms of the limitations in accessing family physicians, particularly during crises like the pandemic, helpful strategies could include providing alternative support such as health consultations in schools, community centers, and settlement agencies.

Further, this study revealed that having an integrated regulation for operating health services during a strategic situation can benefit immigrants to trust the health services performances and prevent confusion in navigating health services for this population. The findings demonstrated how navigating health services can be confounding for immigrant parents

when there were changes in health services operations and providing care methods differed from normal situations.

Of utmost importance, this study underscored the importance of implementing policies in the health system that promote adequate, easily accessible, and comfortable child mental healthcare services. During the pandemic, policies such as school closures and public health restrictions could be anticipated to cause mental health concerns for children, especially immigrant children, who often lack family support compared to non-immigrant children. It could include the consideration of strategies to increase the sensitivity of the health providers for checking and following up on the mental well-being of immigrant children as a factor at the organizational level, increasing the awareness of parents about the potential consequences of these policy changes as a factor at the personal and interpersonal levels, and providing frequent announcements about available supportive child mental health services locally as a factor at the community level. These findings help to consider the unmet needs of immigrant children as the consequence of health policies during the pandemic for future decision-making related to children, such as school closures.

Furthermore, this study significantly helps to improve the transfer of health information to ethnic immigrant groups by understanding their preferences and expectations. The current study showed that parents were less likely to search for health service information on websites and tended to reach information through social media, public announcements, and mostly from health providers. One of the significant examples in this study was the lack of knowledge about available supportive child mental services in London, despite their needs for child mental services during the COVID-19 pandemic.

Each ethnic immigrant population has its own preference, social media and technological networks. Identifying the best sources to reach immigrant populations based on the local ethnocultural diversity can be an effective strategy to increase health literacy among immigrant populations and empower them to use the full potential of available health services and control their health. To implement this strategy, no-cost policies can be used, like providing e-links to health information on websites in immigrant community channels and on social media. Further, cost-effective ways can be considered, such as mobile applications with visual elements, such as images or subtitles, to gather local health information that can be accessible and useful for diverse ethnocultural immigrant groups. However, such plans need pilot research and evidence-based intervention on small groups of immigrants in advance of public implementation.

These strategies will increase immigrants' knowledge and, consequently, decrease their expectations to gain all the needed information through conversations and communication with healthcare workers. However, immigrants will still need to feel valued and be heard to trust healthcare providers even if they gain all information from websites and other sources, and this cannot happen unless their needs and expectations are properly expressed and understood in communication with healthcare providers.

Regarding the post-pandemic policies, similar to the extant literature, this study suggests that follow-up visits for ethnic immigrant children would be beneficial to identify and assess any health issues following the pandemic situation and their limited healthcare utilization during this time.

5. 63 Implications for Research

To date, there is no study on Middle Eastern immigrant parents' perspectives and experiences of child healthcare accessibility during the COVID-19 pandemic in Canada. As a

result, this study's findings could not be compared with other knowledge on this phenomenon to provide a more comprehensive view and explain the actual reality of access to child health services for this ethnic immigrant population during the pandemic. Since this study identified that participants felt the pandemic limited their access to child healthcare services, further experience and exploring effective strategies to address their needs should be a priority for future health promotion research. It would be helpful to conduct future research on a larger population with more diversity and language flexibility in different cities and provinces across Canada. This study showed that participants were preferential toward interviews in their native language, as five of the participants in this study were Farsi speakers, and three of them preferred to speak in Farsi. So, providing the opportunity to study immigrants in their own languages would bring deeper understanding.

This study pointed out that the patient-provider relationship played a significant role in accessing child health services and health information for immigrant parents. While the parents did not believe there was a language barrier and found the health providers unsupportive, other studies showed that health providers believe immigrants do not take their advice and need education due to language and cultural differences (Zanchetta, 2006). This conflict between the two sides of care needs more attention and necessitates studies on both sides of the cycle of care. For example, interviewing health providers and immigrant patients in health services and understanding both sides' perspectives and experiences would bring light to the actual reality of the patient-provider relationship and communication and, therefore, identify the barriers and gaps in the health services.

Further, this study recommended educational programs to improve immigrants' health literacy, communication, and consequently their ability to navigate and access health services. In

terms of the feasibility of these educational recommendations, interventional studies should be conducted to evaluate the potential educational program to provide evidence-based educational strategies.

In this study, while the challenges immigrant parents experienced in accessing health services and care for their children were explored, the findings could not prove that all the challenges were specific to immigrants. It is suggested that some challenges and perspectives might be the same between immigrant and non-immigrant populations. Therefore, to understand immigrants' unique barriers, challenges, and perspectives regarding access to child health services and find the gaps in the health system, more studies are needed to compare the perspectives and experiences of immigrant and non-immigrant groups of participants in the same setting.

5.7 Application of the Socio-Ecological Model

In this study, it was tried not to reduce the reality of access to child healthcare services among Middle Eastern immigrant parents during the COVID-19 pandemic to only the findings of this study. Rather, committed to the paradigm of the study, the participants' perspectives and experiences were analyzed and discussed as a part of the reality and considered as a lens to gain a deeper understanding of this population's access to child healthcare services during the COVID-19 pandemic. Therefore, I considered different aspects of the findings and possible influential factors on the parents' perspectives in this study. To achieve this aim, the SEM helped me think about different factors at other levels that can be connected to an experience, a perspective, and an understanding.

During the data analysis, an effort was made to figure out factors at different levels of SEM related to the participant's experiences and perspectives regarding their access to child

healthcare services. Within the data, it was tried to find if their knowledge, views, definitions, and values were related to their experiences and descriptions regarding their access to child health services; if the perspectives were unique to the immigration situation; if limited care utilization was related to personal and interpersonal factors or to policies and community and organizational contexts; and if their perspective was the result of personal beliefs or the consequence of community, hospital setting, and organizational factors. Therefore, SEM guided this study to generate findings that comprehensively cover the potential factors and settings influencing the participants' perspectives and experiences within the data regarding the phenomenon under study.

The first theme, “Navigating Health Services: Limited and Confusing”, was mostly related to the health service operations, health service limited capacities, and supports from healthcare providers, which are factors at the organizational level of SEM and suggest interventions and modification at the level of health organizations.

The second theme, “Being an Immigrant Made it Hard”, showed the immigrants' lack of family support, enough health information, and familiarity with the health systems in Canada. This theme represents the factors at the personal and interpersonal levels that impacted the participants' access to child healthcare services before and after the pandemic.

The third theme, “Less Intention of Utilizing Child Health Services”, showed that the fear of infection in participants acted as a personal factor to prevent the parents from seeking healthcare for their children. It also showed how the interactions between personal, interpersonal, and organizational factors led to a lack of trust in telemedicine among the participants during the COVID-19 pandemic. this understanding can help health authorities to be aware of the level of interventions and plans to improve the healthcare accessibility of this population.

The fourth theme, “Limited/No Mental Health Utilization”, also showed how lack of awareness and information, negative perspectives, and existing barriers such as long wait times interacted as factors at different levels and limited the child mental health service accessibility among the immigrants in this study.

To discuss the findings, SEM helped to consider possible factors in different levels of SEM that could influence the perspectives and experiences of the participants but were not directly mentioned by the parents and did not appear in the data set. For instance, the participants believed that the healthcare workers did not support them to find the required information for navigating and accessing appropriate health services for their children when needed, without being aware of other factors that could affect their communication with healthcare workers, such as cultural differences, language barriers, or healthcare workers’ assumptions. Further, regarding mental health services, the parents believed it was difficult to access mental health services due to long wait times and expenses. However, they did not consider the factors that made them unaware of the support child services such as not efficient and culturally-friendly health information transferring methods. SEM provides an opportunity to think about the different contexts that can be influential on an outcome, here access to child services during the pandemic for a specific population, and can help to identify the shortcomings, gaps, and needs for further investigations. It helped this study find the need for exploring care providers’ perspectives, change for transferring health information to target audiences, apply strategies to increase health literacy and improve health communication, considering the existing barriers of immigrant populations for future decisions and policy makings, and the importance of having integrated local health services.

5. 8 Limitations

This study should be read in the context of its limitations. First, the COVID-19 pandemic restrictions impacted the data collection and the recruitment process (refer to chapter 3, “COVID-19 Impact, Health, and Safety Measures”). The pandemic restrictions limited the recruitment process to just virtual methods, and I missed the opportunity to communicate with parents in clinics, pediatric offices, and healthcare services, community centers, or settlement agencies and introduce the project to potential participants. Moreover, the in-person interview option was considered in this study under the circumstances of Western policy at the time of data collection, including mandatory proof of full vaccination. These circumstances could make the in-person interview option difficult for potential participants. As a result, I could lose potential participants who were not comfortable with the internet, email, social media, online communication methods, and virtual interviews as well. It can be anticipated that more candidates would be volunteer to participate in this study if the process of recruitment was not limited.

Second, language was another obstacle that may have resulted in parents not participating in this study. Since the method of data collection in this study was an interview, having skills and confidence in communicating in English is needed. It is likely that Middle Eastern immigrant parents find it hard and do not tend to have an interview in English as it is not their mother tongue. Therefore, due to this limitation, I could lose the opportunity to listen to Middle Eastern parents who are not confident enough to speak English and might face more obstacles to accessing health services.

Fortunately, Farsi was presented to the potential participants as another option for the interview in this study. It provided the opportunity for Farsi speakers to be heard and share their

perspectives and experiences in this study. However, from another angle, this opportunity led to more Farsi speaker participants compared to Middle Eastern parents with other foreign languages. The sample of this study could be more heterogeneous in terms of ethnicity to ensure transferability to other settings (Patton, 2015). However, this study was not funded by any organization and, therefore, there was no possibility of hiring a registered translator to translate the Farsi interviews to English.

Furthermore, the setting of this study should be considered for transferability of the findings. The perspectives and expectations of people from different ethnic backgrounds could be affected by their cultures, beliefs, and the health systems and services in their home countries. The perspectives of the participants in this study might also be different from other Middle Eastern immigrants outside of London or Ontario because their experiences and expectations could be different based on the local and provincial health service operations and performances during the COVID-19 pandemic. Moreover, Middle Eastern countries can be defined in a number of different ways. Considering all the Greater Middle Eastern countries from North Africa (e. g., Libya and Sudan) to Eastern countries (e.g., Pakistan and Afghanistan) (World Atlas, 2022), the population is heterogenous in terms of ethnic groups, culture, beliefs, etc., and the transferability of the findings to all Middle Eastern countries may be limited. It is better to consider the participants' characteristics and their countries of origin in this study. Further research on more diverse population may help to better understand the plurality of perspectives that exist among Middle Eastern immigrants.

As was mentioned in the first place, this study does not claim to generate a whole original truth or a definite independent reality of access to child healthcare services for immigrant parents during the pandemic. Rather, in this study, it was endeavoured to become closer to the reality of

the phenomenon under study, understand the connection between events, experiences, and perspectives, and suggest feasible and practical policy and education recommendations and strategies (Fletcher, 2017; Thorne et al., 2004).

Finally, little-to-no qualitative research currently exists that explores the perspectives of immigrant parents on access to child healthcare services during the pandemic. Therefore, the literature review base for this study and contextualizing the findings was mostly existing knowledge about immigrants' access to child healthcare services before the pandemic, and more qualitative research is required to further explore this phenomenon to develop a more in-depth understanding of how the pandemic impacted access to child healthcare services among Middle Eastern immigrant families and explore the parents' perspectives regarding the experiences during this time.

5. 9 Conclusions

This study enhanced our knowledge of Middle Eastern immigrant parents' perspectives and experiences on accessing child healthcare services during the COVID-19 pandemic and takes us one step closer to understanding the reality of accessing child healthcare services among Middle Eastern immigrant families during the pandemic in London, Ontario. Through the interpretive description of the participants' perspectives, it was revealed that their access to child health services would be easier if their existing barriers had been considered before implementing new health policies and will be easier if culturally sensitive health communication improves in the health system to enhance their health literacy, health service information, and ability to navigate the services. The interpretive description of the findings supports that immigrants' access to child healthcare would improve if 1) there is a collaboration between health services, schools, and parents, 2) educational program is implemented for health providers

to enhance their awareness of their role in enabling immigrant parents to trust and navigate health services by effective communication and transferring health information, 3) change the methods of health information transfer to immigrants based on their unique cultures, perspectives, preferences, and accessibility.

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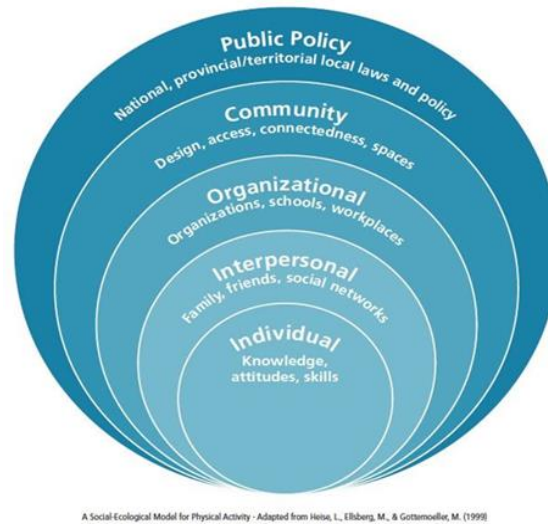
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<https://doi.org/10.1101/2020.03.19.20039107>

Appendices

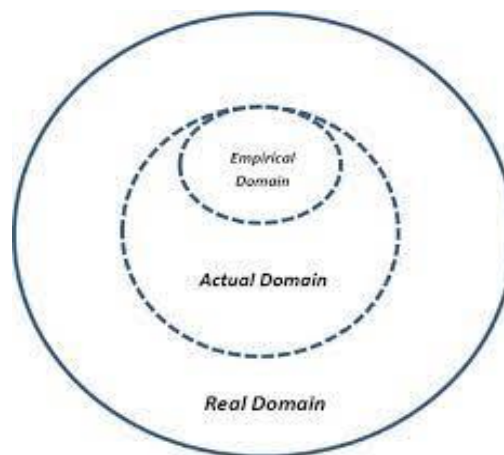
Appendix A

Figure 1: Socio-Ecological Model



Retrieved from <https://blogs.uw.edu/somehm/2017/08/12/social-ecological-model/>

Figure 2: Critical Realism Domains



Retrieved from <https://onlinelibrary.wiley.com/doi/10.1111/nup.12107>

Appendix B

Literature Review Search Terms

Terms	Keywords/ Subheadings
1 (Access to health services)	Healthcare accessibility OR healthcare services OR health services OR health service delivery OR health needs OR healthcare utilization OR health service utilization OR access to healthcare service OR access to health service OR health services accessibility OR access to health OR access to healthcare OR access to health care OR access to health services OR health seeking behaviours OR health-seeking behaviours OR health seeking behaviors OR health-seeking behaviors OR barriers to health OR barriers to healthcare
2 (COVID-19)	COVID-19 OR COVID OR coronavirus OR pandemic OR sars-cov-2 OR sars cov 2
3 (Children)	Child OR children OR pediatric OR pediatrics OR peadiatric OR peadiatrics
4 (Immigrants)	Immigrant OR immigrants OR emigrant OR emigrants OR immigration OR immigrate OR emigrate OR immigrate OR migrate
5 (Middle Eastern)	Middle East OR Middle Eastern OR Muslim OR Muslims OR Arabs
6 (Canada)	Canada OR in Canada OR Ontario OR in Ontario

Appendix C

Figure 1: Search Strategies that Led to Results for Studies During the COVID-19 Pandemic

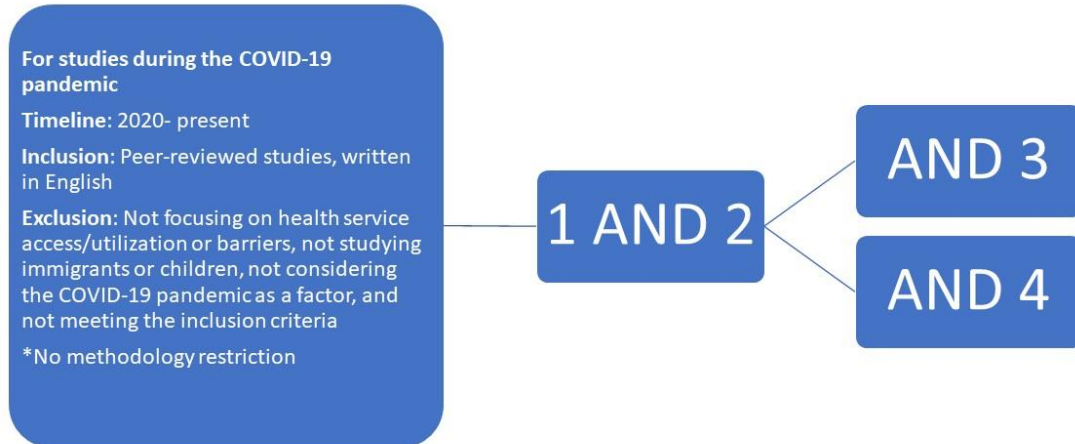
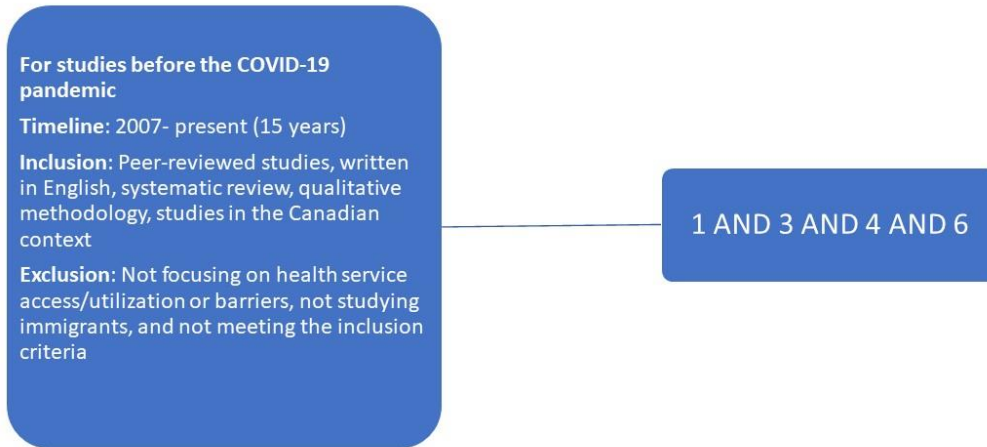


Figure 2: *Search Strategies that Led to Results for Studies Before the COVID-19 Pandemic*



Appendix D

University of Western Ontario Research Ethics Board Approval



Date: 4 October 2021

To: Professor Maxwell Smith

Project ID: 119723

Study Title: Middle Eastern Immigrant Parents' Experiences of Access to Child Health Services During the Covid-19 Pandemic in London, Ontario

Application Type: HSREB Initial Application

Review Type: Delegated

Full Board Reporting Date: 19/October/2021

Date Approval Issued: 04/Oct/2021

REB Approval Expiry Date: 04/Oct/2022

Dear Professor Maxwell Smith

The Western University Health Science Research Ethics Board (HSREB) has reviewed and approved the above mentioned study as described in the WREM application form, as of the HSREB Initial Approval Date noted above. This research study is to be conducted by the investigator noted above. **All other required institutional approvals and mandated training must also be obtained prior to the conduct of the study.**

Documents Approved:

Document Name	Document Type	Document Date	Document Version
Interview Questions	Interview Guide	Received September 28, 2021	
Telephone_Script_from agencies to potential participants	Telephone Script	Received September 28, 2021	
Interview questions in Persian	Translated Documents	Received September 28, 2021	
Survey questions	Online Survey	28/Sep/2021	1
Email from agencies to potential participants-2	Email Script	28/Sep/2021	2
Email to agencies-2	Email Script	28/Sep/2021	2
poster- from agencies to potential participants-2	Email Script	28/Sep/2021	2
Recruitment on facebook-2	Recruitment Materials	28/Sep/2021	2
Letter of Information and Consent_2	Written Consent/Assent	28/Sep/2021	
Farsi Facebok ad-pdf	Translated Documents	28/Sep/2021	1
Farsi Facebook ad	Translated Documents	28/Sep/2021	1
Access to child health services-2	Protocol	28/Sep/2021	2

Documents Acknowledged:

Document Name	Document Type	Document Date
Statement of certifying-2	Translation Certificate	28/Sep/2021

Appendix E

Facebook Recruitment Announcement in English



Western University of Ontario

Call-out for participation.

Hi everyone,

Researchers from the Faculty of Health Sciences at Western University are conducting a study titled **“Perspectives of Middle Eastern Immigrant Parents Regarding Accessing Healthcare Services for Children During the COVID-19 Pandemic in London, Ontario.”**

This study aims to help child health promotion and access to child health services among Middle Eastern immigrant families.

We are looking for volunteers to take part in this study. You are eligible to participate if you 1) are a legal Middle Eastern immigrant currently living in the London area, Ontario, 2) live in Ontario for at least one year before the start of the pandemic (before March 2020), 3) have a child who is enrolled in elementary school in London, Ontario, and 4) can communicate in English or Persian.

If you are interested and agree to participate you would be asked to involve in one session interview which will last approximately 30 minutes long.

If you wish to participate in this study, the following link will lead you to the letter of information and the survey, which will take approximately 10 minutes to complete:

https://uwo.eu.qualtrics.com/jfe/form/SV_2mXRZ1978nA8soC

Thank you in advance for your time. For further information about this study, you are welcome to contact the principal investigator, Dr. Maxwell Smith, Ms. Sarvenaz Mehrabi or Dr. Jacob Shelley.

Appendix F

Facebook Recruitment Announcement in Farsi



دعوت به شرکت در پژوهش علمی

دانشگاه وسترن انتاریو

با سلام،

پژوهشگران دانشکده علوم سلامت دانشگاه وسترن انتاریو در حال انجام پژوهشی با عنوان "دیدگاه والدین مهاجران خاورمیانه در مورد دسترسی به امکانات سلامت کودکان خود در شهر لندن انتاریو طی دوران پاندمی کووید 19" هستند. هدف این پژوهش ارتقا سلامت کودکان و دسترسی به امکانات سلامت و درمانی برای فرزندان خانواده های مهاجر از خاور میانه می باشد.

در این پژوهش به تعدادی شرکت کننده می باشد و شما واجد شرایط برای شرکت هستید اگر که:

(1) یک مهاجر قانونی اهل خاور میانه ساکن لندن هستید. (2) حداقل از یک سال قبل از شروع پاندمیک (قبل از مارچ 2020) تجربه زندگی در استان انتاریو را دارید. (3) فرزند/ فرزندان به مدارس ابتدایی می روند. (4) قادر به ارتباط و گفتگو به انگلیسی یا به فارسی هستید.

اگر علاقه مند به شرکت در پژوهش باشید، از شما درخواست خواهد شد تا در یک گفتگوی حدودا سی دقیقه شرکت نمایید.

در صورت علاقه، از طریق لینک زیر میتوانید تمام جزییات مربوط به پژوهش را در نامه رضایت و موافقت آگاهانه مطالعه نمایید و برای شرکت در این پژوهش تصمیم گیری نمایید. این فرم از شما حدود 10 دقیقه زمان خواهد گرفت.

https://uwo.eu.qualtrics.com/jfe/form/SV_2mXRZ1978nA8soC

پیشاپیش از زمانی که صرف مطالعه خواهد شد سپاسگذاریم. در صورت نیاز به اطلاعات بیشتر، از شما دعوت

میکنیم با اشخاص زیر تماس حاصل فرمایید.

پژوهشگر اصلی، پروفیسور مکس اسمیت

دکتر سروناز محرابی

پروفیسور جیکوب شلی

Appendix G

Letter of Information and Consent Form



Perspectives of Middle Eastern Immigrant Parents Regarding Accessing Healthcare Services for Children During the COVID-19 Pandemic in London, Ontario

Research Team:

Principal Investigator:

Maxwell J. Smith, PhD, Assistant Professor, Faculty of Health Sciences, Western University

Co-investigators:

Jacob J. Shelley, SJD, Associate Professor, Faculty of Health Sciences, Western University

Shauna M. Burke, PhD, Associate Professor, Faculty of Health Sciences, Western University

Sarvenaz Mehrabi, MD, MSc Student, Health Promotion, Health and Rehabilitation Sciences,
Western University

Invitation to participate

As a Middle Eastern immigrant parent/guardian, you are being invited to participate in this study about your perspectives and experiences regarding access to child health services among the Middle Eastern immigrant population of the greater London area.

This study is a master's student thesis project study, and will include approximately 10 participants.

Purpose of the Letter

The purpose of this letter is to provide you with information required for you to make an informed decision regarding participation in this research study.

Why is this study being done?

One of the important factors to have a good health condition is access to health services. The novel coronavirus disease 2019 (Covid-19) pandemic has also highlighted the need for equal access to health services among all populations. It gets more highlighted when it comes to children, particularly elementary school-aged children who are not completely capable of protecting their interests and seek professional health services.

Since the Covid-19 pandemic made Ontario governments enforce public health restrictive measures such as physical distancing, stay-at-home recommendations, school closures, and virtual medical appointments, families may have faced challenges regarding access to child health services during this time. Immigrant families, in particular, may have had unique experiences related to access to child health care due to the pandemic.

Middle Eastern immigrant families are one of the growing immigrant populations in London, so it is important to know about specific experiences/challenges of this population regarding access to child health care to improve the health system and inform policies aligned with their needs.

The purpose of this study is to explore the experiences/challenges and barriers related to the Covid-19 pandemic that Middle Eastern immigrant parents might have faced related to accessing child health services for their elementary school-aged children.

How long will you be in this study?

You will be asked to complete one interview that will last approximately 60 minutes.

What are the inclusion criteria for this study?

To be eligible for participating in this study you must:

- 1) Be a legal Middle Eastern immigrant currently living in London area, ON.
- 2) Live in Ontario for at least one year before the start of the pandemic (Jan 2020).
- 3) Have a child who is enrolled in elementary school in London, ON.
- 4) Can communicate in English or Persian.

The term “Middle Eastern immigrants” refers to immigrants who originally come from Turkey, Cyprus, Syria, Lebanon, Iraq, Iran, Israel, the West Bank, the Gaza Strip, Jordan, Egypt, Sudan, Libya, Saudi Arabia, Kuwait, Yemen, Oman, Bahrain, Qatar, United Arab Emirates, Afghanistan, and Pakistan

4. What are the study procedures?

If you consent to participate in this study, you will be asked to:

1. Provide us demographic data including your age, gender, nationality, and duration of living in Ontario as well as age and gender of your elementary school-aged children.
2. Participate in a one-hour face-to-face or virtual (e.g., Zoom video calls) interview. While it is preferable to conduct the interview virtually, it can also be conducted on the campus of Western University in London, Ontario (room 335, Health Sciences building), depending on your preference.
3. Once your consent has been received, we will contact you via email to inform you if you were eligible to participate in the study based on your answers to the eligibility and demographic questions at the end of the informed consent form. If you met the inclusion criteria, we will arrange a date and time for your interview. If you choose the virtual interview, the zoom link will be sent to you via email the day before the interview day.
4. The interviews will be performed by one of the researchers (Sarvenaz Mehrabi), who is able to speak in English and Farsi and you can choose the language of the interview between these two languages.
5. The interviews will be audio-recorded to be used for the data analysis phase of the study. If you disagree to be recorded, you cannot continue participating in the study.
6. The interview questions will be generally about your perspectives and experiences as parents/guardians regarding access to child health services in Ontario during the pandemic.

What are the risks and harms of participating in this study?

There are no known or anticipated risks or harms to participate in this study; however, it is possible that you could experience sensitivities as you may remember unpleasant experiences or concerns about your child's health during the interview.

If you experience sensitivities, we encourage you to utilize the support services outlined below.

1. General Mental Health Support (<https://www.ontario.ca/page/find-mental-health-support>)
2. Mental Health Helpline (1-866-531-2600)
3. 211 Ontario (1-877-330-3213)

It should be noted that if researchers of the study suspect cases of child abuse or neglect, they are required by law to report it to a children's aid society of London and Middlesex.

What are the benefits of participating in this study?

There are no direct benefits to you by participating in this study, however, you may gain a deeper insight into your child's health and decide to seek more information on the available health services for your children after this study.

Most importantly, by participating in this study you are contributing to our effort to understand Middle Eastern immigrant population's perspectives and experiences about access to child health services, which may help to better address the needs of this population, particularly for future health crises, and promote child health services for this population.

Are participants compensated to be in this study?

You will not be compensated for your participation in this research. If you choose in-person interviews, you have to pay for parking or any transit to campus and the expenses will not be covered by the research team.

Can participants choose to leave the study?

Your participation in this study is entirely voluntary and you may decide not to be in this study. If you do not wish to participate, you do not have to provide any reason for your decision. If you wish to participate, you will be asked to sign this form. If you do consent to take part in this study, you still have the right to not answer individual questions and are free to withdraw at any time, without giving any reasons for your decision. You may request to withdraw your consent and data up until the point of data analysis as data cannot be withdrawn once it has been de-identified and analyzed. You do not waive any legal right by consenting to this study. We will give you any new information that may affect your decision to stay in the study.

While the interview questions are voluntary and you can refuse to answer any of them, there are some screening questions or required fields that are mandatory in order to participate (i.e., eligibility questions and consent).

How will participants' information be kept confidential?

Your consent, responses to demographic questions, and contact information will be collected through a secure online survey platform called Qualtrics. Qualtrics uses encryption technology and restricted access authorizations to protect all data collected. The data will then be directly exported from Qualtrics and securely stored on a Western University server behind institutional firewalls. Your direct personal identifiers (names, contact information, demographic data) will be retained separately in a master list on an institutional drive (Western OneDrive) and will be accessed remotely by the research team. Your demographic data will be collected for the descriptive statistics and understanding the population under study. Your contact information will be requested to contact you for setting an appointment for the interview.

Audio will be recorded by “windows voice recorder application” for both virtual and in-person interviews. The audio files will be immediately transferred to a Western OneDrive folder - a secure Western University server behind institutional firewalls-after interviews to be stored for data analysis and will be permanently deleted from the initial mentioned devices.

The audio will be organized and transcribed by numbers instead of names of the participants to make the study data de-identified. The transcription process will be performed by the interviewer using Western OneDrive documents.

All data collected will remain confidential and accessible only to the investigators of this study.

This study will be published in a scientific journal, and it is possible that scientific journals request study data from the researchers for verification. If it was required, scientific journals will access anonymized data with NO personal identifier. We might publish very brief anonymized quotations from participants (anonymized means no data which can identify you would ever be published) in the publication to discuss the results of the study.

After 7 years, all data will be permanently destroyed, including the master list of participants. By participating in this research, you agree that the results may be used for scientific purposes, including publication in scientific journals. No individual information will be reported.

Conflict of Interest

There are no conflicts of interest to declare related to this study.

Whom do participants contact for questions?

If you require further information about this research study and your participation, please contact Ms. Sarvenaz Mehrabi (smehrab3@uwo.ca).

If you have any questions about your rights as a research participant or the conduct of this study, you may contact The Office of Human Research Ethics (519) 661-3036, 1-844-720-9816, email: ethics@uwo.ca. This office oversees the ethical conduct of research studies and is not part of the study team. Everything that you discuss will be kept confidential.

Eligibility and Consent

Prior to participating in this study, you will be asked to give consent and confirm your eligibility.

If you do not consent and do not wish to participate in the study, please select the appropriate option. You will not be penalized in any way if you choose not to participate. By clicking "I consent to begin the study", you acknowledge that you understand the terms and conditions of participating in this study and are making an informed decision to participate. Further, submitting the survey is an indication of your consent to participate in the study.

- I consent to begin the study
- I do not consent, I do not wish to participate

*If you do not consent to participate, you do not need to continue reading this form, thank you for your time.

Contact information

We need your contact information for the next step and scheduling the interview.

*Email address:

Telephone number:

Eligibility and demographic information

*Full name:

We need your name for contacting and communicating with you, but do not use your real name in the study. If you do not want to share your name with us, please write a preferred name.

*Age:

What are your pronouns?

1. She/Her 2. He/His 3. They/Them 4. Prefer not to say

*Country of origin:

*How long are you living in Ontario?

*Do you prefer to be interviewed in which language?

1. English 2. Farsi

*Are you a parent or a legal guardian of an elementary school-aged child/children who is/are enrolled in elementary schools in London?

*What grade is/are your child/children?

Which of the following most accurately describe your child?

1. Girl 2. Boy 3. Non-binary 4. Prefer not to say

Appendix H

Interview Guides

Interview Guide, Version 1

1. Do you usually feel comfortable using health services for your child in Ontario?
2. Did you feel comfortable accessing health services for your children during the Covid-19 pandemic? Why or why not?
3. Have the school closures had any impacts on your children's access to health services?
3. Did you adopt other strategies for taking care of your children's health during the pandemic?
5. Did you have any challenges with your children's health during the pandemic?
6. To what extent do you believe that your immigrant status has been influential in having these experiences (the experiences that participants will mention for the previous questions)?

Interview Guide, Version 2 (October 25, 2021)

1. Do you usually feel comfortable using health services for your child in Ontario?
 - a. if they mentioned any challenge > try to ask more detail like do you think that what is the reason for having such a problem?
2. Have you used any health services for your child during the pandemic? How was your experience?
 - a. If they had no experience > why? It is because you did not need it, or you did not want to use health services?

2. Have you experienced any change in access to health services for your child during the pandemic compared with the past?

a. if they had no experience during the pandemic < a1. What about regular check-ups, a2. if you needed health services, did you feel comfortable to accessing to health services for your children during the pandemic?

3. Did you adopt other strategies for taking care of your children's health during the pandemic?

a. if yes > why? It is the strategy that you always use or you used it because of the pandemic situation.

4. Before the pandemic, did your child's school play any role in your child health or your access to child health services?

a. if yes > encourage them to explain more

5. Have the school closures had any impacts on your children's access to health services during the pandemic?

a. if they mentioned mental health challenges for children during this time (because both participants mentioned mental challenges as a consequence of SC) > Did you seek help from child health services for this problem? Why/ why not?

a1. If applicable, have you ever searched about what other health services, other that your family doctor, is provided for children in Ontario? If not, why?

6. To what extent do you believe that your immigrant status has been influential in having these experiences (the experiences that participants will mention for the previous questions)?

7. Is there any final comment you want to share about child health services in Ontario?

Interview Guide, Version 3 (January 1, 2022)

1. Do you usually feel comfortable to use health services for your child in Ontario?

a. if they mentioned any challenge > do you think that what is the reason for having such a problem?

2. Have you used any health services for your child during the pandemic? How was your experience?

a. If they had no experience > why? It is because you did not need, or you did not want to use health services?

3. Have you experienced any change in access to health services for your child during the pandemic compared with the past?

a. if they had no experience during the pandemic < a1. What about regular check-ups, a2. if you needed health services, did you feel comfortable to accessing to health services for your children during the pandemic?

4. Did you adopt other strategies for taking care of your children's health during the pandemic?

a. if yes > why? It is the strategy that you always use or you used it because of the pandemic situation.

5. During the pandemic, have you ever been confused about how to use health services due to restrictive measures at that time?

6. How have you kept yourself updated about new health policies and changes during the pandemic? Was it easy to follow?

7. Before the pandemic, did your child's school play any role in your child health or your access to child health services?

a. if yes > encourage them to explain more

8. Have the school closures had any impacts on your children's access to health services during the pandemic?

a. if they mentioned mental health challenges for children during this time (because both participants mentioned mental challenges as a consequence of SC) > Did you seek help from child health services for this problem? Why/ why not?

a1. If applicable, have you ever searched about what other health services, other than your family doctor, is provided for children in Ontario? If not, why?

9. To what extent do you believe that your immigrant status has been influential in having these experiences (the experiences that participants will mention for the previous questions)?

10. Is there any final comment you want to share about child health services in Ontario?

Curriculum Vitae

Sarvenaz Mehrabi

MD, MSc

Education

1. Western University of Ontario, Canada
 - MSc of Health Promotion, “HELP lab”, Sep 2020- Present (GPA: 84/100)
2. Arak University of Medical Sciences, Iran
 - Doctor of Medicine, Jan 2010- March 2017 (GPA: 82/100)

Research Experience

1. Clinical Research Assistant, under supervision of Dr. Robert Teasell, Lawson Health Research Institute, London, Ontario, August 2022- present
2. Clinical Research Assistant, under supervision of Dr. Yazdan Ghandi, Associate Professor, Pediatric Cardiologist, Arak University of Medical Sciences, Arak, Iran, Jan 2020- March 2021
3. Research Assistant, under supervision of Dr. Morteza Gharibi, Associate Professor, Emergency Department, Arak University of Medical Sciences, Arak, Iran, Dec 2018- Aug 2019
4. Volunteer Research Assistant, under supervision of Dr. Aziz Eghbali, Associate Professor, Pediatric Hemato-Oncologist, Arak University of Medical Sciences, Arak, Iran, June 2018- July 2019

Work Experience

1. General Practitioner and regional public health advisor, Moarefizadeh Hospital, Shadegan (Covid-19 center), Iran, (Aug 2019- Feb 2021)
2. General Practitioner and regional public health advisor, at Dizabad Clinic, Arak, Iran (Sep 2018- Nov 2018)
3. Emergency Physician and Public Health Officer at Razi Hospital, Saravan, Iran (May 2017 - Aug 2018)
4. Pediatrician Assistant at Dr. Qorashi Clinic (Part-time), Saravan, Iran (July 2017 – Aug 2018)
5. Medical internship at Arak University of Medical Sciences Hospitals, Arak, Iran (Sep 2015 – March 2017)

Journal publications

1. Najimi, M., Ghandi, Y., **Mehrabi, S.**, Eghbali, A., & Habibi, D. (2022). Correlation between myocardial iron overload detected by CMRT2* and left ventricular function

assessed by tissue doppler imaging in patients with thalassemia major. *Journal of Cardiovascular Echography*, 32(1), 17.

2. **Mehrabi, S.**, Safaei, M., Ghandi, Y., & Bahrami, M. (2021). Chest CT Features in Pediatric Patients with COVID-19 Infection: A Brief Review Article. *International Journal of Pediatrics*, 9(4), 13421-13427.
3. Mansurian, M., Ghandi, Y., Habibi, D., & **Mehrabi, S.** (2021). COVID-19 infection in children: A systematic review and meta-analysis of clinical features and laboratory findings. *Archives de Pédiatrie*.
4. Ghandi, Y., & **Mehrabi, S.** (2020). Right Ventricular Non-Compaction Cardiomyopathy in Children: Brief Review Literature. *International Journal of Pediatrics*, 8(8), 11719-11725.
5. Ghandi, Y., **Mehrabi, S.**, Nariman, R., & Habibi, D. (2020). Evaluation of Clinical Manifestation, Demographics Parameters and Causes of Chest Pain in Children. *International Journal of Pediatrics*, 8(11), 12409-12419.
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