Health literacy in recently migrated Pakistani women in Norway

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M. Waqas Ahmad **May, 2023**

Inland University of Applied Sciences, Department of Public Health, Elverum

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Muhammad Waqas Ahmad

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Abstract

Background

Immigrants in a new host country have challenges to control their health due to poor health literacy which makes them vulnerable. It has been previously investigated that recent migrant women have disadvantages due to poor health literacy with the new health care system and have negative experiences due to loss of social network. However, little is known about the migrated Pakistani women to access and experience healthcare and health providers and interpreting health information in a country like Norway.

Methods

This thesis project had a qualitative research design. A snowball sampling method was used for recruiting the participants by using social media like Facebook and WhatsApp. Ten qualitative in-depth interviews were administered to get perceptions and meanings of the target group. For ethical considerations, the research process was started after approval from NSD (The Norwegian Centre for Research Data). Interviews were conducted in Urdu, the native language of the participants, and then transcribed verbatim into English. All the interviews were audio recorded by using the Nettkjema mobile application from the University of Oslo to maintain the security and safety of data. The transcribed qualitative data were analyzed by using a thematic analysis approach with Open Code software.

Results

Findings revealed that most of the recently migrated Pakistani women (MPWs) have difficulty accessing and interpreting health information due to a lack of communication and linguistic barriers in Norway that reduce their control on their health and make them dependent on their husbands to get and access health information and healthcare.

Conclusion

The findings concluded that the migrated Pakistani women in Norway have difficulties in accessing, interacting, and interpreting health information due to poor command of the Norwegian language which accelerate to poor health literacy with poor health outcomes. The theme '*communication a main concern'* highlighted that health communication with immigrant

population is not only a challenge for the target group but also for the health providers. Furthermore, the MPWs have difficulty to access the healthcare due to language and communication barriers that make them dependent on their husband to seek health information, and to make their own health decisions.

Norsk Sammendrag

Bakgrunn

Innvandrere i et nytt vertsland har utfordringer med å kontrollere helsen sin på grunn av dårlig helsekompetanse som gjør dem sårbare. Det har tidligere blitt undersøkt at nylige innvandrerkvinner har ulemper på grunn av dårlig helsekompetanse med det nye helsevesenet og har negative erfaringer på grunn av tap av sosialt nettverk. Imidlertid er lite kjent om de migrerte pakistanske kvinnene for å få tilgang til og oppleve helsetjenester og helsepersonell og tolke helseinformasjon i et land som Norge.

Metoder

Dette avhandlingsprosjektet hadde et kvalitativt forskningsdesign. En snøballprøvetakingsmetode ble brukt for å rekruttere deltakerne ved hjelp av sosiale medier som Facebook og WhatsApp. Det ble gjennomført ti kvalitative dybdeintervjuer for å få målgruppens oppfatninger og betydninger. Av etiske hensyn ble forskningsprosessen startet etter godkjenning fra NSD (Norsk senter for forskningsdata). Intervjuene ble gjennomført på urdu, morsmålet til deltakerne, og deretter transkribert ordrett til engelsk. Alle intervjuene ble tatt opp på lydbånd ved hjelp av mobilapplikasjonen Nettkjema fra Universitetet i Oslo for å ivareta sikkerheten og sikkerheten til data. De transkriberte kvalitative dataene ble analysert ved hjelp av en tematisk analysetilnærming med Open Code-programvare.

Resultater

Funn viste at de fleste av de nylig migrerte pakistanske kvinnene (MPWs) har problemer med å få tilgang til og tolke helseinformasjon på grunn av mangel på kommunikasjon og språklige barrierer i Norge som reduserer deres kontroll over helsen og gjør dem avhengige av sine ektemenn for å få og få tilgang til helseinformasjon og helsetjenester.

Konklusjon

Funnene konkluderte med at de migrerte pakistanske kvinnene i Norge har problemer med å få tilgang til, samhandle og tolke helseinformasjon på grunn av dårlig beherskelse av det norske språket som akselererer dårlig helsekompetanse med dårlige helseutfall. Temaet «*kommunikasjon et hovedanliggende*» fremhevet at helsekommunikasjon med innvandrerbefolkningen ikke bare er en utfordring for målgruppen, men også for helsepersonellet. Videre har MPWs problemer med å få tilgang til helsetjenester på grunn av språk- og kommunikasjonsbarrierer som gjør dem avhengige av mannen sin for å søke helseinformasjon og å ta sine egne helsebeslutninger.

Abbreviations and Terms Used in This Project

AIDS: Acquired Immune Deficiency Syndrome

HIV: Human Immunodeficiency Virus

MPWs: Migrated Pakistani women.

NSD: Norwegian Centre for research data

SSB: Statistisk Sentralbyrås (Statistics Norway)

WHO: World Health Organization

UDI: Utlandingsdirektoratet (The Norwegian Directorate of Immigration)

Immigrant/Migrant

Immigrant and migrant are terms used synonymously in this project. A person who cross the border and move to another country, regardless of status, length of stay, and movement is called migrant (IOM, 2019).

Recently migrated Pakistani women (MPWs)

Women with Pakistani backgrounds, who came to Norway on family immigration and living here for less or equal to 5 years.

Access to the healthcare system,

Access to healthcare is a complex concept which means facilitating access is concerned with helping people to command appropriate healthcare resources to preserve or improve their health (Gulliford et al., 2002). In this project access to healthcare means how the target group can access Norwegian health care as an immigrant to control their health.

Health providers,

In this study, Health providers are doctors, nurses, pharmacists, and other health personnel. Experience with health providers means that how immigrant women have experience and perception to get the health information for better health control.

Interpret the health information,

At which level do they understand the information about their health from health providers.

1.0 INTRODUCTION

1.1 Background and Introduction

Poor health literacy is related to poor health (Dewalt et al., 2004; Sørensen et al., 2012). The term health literacy was introduced in the 1970s (Simonds, 1974). In the recent paradigm, health literacy is the degree to which individuals obtain, process, understand, and communicate health information to make proper and informed decisions about health (Parvanta, 2017). The individual's skills in which knowledge of risk factors are mostly affected by cultural beliefs, understanding of the local health system, and knowing the health information channels like digital information channels and media (Gele et al., 2016).

Several national and international studies shed light on that the immigrant population in a host country has a higher rate of non-communicable diseases, diabetes, obesity, and hypertension as compared to other segments of society which lead to worse health outcomes (Dias et al., 2013; Kumar et al., 2006; Medina et al., 2022a).

The migrant population in a new community needs fundamental interventions to promote health and reduce health inequalities by providing equitable healthcare services (Medina et al., 2022a). Migrants and their health issues are an important concern of public health (Simon et al., 2015). Several studies about migrant and Pakistani migrants in Norway show poor health literacy than the general population (Arora et al., 2019; Småland Goth & Berg, 2011; Syed et al., 2006).

There are limited earlier studies found on recently migrated Pakistani women (MPWs) in Norway, therefore it is an opportunity to find the gap by elucidating the health literacy in the target group related to accessing and experiencing the health care system and interpreting health information to make health decisions. A qualitative research strategy has been used by conducting semi-structured interviews. Interviews have been arranged based on an interview guide that covers the meaning and understanding of recently migrated Pakistani women to access and experience the healthcare system and interpret health information.

1.2 Migrant Women in Norway

In this project, both terms *migrant and immigrant* are used synonymously with the same meaning. In the 7.7 billion of total population of the world, there are 258 million are international migrants (Bolter, 2019). In Norway, there are 819 000 migrants, 15% of the total population in the country (SSB, 2021, 2022). Almost 40 000 immigrants and Norwegian-born immigrant parents are from Pakistan, one of the biggest groups in Norway from any non-western country (Tatara et al., 2019). The process of migration to Norway started in 1970 when Pakistani men migrated for labour and settle down later on, their wives joined them as a family reunification and they begin to live in a new society (Ashraf, 2018).

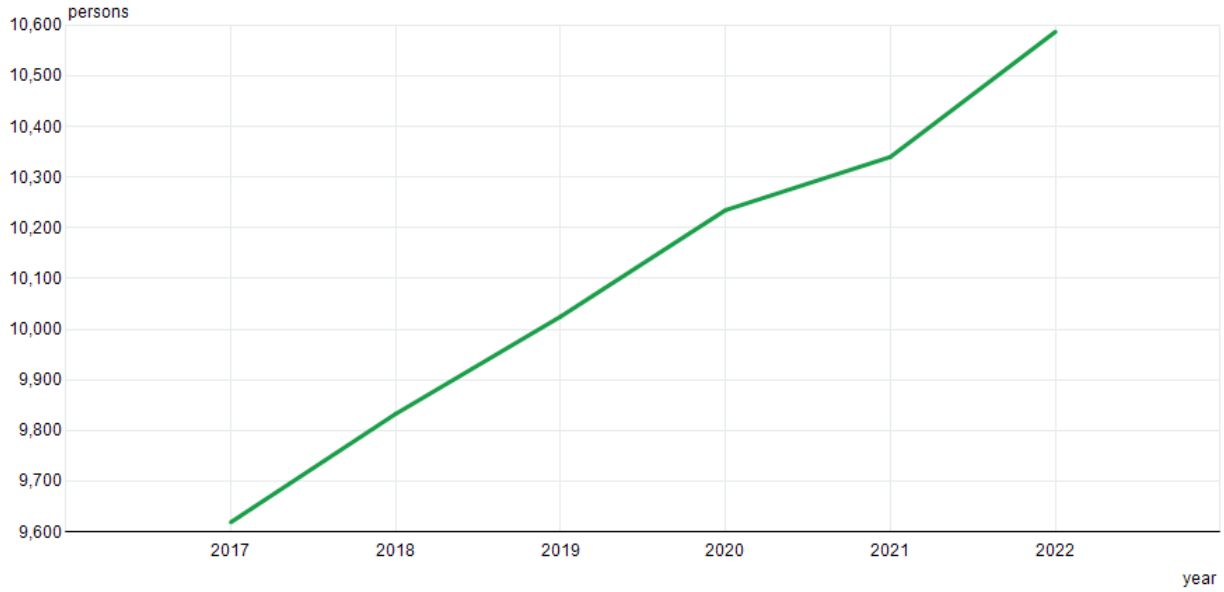

Figure # 1 Pakistani women immigrants in Norway in the last 5 years 2017-2022 (*Statbank Norway*, 2022)

This migration activity for Pakistani women is increasing gradually over time as cleared by statistical data from Stat Bank Norway. Figure 1 sheds light on this migration process from 2017-2022, in which recently migrated Pakistani women, who migrated equal or less than five years in Norway. Moreover, the inclusion criteria of research are recently migrated Pakistani women, who migrated to Norway on family immigration and have plans to live and become a part of a new society with their families. The majority of recent migrant women have

disadvantages due to less literacy with the new health care system and have negative experiences due to loss of social network (Saunders et al., 2021).

In migrated women from low and middle-income countries from Asia and Africa, the prevalence of mental health rates, infectious diseases, and reproductive health-related problems are consistently higher compared to Norwegian and the general population which make them vulnerable (Abebe, 2010).

1.3 Migrants from a Public Health Perspective

Social inequalities are common in the migrant population that put their mental, physical, and social well-being at risk, as well as the quality of services in the host country in the form of acceptability, availability, and accessibility determine their health (Davies, 2006). *Taking race out of the human genome* clears that in a variety of settings, there are clear health disparities in ethnic groups that are significantly driven by social and cultural factors (Yudell et al., 2016). *Health inequality is the term that is used to nominate variations, differences, and disparities in the health achievements of individuals and groups* (Kawachi et al., 2002).

To reduce the health inequalities and improve the health of those who are worse off the groups to the best off is the main concern of public health (Marmot, 2020). Migration is a social determinant of health that expose them to health risks, as well as improves their health in the host country(IOM, 2022). Migrants have challenges accessing healthcare due to factors such as low health literacy, language and communication problems, socioeconomic difficulties, and lack of social support that contribute to health inequalities (Abebe et al., 2018; Castañeda et al., 2015; Ingleby et al., 2012; Marmot & Wilkinson, 2005). Migrant women are usually linked to their role and status in the family with relation to the male partner and in addition, due to loss of social and environmental entourage places them under stress, anxiety, and sexual abuse, and making them highly vulnerable (Carballo et al., 1996).

Different factors determine the health of an individual such as physical, behavioural, biological, and social factors (Davies, 2006). Legal status, race, language skills, length of stay in a host country, and reason for migration are factors that relate to social determinants of migrants' health (Davies, 2006).

In Figure 2, the factors mentioned in Dahlgren and Whitehead's model of health determinants have implications for the migrant population.

- Personal characteristics such as age, sex, ethnic groups, and hereditary factors.
- Individual lifestyle such as behaviour, social and community like, family.
- Living and working conditions like education, job, housing, healthcare services, and working environment.
- General social, cultural, and environmental conditions that determine the quality of health of the population (Dahlgren & Whitehead, 2021)

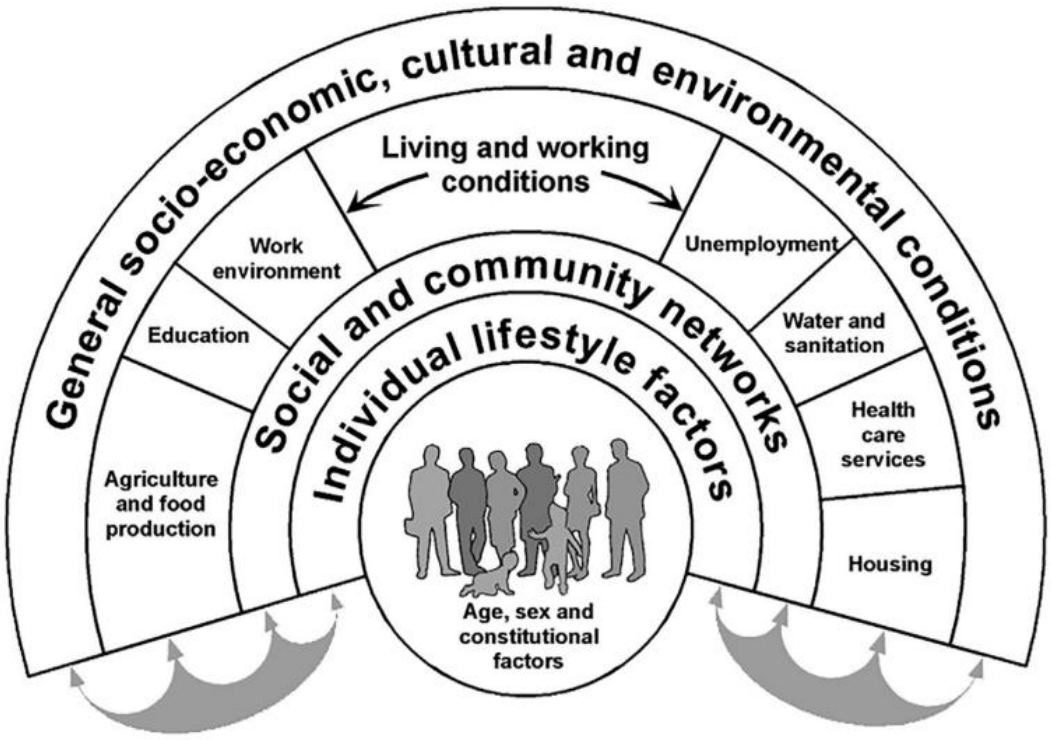

Figure 2: Dahlgren & Whitehead model 1991, Social Determinants of Health.

From a public health perspective, the determinants of health are factors which affect the quality of migrants' health, and migration has a positive and negative impact on health outcomes (Davies, 2006). During the migration process the migrant population faces behavioural, cultural, economic, social, and communication barriers which affect their health in a new setting and lead

to social inequalities due to imbalances in different groups of the society (Davies, 2006). The Marmot Review, *Fair Society, Healthy Lives* reveals that there is a need for action among all the social determinants of health to reduce health inequalities(Marmot, 2010).

This model is particularly helpful and provides a concept for policymakers and professionals in different sectors outside the health sector, the notion that the health of a group of the population such as a migrant population can improve and determine by formal health services and other sectors by performing a multisectoral work.

1.4 Pakistani Migrant and Health Literacy in Norway

In Norway, the five immigrant populations with backgrounds from Pakistan, Poland, Turkey, Somalia, and Vietnam have more public health challenges due to low health literacy than the general population (Le, C et al., 2021). People with low-level health literacy have limited options to process, get and find the proper health information about the treatment of illness (Le, C et al., 2021). Studies conducted by Christopher Le and Sanjana Arora, spotlight that Pakistani immigrants in Norway have challenges in health literacy such as language and communication challenges, understanding and interaction, and processing health information to decide on their health (Arora et al., 2019, 2022; Le et al., 2021).

In 2006, Syed and colleagues conducted a study to observe the inequalities in health among ethnic Pakistani and ethnic Norwegians in Oslo that shows a large diversity of self-related health, findings show that ethnic Pakistanis have reported a poor self-related health at 54.7% as compared to ethnic Norwegians 22.1%, diabetes 14% vs. 2.6% and psychological distress 22.0% vs. 9.9% (Syed et al., 2006). Ethnic minority groups from Pakistan and Sri Lanka in Oslo, are at high risk and have diabetes susceptibility higher than ethnic Norwegians (Jenum et al., 2012).

The study presented by Sanjana Arora and colleagues on Pakistani immigrant women in Norway in 2019, based on qualitative research design and interviewed 23 older women and 10 caregivers, findings show that older immigrant women experience barriers in accessing health care in Norway (Arora et al., 2019).

The focus of the Le-report was specific on COVID-19 vaccination, in which migrant populations from different backgrounds were studied at the same time. On the other hand, the inclusion

criteria for Arora's research were only the older Pakistani women. But the focus of this research project is to evaluate the health literacy of recently migrated Pakistani women who are on a family immigration visa in Norway and living for less or equal to five years.

1.5 Norwegian Healthcare System

The Norwegian healthcare system is one of the successful healthcare systems that provides universal health services and focuses to improve equality to access health care, nevertheless socioeconomic status and ethnic background, regardless of having a high number of physicians, Norway is struggling to provide geographical equity to access health care. (World Health Organization. Regional Office for Europe et al., 2013). Since 2001, every individual on resident permit in Norway have right for own General Practitioner (GP) (omsorgsdepartementet, 2022). Regardless of this GPs scheme, the recent migrated individuals often use emergency, and have less satisfaction with health services (Abebe, 2010). Immigrants have barriers to accessing health care in Norway (Mbanya et al., 2019).

1.6 Aim and Purpose

The purpose of the study is to investigate health literacy in the recently migrated Pakistani women in Norway by focusing on the research question, how effectively they access to healthcare, experience with health providers, and interpret health information. There were limited previous studies available on the same target group, so the strength of the research is to fill the gap by getting the perceptions of the MPWs on their experience and interaction with new Norwegian health care system and ultimately improve and control their own health by finding the missing links in health literacy. Furthermore, the purpose of the study is to highlight that there is need for interventions to reduce the threat of isolation of target group from rest of community, and overall reduce the burden on society. To achieve the goal of the study the qualitative research method has been used by conducting semi-structured interviews based on an interview guide with simple and open-ended questions. Interview guide consists of three main topics that focus on, 1) accessing health care, 2) their experience with health providers, and 3) the extent to which they can interpret the health information to make proper health-related decisions to improve their health. It may consist of several sub-questions in each main topic.

1.7 Research Questions

This study aims to highlight the following research questions:

1. *How effectively the recently migrated Pakistani women have access to health care and interpret health information to improve their health in Norway.*
2. *How do the recently migrated Pakistani women have experience and perception to interpret health information in Norwegian healthcare?*

The research questions are developed in a way to get in-depth perceptions of the target group about access, interact, and interpret health information from health healthcare and health providers by using qualitative research method (Semi structure interviews) .

1.8 Structure of Project

There are five different chapters presented in this master thesis.

Chapter one is the introduction to the topic with different terms used to explain how health literacy is a public health issue for the migrant population in Norway and especially the recently migrated Pakistani women. In addition, there is an introduction about the aim and purpose of the thesis and problem statement.

Chapter two is about the review of the literature that sheds light on the previous research and studies conducted at an international and national level with critical insight to find the correlation and possible gaps. The concept and theoretical framework related to health literacy are also presented in this chapter.

Chapter three presents the methodology and describes the research design and process.

Chapter four is about results and findings explored after the process of data analysis.

Chapter five presents discussion, implications for public health and conclusions.

2.0 LITERATURE REVIEW

As Bryman (2016) states, in research reviewing the existing literature is a crucial stage to knowing w*hat is already known about the topic* in a way to give background and justification for your research (Bryman, 2016). The purpose of this chapter is to explore the existing literature on health literacy and migrants' health in the host country. To get a broader picture and better understanding of relevant literature, there will be a focus on studies both from the international level and in Norway.

2.1 Health Literacy

In the recent paradigm, health literacy is the degree to which individuals obtain, process, understand, and communicate health information to make proper and informed decisions about health (Parvanta, 2017). The World Health Organization (WHO) defines health literacy, as the social and cognitive skills that determine and motivate individuals' ability to access and understand the information to maintain and promote health (World Health Organization. Regional Office for South-East Asia, 2015). Health literacy extends beyond the concept of individual health education and behavioral communication and is defined as "social resources and personal characteristics required for communities and individuals to access, understand, appraise and use information and services to decide on health" (Kickbusch et al., 2013). The updated definition of health literacy was released by the Government of the United States in 2020 with the following wording; the degree to which individuals can find, understand, and use the information to make health-related decisions for themselves and others (CDC, 2022). What is health literacy? And why the health literacy is important was cleared by an example quoted by Nielsen-Bohlman and Colleagues 2004,

'A 29-year-old African American woman with three days of abdominal pain and fever was brought to a Baltimore emergency department by her family. After a brief evaluation, she was told that she would need an exploratory laparotomy. She subsequently became agitated and demanded to have her family take her home. When approached by staff, she yelled "I came here

in pain and all you want is to do is an exploratory on me! You will not make me a guinea pig!" She refused to consent to any procedures and later died of appendicitis' (Nielsen-Bohlman et al., 2004).

2.1.1 Nutbeam Health Literacy

In 2000, Nutbeam distinguished the different types of health literacy. Basic/Functional health literacy, in which individuals have the basic skills of reading and writing that make them able to understand and use health-related information. Communicative/Interactive health literacy is the advanced and cognitive skill of individuals to interact with healthcare providers to interpret the information to make and change their health circumstances. Critical health literacy is the advanced cognitive skill of critically analyzing and using information for better control of life circumstances and health situations (Nutbeam, 2000).

The foundation of this project is on Nutbeam's concept of communicative and interactive health literacy that provides an opportunity to evaluate the level of health literacy in recently migrated Pakistani with three basic concepts, in which there is access to healthcare, communication (experience) with health providers, and interpret the health information.

2.1.2 Integrated Conceptual Model of Health Literacy (Sorensen Model)

Sorensen and his colleagues introduced an integrated model of health literacy in 2012, after reviewing the number of models in health literacy. This model has combined qualities to outline the dimensions of health literacy. The model presents some different factors and pathways that connect health literacy to health outcomes. The basic concept of the model is associated with the process of

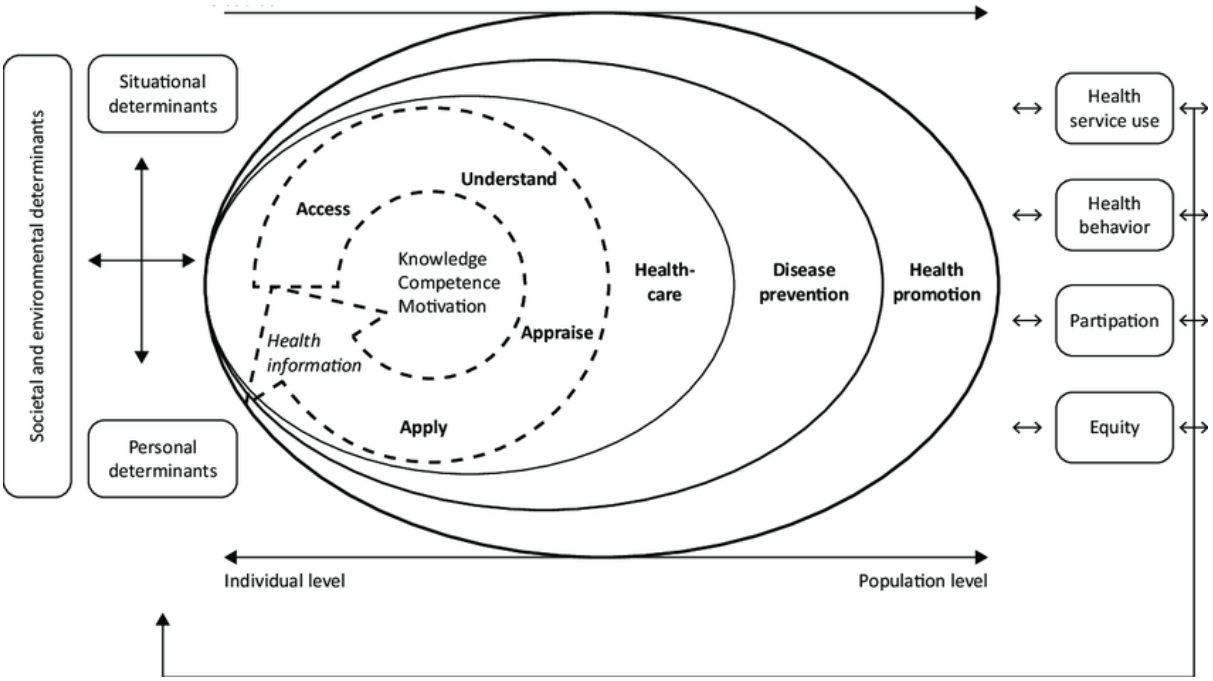

Fig:3 Integrated conceptual model of health literacy (Sørensen, K et al., 2012).

understanding, accessing, appraising, and applying health information (Sørensen, K et al., 2012). The core factors of the Sørensen model are the following, and these factors are focused and considered as a basic tool in this project to evaluate health literacy.

1. *Accessing:* the ability to find, seek and get health information.
2. *Understanding:* the ability to understand accessed information.
3. *Appraising:* the ability to judge, interpret and evaluate that information.
4. *Applying:* finally apply or communicate that accessed information to make proper decisions to improve health. (Sørensen, K et al., 2012)

The above-mentioned skills make individuals capable of navigating their health in the health care system for better control over their lives, disease prevention, and health promotion.
This model is linked to the domains from individual progression to the population level and it integrates health literacy not only in medical but also from a public health perspective. It

improves health literacy outside the health care system and reduces the pressure and burden on the health system of the country.

The basis of this project is Sørensen's model of health literacy to explore, how effectively the recently migrated Pakistani women have access to health care and interpret health information to improve their health in Norway. This model is quite helpful and catches the attention for public health providers and policymakers for disease prevention and health promotion of individuals from micro to macro level in the society.

2.2 Health Literacy and Immigrants

A migrant is any person who moves or crosses the border far from their place of residence, regardless of their legal status, voluntary movement, and length of stay (IOM, 2019). Immigrants due to different social, genetic, and environmental factors in a new host country have challenges to control their health that make them vulnerable (Modesti et al., 2014). In accessing health care in their host country, the immigrant population has several challenges, in the form of diverse cultural practices, language and communication problems, and unfamiliarity with the health system (Arora et al., 2019; Småland Goth & Berg, 2011; van Rosse et al., 2016). In several European countries, different diseases such as hypertension, obesity, diabetes, and kidney diseases are higher in the immigrant population than in the host country population (Modesti et al., 2014). In 2000, Ortega and Calderon conduct a study on pediatric asthma among the minority population in the United States that shows hospitalization due to asthma is higher in minority children than native white children (Ortega & Calderon, 2000).

The immigrant population compared to other segments of society have higher rates of diabetes, worse health outcomes, and other non-communicable diseases and have more serious health disparities (Kumar et al., 2006). Studies clear that almost 50% of refugees have one noncommunicable disease, 10% have three or more non-communicable diseases (Yun et al., 2012), and almost 50% are obese or overweight (Yun et al., 2012). Different studies developed in the European context observed that immigrants report a decline in their health status concerning chronic diseases and disability throughout their time stay in the host country (Dias et al., 2013; Medina et al., 2022b). Moreover, immigrants are a vulnerable population that faces serious health disparities and significantly poor health outcomes with high rates of mortality than

other segments of society, and suffer from heart attacks, diabetes, cancer, HIV/AIDS, and many other serious diseases (Kreps & Sparks, 2008).

A series of previous studies showed that migrants in a new society have more adverse health outcomes than other segments of society which make them vulnerable. The literature review shows that the migrant population in a new society has challenges to maintain their health. This has also been explored in previous studies, the migrant population has health inequalities with poor health outcomes than other groups of society and consider as a public health concern.

As World Health Organization (WHO) states, *'Health literacy means more than being able to read pamphlets and make appointments. By improving people's access to health information, and their capacity to use it effectively, health literacy is critical to empowerment." Health Promotion Glossary, 1998* (WHO, 2023).

Low health literacy not only affects the health of the population in the country but is also a big burden on the economy of the country (Parvanta, 2017). Limited and poor health literacy is related to poor health status, more hospitalization, nonadherence, and poor medication use across many diseases (Dewalt et al., 2004; Jacobs et al., 2016; Osborn et al., 2007; Sørensen et al., 2012). Previous studies cleared that health literacy is a public health issue and there is a need for proper interventions. Furthermore, studies in Europe declare that migrant populations have poor health due to poor health literacy.

In Europe, health literacy is lower in the immigrant population (Wernly et al., 2022). Immigrants are a challenge for public health in Europe and many immigrant subgroups have a high rate of cardiovascular risk factors, hypertension, and diabetes (Wernly et al., 2022). In modern American society, immigrants are the most vulnerable population that has more cancer-related disparities than the general population (Kreps, 2006). New migrants in Canada have difficulties adopting new health culture that is related to a lack of information and experience with the healthcare system (Zanchetta & Poureslami, 2006). Cultural, religious, and linguistic factors lead to social isolation for immigrants (Zanchetta & Poureslami, 2006).

According to Zanchetta and Poureslami, the new immigrants in a new health culture have various challenges that make them isolated from other societies. The idea supports the present study, in which recently MPWs may have the same challenges when they migrate to a new

Norwegian society with new health culture. They also mentioned ‘social isolation’ that may suggest to *Social Capital*, in which individuals and groups have relations and interactions with each other (Nieminen et al., 2013). According to Nieminen and Colleagues 2013, individuals with high level of social capital, in terms of better social networks and social participation have healthier behaviors and feel physically and psychologically healthy regardless of their social status (Nieminen et al., 2013).

A cross-sectional study conducted among 205 women with breast cancer in Ghana showed that health literacy and access to healthcare had an indirect effect on the quality of life of women through anxiety and depression (Kugbey et al., 2019). Poor health literacy affects negatively on woman’s ability to navigate the healthcare system, preventive behavior, and ability to take care of her children (Shieh & Halstead, 2009). Health communication plays a vital role in every aspect of health promotion and disease prevention which influences in separate ways such as patient-doctor relations, public health information and campaigns, health risk information, and health images in media (Kreuter & McClure, 2004). For better health care, the immigrant population needs to provide sufficient health information to make proper health decisions (Thomas et al., 2004). The focus of this study is also on health information, in which how effectively the target group has health information to access the healthcare, and to interact with health providers to make proper health decisions.

The findings after a comprehensive literature review conducted by Corrarino (2018), clear that a complex issue like health literacy can badly affect women’s ability to access and adhere to the clinical plans of healthcare, their knowledge, and health outcomes (Corrarino, 2013).

The study conducted by Akhter and colleagues in 2022 in New Zealand clears that recently migrated Pakistani women have difficulties to access health information about the health system, general practitioner registration, children and adults’ mental health, and maternity care services (Akhtar et al., 2022). Findings show that poor health literacy and access to the health care system can impact the health of recently migrated Pakistani women and their families.

A considerable body of literature on health literacy and the health of the immigrant population spotlight that health literacy affects the health of immigrants in a host country, but still there is limited literature available to highlight the relationship between immigrant women’s health and health literacy. The international literature highlights that recently migrated Pakistani women

have challenges and hurdles to access and navigate health information to improve their health. There are only a few previous studies conducted in Norway on Pakistani women with different inclusion criteria that mention below. But the purpose of this study is to explore the health literacy level of recently migrated Pakistani women in the form of access and experience with the healthcare system in Norway and to interpret health information for better health control.

2.3 Health Literacy and Norwegian Immigrants

Almost 50% of the Norwegian population is below *health literacy level 2*, which means they do not find information about specific health services to get their rights as a user or patient in health services, and 20% of the population are under *health literacy level 1*, which means they have much more difficulties or challenges to assess health services when they are ill and have health problems (Le, C et al., 2021). And it became more difficult when we are talking about immigrants, who are new in the country and have poor language grip and communication challenges to assess and find information about specific health services (Le, C et al., 2021).

In Health Literacy Survey 2021, included five immigrant populations with backgrounds from Pakistan (200), Poland (400), Somalia (379), Turkey (352), and Vietnam (402). The data was collected by using two sets of questionnaires with a number of 1733 participants in total. The survey shows that people from Pakistan, Turkey, and Vietnam have more difficulty in finding, understanding, judging, and deciding the information about the COVID-19 vaccine in vaccination programs than the general population. Immigrants from Pakistan and Poland with poor oral Norwegian language proficiency have more difficulties in understanding and processing written information about vaccines (Le, C et al., 2021).

A mixed method study conducted by Sukhjeet Bains and colleagues on recently migrated women, who are living less or equal to five years in Norway identified the challenges and barriers in language, psychosocial and structural factors, navigating to the healthcare system, and maternal healthcare (Bains et al., 2021)

Previous studies and reports indicate that the immigrants from Pakistani backgrounds have poor communication skills to get or access health information that affects the health of the target group. The findings reveal that immigrants coming from different countries to Norway have

difficulties getting health information and interacting with the Norwegian healthcare system which accelerate health inequalities (Gele et al., 2016).

But the concern of this thesis project is the young and recently migrated Pakistani women in Norway to evaluate at which grade this population group gets or interprets health information, and how their communicative interaction with the health system or health providers. Furthermore, the strong side of this study is a selection of a specific women group that has not been studied well before in Norway to elucidate their health literacy skills. In a healthcare system, individuals' competencies and skills are necessary for health literacy to make their own health decisions regarding health care, health promotion, and disease prevention (Nutbeam, 2000). Health literacy is an important determinant of health and is a tool to maximize health outcomes for immigrants (Gele et al., 2016).

3.0 RESEARCH METHODS

This chapter aims to present the research methods, research strategy, and research design to collect the data and support the research question. To get an in-depth understanding of recently migrated Pakistani women, a qualitative approach presents in this chapter. Research design, sampling and recruiting, data collection, and data analysis are also outlined in this chapter. In addition, the ethics of conducting the research process is also discussed in this chapter.

3.1 Research Strategy

In this project, a qualitative research strategy was adopted to find the meanings and experience of the target group (MPWs) in depth, regarding health literacy in the form of accessing and experiencing the health care system and interpreting health information to make proper decisions to improve health. Qualitative research is a type of research that spotlight and focus on words rather than numbers and quantification in the analysis and collection of data (Bryman, 2016). In general, qualitative research is an interpretative orientation that focuses on the complex process of maintenance and creation of meanings (Liamputtong & Ezzy, 2005).

"Qualitative research is multimethod in focus, involving an interpretative, naturalistic approach to its subject matter. This means that qualitative researchers study things in their natural settings, attempting to make sense of or interpret phenomena in terms of the meanings people bring to them. Qualitative research involves the studied use and collection of a variety of empirical materials – case studies, personal experience, introspective, life story, interview, observational, historical, interactional, and visual texts – that describe routine and problematic moments and meanings in individuals' lives" (Denzin & Lincoln, 2011).

Compared to quantitative statistics methods, qualitative research is more flexible in its approach. Some researchers think that qualitative research has not been governed by clear rules which makes it less worthy. Positivist researchers argued that qualitative research has little value to contribute to scientific knowledge and particularly in health care due to lacking reliability and validity (Baum, 1995; Denzin & Lincoln, 2011). According to Hammersley and Liamputtong interpretative and flexible approach is necessary in qualitative research and qualitative data is reliable because they *"document the world from in people point of view rather than researcher perspective"* (Hammersley, 1995; Liamputtong & Ezzy, 2005). Qualitative data may be best understood by using philosophical views, especially the epistemological perspective that clears the nature of knowledge and classifies the design and purpose to shape the research as acceptable or not (Tennis, 2008).

3.1.1 Philosophical Consideration

The primary step in conducting the research or case study is to have to clear understanding of the philosophical paradigm that emerges from the concept of epistemology and ontology (Denzin, 2008). A paradigm is a set of patterns that contain legitimated design and assumptions for interpreting and collecting data by using qualitative and quantitative methodologies that constitute valid research in a social world (Barker, 2003). Every research starts with a brief perception of which research methodology will be used either quantitative; use of numerical or qualitative; or descriptive approach (Maree, 2010). Different research fields can use various paradigm, which is derived from reality (ontological) and knowledge (epistemological) assumptions (Maree, 2010).

3.1.2 Ontology

According to Crotty, "*Ontology is the study of being"* (Crotty, 2020). Social ontology is concerned with social entities which considered objective(objectivism) that have reality to social actors, or either considered social constructions(constructionism) that build up from actions and perceptions of social actors (Bryman, 2016). Objectivism is a position that declares the fact that there is the existence of social phenomenon which is independent of social actors, but on the other side constructionism is an ontological position that clears that social phenomenon and their meaning build-up by social actors, not only with social interaction but also with a constant state of revision (Bryman, 2016).

The qualitative research strategy in ontological orientation is based on constructionism in which meaning, perception, and interpretation of social beings shape the culture and society (Bryman, 2016; Denzin & Lincoln, 2011).

In this study theory and research combination is based on the concept of constructionism, in which data collection is done by interviews, on behalf of meaning and perception of recently migrated women in Norway.

3.1.3 Epistemology

Epistemology spotlight to know the nature and origin of knowledge (Maykut & Morehouse, 1994). Epistemology and epistemological considerations is a theory of knowledge that concerns what is acceptable knowledge in a discipline (Bryman, 2016) that is further divided into three epistemological positions, such as *positivism;* application of methods of natural science in social reality, *realism;* reality is independent of researchers tolls and theoretical speculation, *interpretivism;* is the contrast of positivism that grasp the meaning of social actions (Bryman, 2016).

In qualitative research strategies, interpretivism is considered suitable for epistemological orientation.

Baum argued that qualitative research methods are appropriate in public health, well suited to studying the complex situations in public health, and emphasize both understanding and describing people's needs (Baum, 1995). Qualitative research methods provide perception about

people, and how they make sense of their experience that cannot be provided with other research methods (Lewis & Lindsay, 2000).

The qualitative research method is considered suitable to yield significant understandings and ideas. The purpose of using qualitative research is to elucidate the exact meaning, experience, and perception of recently migrated Pakistani women (participants) in depth regarding their health in a host country by using interpretivism as an epistemological position, and constructionism as an ontological orientation.

3.2 Study Design

In this study, phenomenology was used as a research methodology. The focus of phenomenology is to study the lived experience of individuals in natural settings, and for conducting phenomenological research successfully, there is important to understand the epistemological and ontological assumptions (Mapp, 2008; Neubauer et al., 2019). To understand the affective and emotional experiences of individuals, phenomenological research design especially considers suitable to get the essence of individuals perceptions who have experienced it (Merriam & Grenier, 2019). In this project, the perceptions and meaning of migrated Pakistani women were collected by conducting the phenomenological interviews as, Merriam and Grenier 2019, describe that phenomenological interviews are the primary method to collect the data and collect the lived experience of the participants (Merriam & Grenier, 2019). According to Michael Patton 2015,

'Phenomenology aims at getting a deeper understanding of the nature or meaning of our everyday experiences' (Patton, 2015).

The purpose of this study was also to get a deeper meaning of MPWs about to access the Norwegian health care, and to interpret health information after everyday experience and interaction.

Table 1: Brief view of the study design

How effectively do the recently migrated Pakistani women have access to and experience with the healthcare system in Norway to improve their health?

Context

Recently migrated Pakistani women, who are on family immigration visas in Norway.

Objective

To evaluate health literacy in the form of accessing and experiencing the health care system and interpreting health information.

Study design

Pakistani migrant community (recently migrated Pakistani women in Norway)

Data collection

Semi-structured interviews based on an interview guide with open-ended questions.

Data analysis

Thematic analyses were used to synthesize the codes, sub-themes, and themes by using Open Code software.

3.2.1 Sampling and Participants

The qualitative study sample is not statistically representative, which does not mean that the qualitative study process is without guidelines (Liamputtong & Ezzy, 2005). It is difficult to know exactly about sample size in qualitative research. Liamputtong in his book *qualitative research methods*, clears how large there will be sample size. "*Answer is simple when the researcher is satisfied that the data is rich enough and covers all dimensions they are interested in, then the sample is large enough''* (Liamputtong & Ezzy, 2005).

In this master thesis, a purposeful sample of recently migrated Pakistani women was used to get rich data to cover all dimensions that the researcher wants. 8 recently migrated women were chosen, who are on family immigration visas and living in Norway for equal to or less than 5 years. The purpose to select this sample was on the fact that this group of women on family

immigration visas has had plans to live in Norway for a longer time and adjust themselves to the new society like a healthy participant with better health literacy. Health literacy is an important factor that controls the health of individuals, in which there is knowledge and skills required to access, understand, interpret, and communicate health information to make critical decisions about health (Keleher & Hagger, 2007).

Those who are on student visas probably leave the country after completion of their education. So, the inclusion criteria for participants in this project were those Pakistani immigrant women who recently migrated and resided legally in Norway for less or equal to five years. Students and those who are on student visas are not considered participants. Another important inclusion criterion for participants based on age, all participants were 20 to 40 years.

All the participants migrated to Norway on family immigration and lived with their husbands and children as a family. Participants with one or two children have had more interaction with the healthcare system either for their health or for their children and have visited hospitals, polyclinics, general doctors, nurses, and pharmacists to manage their health. Such an information-rich group provides more insight to know about health literacy in the new Norwegian context.

Most of the participants in this study were women with good educational backgrounds with master's and bachelor level degrees which gives a better understanding and insight into their experience and perception of this research phenomenon. Due to college and university exposure, all the women participants were fully confident to answer all questions related to access, experience, and understanding of health information from health providers.

3.2.2 Recruiting of Participants

Social media was used to get in contact with the participants. It was started to send an invitation letter on WhatsApp group. Most of the members in WhatsApp and Facebook groups were Pakistani background that was very helpful to send invitation letters for participation in this project. In the start, there were only two candidates who contacted back to take part in the study. Furthermore, there were contacted different family and friends for participation and requested them to ask further candidates who are willing to participate and come in the eligibility criteria. A *snowball sampling* method was used to get in contact because it was not easy to find

participants(women) with Pakistani backgrounds to conduct the interviews. The most popular method of sampling in qualitative research is snowball sampling which starts with a small number of participants, who fit in the research, the agreeable participants were asked to recommend other participants and so on, sampling usually finishes when the required sample size was achieved or saturation point has been reached (Parker et al., 2019).

The availability of participants in the specific immigrant population was a challenge. The most populated area for Pakistani immigrants is in Oslo and near areas, so the setting to conduct the study was Oslo, Inland County, and its surrounding areas. Another challenge in recruiting the women participants was approval from their husbands. In addition, tried to contact participants several times to choose a specific time for the interview. For women with one or two children, it was even more tough to reserve the time for an interview.

All the participants have been given the information letter after NSD recommendations with a comprehensive detail about the project and basic information about the participant's rights. The consent form and information letter are presented in the appendix.

3.2.3 Data Collection Methods

For collecting qualitative data, interviews are the most familiar strategy (DiCicco-Bloom & Crabtree, 2006). An interview guide was used to conduct the interviews which were based on open-ended questions regarding qualitative measures. As Patton 2015, said that qualitative interviews consist of open ended questions that begin with descriptive inquiry in which the researcher avoid dichotomous questions such as, Yes or No (Patton, 2015). The interview guide consists of three main parts. Part 1 is about basic background questions, part 2 presents the introduction question about access to health care, and Part 3 is about the experience with health providers and health information. Each part of the interview guide has sub-questions with *probes* to get an in-depth perception of participants.

The supervisor recommended testing the interview guide and data collection process by conducting the pilot interviews. So, it was conducted two pilot interviews. One-to-one pilot interviews were an effective way to modify and improve the interview guide and to prepare for fieldwork with confidence. The pilot studies consider helpful, to find the problems to recruit the participants, and to assess and accept the interview protocols (Janghorban et al., 2014). It is

important to conduct the pilot study to test and ensure that the research tools working well (Bryman, 2016).

3.2.4 Semi-structured Interviews

A good interview is like a friendly and polite conversation. It is like a two-way affair in which one person talks and another listens, responds, and encourages (Liamputtong & Ezzy, 2005). Qualitative interviews are categorized as structured, unstructured, semi-structured, and in-depth interviews (Britten, 1995).

Qualitative interviewing is different from quantitative in the following ways. Such as qualitative interviews are much less structured than quantitative ones, They consist of open-ended questions than closed questions, are more flexible than controlled, and consist of words than numbers (Bryman, 2016)

Semi-structured interviews can be a flexible conversation, unstructured focus interviews, and unstructured informal interviews in which the interviewer aims to gather information in depth (Gray, 2021). Semi-structured interviews or in-depth interviews in which a respondent answers a set of open-ended questions (Jamshed, 2014; Strauss & Corbin, 1998). A semi-structured interview is a valuable tool to gather data in qualitative research (Adams, 2010). Semi-structured interviews are a method consisting of dialogue between participant and researcher, with flexible interview protocols and follow-up questions, comments, and probes (DeJonckheere & Vaughn, 2019).

According to Michael Quinn Patton 2015, '*the purpose of the interview, then, is to allow us to enter into other person perspective, to get assumptions and meanings of others, to find out what is in and on of others mind to gather their stories'* (Patton, 2015).

In this study, semi-structured interviews were conducted to get the perception and meaning of participants about the topic and to know their experience with the Norwegian health system. As Patton 2015 said that the purpose to interview with migrants in a new society is to know, what the smartest thing you did in the home land that you can do or maintain here for the benefit of this society (Patton, 2015).

For better understanding and compliance with Pakistani migrated women, there were three optional languages selected to conduct the interviews, in which there were Norwegian, English, and Urdu. Participants were asked to select the language that is easy and comfortable to talk about for a complete understanding of the questions and answers and to get an in-depth perception of the topic. All the respondents were willing to talk in Urdu because it was easy for them to conversate in their native language Urdu instead of Norwegian and English.

There were 8 semi-structured interviews conducted in this thesis project with 2 pilot interviews before starting the study, and to check and test if the research tools are working well or not. Three interviews were conducted face to face and five interviews were conducted on Teams and Zoom. The fact about digital interviews was that the women participants were more comfortable talking on the internet as compared to direct conversation. So, in research gender bias affect both selection of the participants, and perceptions about the capacity of individuals to do quality research (Upchurch, 2020). Conducting the interviews with young women was a challenge in this study. So, it was planned to conduct the interviews with polite conversation and a respectful manner. For a good interviewer, it is important to know about the interviewee's (participants) responsibility, well-being, listening skills, and emotional control (Adams, 2010).

Surprisingly, all the participants were very excited to participate and talk freely about the topic. Young women with an age limit 20-40 years were happy to share their experiences and perception related to health information about the new Norwegian healthcare system and health providers.

The interviews were conducted in a quiet place with minimum noise and interference from other people. It was clear that all the women participants have the right to take part in this study voluntarily and have full freedom to answer the questions or not. In addition, all the information provided by participants in this project must be treated confidentially. It was informed that you can ask questions about the project and have the right to withdraw at any time and refuse to answer any question without any reason or consequences. At the end of the interview, It was reminded that all the collected and stored data will be removed permanently, and all the participants will be informed when the thesis project will be completed.

3.2.5 Data Analysis

The most mysterious and complex part of qualitative research is data analysis which get minimum attention in the literature (Thorne, 2000). To conduct a grounded and rigorous data analysis in qualitative research depends upon researchers understanding of *what it means to do* in qualitative data analysis (Lester et al., 2020). It is difficult to judge and evaluate research without analysis of collected data in research (Willig & Rogers, 2017). So, qualitative data analysis gives meaning to a data set (Anfara et al., 2002). Broadly thinking, qualitative analysis is a set of codes that drawn from interviews and observations, and is a process of shifting and sorting the material to the same phrases, patterns, and themes within data (Braun & Clarke, 2006; Lester et al., 2020).

In this study the interviews were conducted in Urdu, and recorded on a mobile telephone by using Dictaphone, the official mobile application from the University of Oslo, that synced directly to Nettkjema to deliver and save the files in encrypted form, which further synced and saved into Educloud (Inland University of Applied Sciences) for security and safety purposes, and to fulfill the NSD requirements. After listening to the recorded interviews several times, it was transcribed into English exactly in the same wording as the respondents talked to get maximum originality and to maintain the exact meanings and perception of the participants.

When transcribing of data was finished the process of data analysis started. There were different ways to analyze qualitative data to get unique theoretical expectations and assumptions (Lester et al., 2020), but in this project it was used thematic analysis to give the meaning and sense of the collected data. As Braun and Clarke state that *thematic analysis* is a process of identifying, analyzing, and reporting the themes within data, but what counts for a theme? *A theme captures something important about the data in relation to research question, and represents the level of response and meaning within the data set* (Braun & Clarke, 2006).

As Lester and colleagues (2020) state that thematic analysis consists of different phases such as,

1. Preparing and organizing the data
2. Transcribing data
3. Become familiar with data.
4. Coding the data
5. Categories and themes.

In this project, there was also used the same pattern to conduct the thematic analysis. *Open code 4.03* was used to analyze the data. Open code is software from UMEÅ University, that is originally developed to follow the steps of grounded theory, but this new version can also be used for qualitative content analysis (*Open Code*, 2023). Open code accepts only the files with Text format. So, after transcribing the data, the files from Word were converted to text format and started the process of data analysis.

The Open code aligned the text data into phrases, then the researcher gave them appropriate codes, and when the coding is finished, then the researcher on the base of similarities and diversities synthesis the categories and themes. Furthermore, the themes present what the researcher found from this set of data.

In this project, the concepts of *Nutbeam health literacy*, and the *Sørensen model of health literacy* were used to understand the meaning and perception of young Pakistani immigrant women in Norway. The themes captured in this data analysis are related to health information, in the form of accessing, experiencing, and interpreting the health information to improve their health.

3.3 Ethics

Ethical issues are present in any type of research (Orb et al., 2001). In qualitative research there are inherent difficulties that can be reduced by giving awareness about ethical principles such as autonomy, participants' rights, justice, and beneficence; - do good and prevent harm (Orb et al., 2001). Autonomy, respect, and participants' rights were considered as a top priority in this project. Confidentiality is an important ethical issue (Clifford et al., 2016). So, the participants must be assured that all the data collection will be secure and put in lock and key, gathered information will be confidential, and participants must get a consent form. All the participants have the right to withdraw from the research at any time without any reason or explanation (Clifford et al., 2016).

Bryman (2016) states, four main ethical principles considered useful in social research such as harm to participants, lack of informed consent, invasion of privacy, and deception (Bryman, 2016).

In this project, above mentioned principles were used to reduce the ethical issues between the researcher and participant. For ethical considerations, contacting the participants and starting the process of research was done after approval from NSD (Norwegian Center for data research). All the participants in this project have given informed consent with comprehensive information about the project and participants' rights. Participants are also requested to read the consent form for a better understanding of their rights as a participant. There was no personal data collected in this project, such as national ID number, date of birth, telephone number, or photographs of the participants. Research and data collection were based on health information, not on the personal health condition of the participants. All the participants have a right to get a summary of the research results at completion.

4.0 Findings

The purpose of this chapter is to present the meanings of migrated Pakistani women in Norway. The findings were explored after the process of interviews, data collection, and data analysis, which reiterates the research question and highlight the aim of the research.

How effectively the recently migrated Pakistani women have access to health care and interpret health information to improve their health in Norway.
How do the recently migrated Pakistani women have experience and perception to interpret health information in Norwegian healthcare?

There were five main themes found in exploring the research question.

1. Communication a main concern.
2. Access to healthcare
3. Depends on the husband to get health information.
4. Interpret health information.
5. Need for intersectional work.

Named themes came out from the analysis of qualitative data. These themes explore their experience and perception of Norwegian healthcare. Findings under the main themes will be presented with some quotations extracted from a data set of each participant. Despite the names

of the participants, all the quotations have been presented with alphabets such as *Interviewee A, B, and C* …. and so on, to assure the anonymity of participants.

4.1 Communication a Main Concern

Communication and communication problems considered the main finding that suggest the health literacy of target group and show how the migrated women have their interaction and experience with health providers, and how affectively they interpret health information. The theme 'communication a main concern' is an important finding that target group have had experienced while interacting with their doctor, nurse, and pharmacist to get health information to manage their health.

The results demonstrate that communication is a main challenge for target group to get and manage their health, and to get complete health information in a new society. As interviewee A said that,

Interviewee A: When I move to Norway, my doctor was Norwegian, so it was difficult to communicate.

Interviewee B, who is mother of two children and living in Norway almost 3,5 years now, when she asked about communication experience with health providers to get health information? So, she said,

Interviewee B: Mostly the doctors are Norwegian, and they are not fluent in English, thus it is difficult. Sometimes there is a big language barrier, in such case, we discuss little and leave, because it is difficult for both of us, and meeting is not being very comprehensive.

The finding spotlight that there were incomplete and little information about health after interaction with health provider due to language and poor communication that affect the health of participants.

Interviewee C: The biggest difficulty I faced was language because no one knew English in hospital, so I used to go with my husband, who translated everything for me.

Interviewee C: Because of English, I was very comfortable, but when I visit with my baby, my baby's consultant speaks Norwegian, thus its difficult over there to communicate.

The finding demonstrates that communication problem due to language issue is a main problem for migrated women in Norway. Particularly, poor Norwegian language for Pakistani migrated women mean poor health literacy that leads to poor control on their health.

Another promising finding from interview B and C was that the language and communication is not only a challenge for the target group, but also a challenge for health providers to deliver the understandable health information to immigrant population. Interviewee G, and H experienced same as Interviewee B and C. so, they expressed their experience in following wording,

Interviewee G: For me, the doctor did not know English, and I tried to communicate in English, thus the situation became very confusing.

Interviewee H: I visited the male gynaecologist, over there I had a feeling that, the communication was not particularly good, and even the doctor did not know how to talk in English, and I did not know any Norwegian at that time, therefore it was difficult.

Despite of A, B, C, G, and H, interviewee D, E and F had contrasting experience with health providers, and communication was not a big problem for them. They said that if you cannot speak Norwegian, you can easily manage in English.

Interview D: according to me communication is not a big problem, if you are not fluent in Norwegian the worker can also communicate in English. My experience till now is satisfactory.

In the same interview, the interviewee D expressed her feeling in such way, when they get to know that we are immigrants, they try to explain in a way we immigrants can understand easily by using simple words.

As interviewee F had trouble when she came in Norway, but later she managed her health by using English language, as she said that,

Interviewee F: Once when I come here, I had to get my TB(Tuberculin) test done, and my husband had to go, so he handed me over to a girl (female assistant), she did not know English properly, that day I faced difficulty, and we used gesture language. Otherwise, the healthcare providers can easily understand English.

The findings suggest that communication is a main concern to interpret health information for target group, and it works affectively when both doctor and patient understand each other.

4.2 Access to Health Care

The findings suggest that access to Norwegian health care is a challenge for the majority of recently migrated Pakistani women. The participant's perceptions shed light on that health care in Norway is complicated and difficult to access. As in interview A, the participant told that.

Interviewee A: The system here in Norway is a bit more difficult and complicated. As I experienced bad, I got sick, and I was not able to find any assistance even in emergency, they told me to go to another hospital for treatment.

In addition, the women having one or more children have more visits to healthcare either for herself or for their children's health. So, in interview B, after a simple question from interviewer to a mother with two children, what would you say? Is it easy to access and navigate health care in Norway?

Interviewee B: It is not easy here, as you know in Pakistan doctors are available at evening time also, so if kids get sick, we just get them to doctor and after little wait its done. But here first you must book an appointment and wait for hours, and sometime day and we must follow, so it's difficult.

Some participants said that it was difficult in the start to access the health care due to personal number and documentation from the government, but things get better with the time, and we learned much from our Pakistani community about health care.

Interviewee D: In the start it was exceedingly difficult as you need personal number and then government send you letter to assign a doctor then you need an appointment to see the doctor. But now with the passage of time we know how to survive.

The interviewer asked, do you think was there any other source that was very helpful?

Interviewee D: I think they have a website as well that is helpful and has information.

Interviewer: Do you think the internet is also a source of information to access healthcare?

Interviewee D: Yes, it is, But it's not very simple.

Findings show that the pregnant migrated women have more challenges to access the healthcare and to interact with health providers(doctors) especially, with opposite gender. As interviewee G expressed her feelings when asked about access to health care.

Interviewee G: I think it is difficult in this country as if I need to visit a female doctor or you need a rapid treatment, (pause…) I have no say in it, I cannot decide self to visit the hospital. In Pakistan you can go whenever you want, and you can get instant treatment. In my case you must wait for days and weeks. Though there are very good facilities, but you wait for a long time unlike Pakistan.

Another important description to access the health care was a frequent visit to your health provider such as, doctor with shorter appointment time. As interviewee G expressed that longer time to get doctor appointment affects the health.

Interviewee G: For me, I have been here for 4 years, and I haven't contacted my general doctor, nor has he contacted me to know why I have not contacted him. I think, it is important to have a better connection with your general doctor for health. In addition, the waiting time must be less.

Findings form interview G shows that planned and shorter visit to health provider can reduce the health threats.

Interviewee G: As we ignore things ourselves…, For example, if I was a little sick yesterday and better today so, I do not contact the doctor, but if I have planned visit with my doctor for brief time, may doctor can diagnose and treat the illness in early stage.

Difficult to access healthcare in Norway as compared to Pakistan due to various factors such as, language barrier, communication issues, longer appointment time, poor follow up, and may be migrants are not used to for this new system. As interviewee H reveals that, 'I think it is difficult because the things are not straight or maybe we are not used to it. I think it is very complicated as compared to Pakistan, where everything is given on the counter after visiting the healthcare'.

The results show that it was difficult for the target group to access and navigate healthcare in the start, but gradually it became easier for them. As mentioned, interviewee B, who is living in Norway almost 3,5 years now.

Interviewee B: At the start it felt very difficult to book an appointment, I was thinking how things would go, but now it is not an issue to book an appointment.

The purpose of the theme ‘access to healthcare’ was to evaluate how effectively the target group access to healthcare and health providers to control their health.

4.3 Depends on the Husband to Get Health Information.

In all the interviews the participants talked about their husband, when they were asked, how did they get health information. So, the theme ‘depends on husband’ is considered especially important to evaluate the health literacy of the target group about how affectively and independently they access health information.

Findings demonstrate that the migrated Pakistani women depends on their husband. It is not clear why and what are the factors that make them dependent, and why they cannot get health information independently, but findings from interviews shed light on that there are language and communication barrier that make them dependent. Communication and linguistic skills are the big challenges for target group to adjust in a new community as a healthy member.

Interviewee G: Mainly, it is preferred to visit the doctor alone, but I took my husband with me, as some things were very difficult for me to understand as for communication barrier.

In interview A, when asked to the participant, how easy or difficult for you to explain your health situation to health provider? So, she said that,

Interviewee A: It was difficult at the start because I was not able to convey my health issue to the doctor, so I took my husband with me and sometime other option like translator.

Another finding from the interview B support the present theme. When asked to the participant B, how did you get information to access the healthcare?

Interviewee B: My husband was the one who searched out information for me and told me how to access the healthcare.

Interviewee C: I used to go hospital with my husband, and he translate everything for me.

Interviewee E: My husband gave me basic information about Norwegian healthcare, and he was the biggest source.

The mentioned findings demonstrate that the MPWs have limited control on their health due to limited independency to access and interpret health information.

4.4 Interpret Health Information.

The theme ‘interpret health information’ explored to check and elucidate health literacy of MPWs. The purpose of the theme was to know, how affectively the target group understand and interpret health information either to access the healthcare or to interact with health providers for better health control. As interviewee A said that,

Interviewee A: It was difficult at the start because we were not able to convey our health issue to the doctor.

An important finding highlights that the majority of MPWs on family immigration in Norway have ability to communicate in English, even though they have issues in Norwegian language.

Interviewee C: Easy to communicate with health providers in English. I tried to follow doctors’ instructions.

Interviewee F: The information given in English like pamphlets in English was very helpful.

According to interview D and E, the interaction with health providers depends on how the doctor, nurse, and other health providers deliver health information to the patient to make it easy.

Interviewee D: According to me, when they get to know that we are immigrants, they try to explain in a way we immigrants can understand easily by using simple words. We follow whatever doctor instructs to stay well.

In contrast to interviewee D, the interviewee E have different experience and interaction with health providers as interviewee E said that,

Interviewee E: When I was new, they asked me about my medical history so, it was difficult for me to tell as there were some ‘terms’ which I was not able to understand even in English.

4.5 Need for Intersectional Work

The theme ‘need for intersectional work’ explored to know how affectively the target group get and use health information to manage their health. After asking a simple question to the participant, did you get any health information from other government sectors than health sector such as, UDI (utlandingsdirektoratet), Police or at airport about health and access to healthcare when you came to Norway?

There was surprising answer from all the participants, *and that was NO.*

As in interview C, the participant described that there was no information about health from the government sectors such as, police, immigration office to navigate health and health care system in Norway.

Interview C: No, all the information I have, my husband gave me.

Interviewee D: I don’t remember if they gave any information about healthcare facility.

Interview F: No, no such information given to us, you must do everything on your own.

Interviewee G: No, not at all because I got personal number after weeks, during that time I had no information, I was like anonym person.

The results demonstrate that the migrated women have had lack of health information from government offices with which they often have interaction when they come to Norway. Findings support the theme and catch attention for health policy makers.

5.0 DISCUSSION

The outcomes of this master thesis project are to provide awareness about health literacy of recently migrated Pakistani women in Norway, and how affectively they have accessed the healthcare, and interpret health information to control their health. The research question also guides the research process as follow, how do the migrated women have their experience to interact with health providers to get health information, and how they interpret that information to make health decisions. The mentioned research questions were developed to evaluate and understand the meaning and perception of young, migrated women in host country like Norway. The results indicate that the target group have challenges to access to health care and have communication and linguistic problems to get health information form health providers to interpret health information. Furthermore, results show that the target group is dependent on their husbands to get health information in the beginning when they migrated, which suggest that there is need for intersectional work to engage the migrated women with multisectoral help to improve their health. In addition, this chapter provides reflection on implications the results have for public health work, limitation of research process, and ends with several recommendations for future work.

In international health literacy, affective access to get health information is a focus for World Health Organisation (WHO). The findings explored in this study, revealed that the MPWs have difficulty to access and interpret health information in Norway. Majority of the participants have communication and language barriers that make complicated and difficult for them to navigate the Norwegian health care system and to get health information to manage their health. These complications may affect the health of target group. As data from previous literature supported that health literacy and access to healthcare had an indirect effect on the quality of life of women through anxiety and depression(Kugbey et al., 2019).

In this thesis, Sørensen and Nutbeam conceptual models is the foundation of intervention to improve the health and health literacy in the recently migrated Pakistani women in Norway.

According to Sørensen and colleagues 2012,

Health literacy is linked to literacy and entails people's knowledge, motivation, and competencies to access, understand, appraise, and apply health information to make judgments and take decisions in everyday life concerning healthcare, disease prevention, and health promotion to maintain or improve quality of life during the life course (Sørensen et al., 2012).

Findings suggest that MPWs have difficulty to interact with health providers due to poor command on Norwegian language and faces challenges to communicate effectively. As Le Report 2021, support the finding, the immigrants who migrate from another country to Norway have basic problems in reading, writing, listening, and speaking the Norwegian language, and poor communication skills make them vulnerable to navigating their health condition (Le et al., 2021). Persons with limited reading ability have difficulty in using health signs and printed health information, and those with less writing ability have more difficulty to filling the forms in health settings, and those with less speaking and listening ability have challenges to interact with health providers to explain and understand about health situation (Parvanta et al., 2017). Arguably, the findings indicate that the MPWs on family immigration visa in Norway have difficulty in speaking, listening, and understanding the Norwegian language particularly, when they interact with health providers to get health information. the qualitative exploratory study conducted by Tschirhart and colleagues 2019, indicates that most of Thai women have barriers to access Norwegian healthcare due to persistent language challenges (Tschirhart et al., 2019).

Findings in this study suggest that recently MPWs have poor health literacy due to poor language and communication problems that considered a main barrier to get, access, and interpret the health information. Especially, the Norwegian language and communication in Norwegian with health providers is a challenge to interpret health information that leads to poor control on health. The results indicate that health literacy due to communication and language is not only a challenge for migrated women, but also considered a main concern for health providers. Evidence base findings in interview B, C, G, and H shed light on that the health providers, especially, the Norwegian doctors have difficulty to communicate and deliver health information to the migrated women. Kelly and colleagues argue that effective communication between patient and health providers is a fundamental element, but health providers overestimate the health literacy of the patient which leads to poor health outcomes and readmission to hospitals(Kelly & Haidet, 2007). In provision of health services the immigrant population have

reported less satisfaction due to cultural and ethnic differences, lack of experience, and poor mutual communication among patients and health providers (Abebe, 2010).

Findings show that the pregnant migrated women have more challenges to access the healthcare and to interact with health providers(doctors). There are no solid findings behind this concept. But maybe it is due to cultural and religious beliefs that affect their health in a new society. Because it is common routine in Pakistan, the females visit to female doctor when they are sick, and especially in situation when they are pregnant and need special checkup. As interviewee G expressed her feelings when asked about access to health care.

Another important finding shows that the recently MPWs depend on their husband to get and interpret health information. There were limited grounds to know what the exact factors behind this theme are, but results explore that poor language and communication with health providers make them dependent on their husbands. Due to poor command on Norwegian language, they depend on husbands to get an appointment, interact with health providers, and translate health information into native language for complete understanding. This finding highlight that the MPWs have limited control on their health due to dependency, and maybe the multisectoral work missing to focus on the health of target group. Therefore, there is need for special attention for health policymakers due to fact that women are different from men and have different needs in their lifespan (DAVIDSON et al., 2011), and they need independent healthy life. The theme 'need for intersectional work' considered as a valuable tool in public health to improve the health of migrated women.

The women having one or more children have more visits to healthcare either for herself or for their children, have more experience to interact with health providers, suggest that limited opening hours of general practitioners' clinics make more difficult to access them, which make longer and delayed appointment time to get health information. The analysis identifies that there is need for a quick way to get and access health information. As findings suggest that there is difficult for migrated women to access and manage their health without documentation and personal number in the host country like Norway. As interviewee D said that in the start it was exceedingly difficult as you need personal number and then government send you letter to assign a doctor then you need an appointment to see the doctor. This finding shed light on that may be there is need for intersectional work. The migrant population waiting for personal number or in

the process of documentation should need a collaboration from relevant departments such as, health department, and other sectors like, UDI for quick way to access healthcare and health providers.

5.1 Implications for Public Health

The findings in this project will be useful for health providers, public health workers with following implications,

5.1.1 Language Access Services

The findings reveal that the MPWs have difficulty to communicate in Norwegian languag to get comprehensive health information from health providers. The fundamental need for target group in Norway is to educate them about the basic Norwegian language to improve their communication skills for better interaction and understanding with health providers and the healthcare system. If the government participates actively and supports them by providing free language programs, may be very helpful to improve the health literacy of the target group. According to the introduction act 2021, There is free Norwegian language training programs that are only for persons who are, asylum seeker, have permanent residence, and persons with limited residence permit due to family and children (Introduction Act, 2021, § 17), But the immigrants who are on working visa, and their families on immigration visa in Norway have no right for free language training, if the government and policy makers give little attention and provide them free Norwegian language training. So, the target group has a better opportunity to learn language and communication skills that finally improve their health literacy, and they can navigate their health comfortably and independently. As previous studies recommended that there is a significant gap between official policy and services provided to migrated women for equitable access to healthcare (Bains et al., 2021; Tschirhart et al., 2019).

5.1.2 Organizational and Governmental Support

There are the following organizations and governmental departments with which immigrants have interaction from the first day, when they apply for a visa, outside and inside Norway.

UDI (The directorate of immigrants)

The Directorate of Immigration (UDI) is the main Norwegian authority that controls the immigration administration and implements, helps, and facilitates the government's immigration and refugee policy (UDI, 2022). The immigrants have their first interaction with UDI when they get information to migrate and apply visa for Norway. If UDI provides enough and easy information about basic health services on their website in different immigrant's native languages that can also be helpful for MPWs to learn primary health information to improve health literacy about health and healthcare.

There are different other department such as, Police, Traffic department, Norwegian language centers, and Schools that can play a vital role to support the new migrant population on their own by giving relief. So, the theme *Need for intersectional work* spotlight that the MPWs also need attention from public health providers to start a collaborative work for improving the health of this group.

5.1.3 Health System and Health Provider's Support

There is a need for interventions in health communication and the healthcare system. In which, the target group is health providers like doctors, nurses, pharmacists, and other health personnel. Health literacy interventions for health providers are considered important because of how they communicate and deliver health information to patients. Health information should be simple and easy to understand for consumers and immigrants. The written and visual health information (Infographics, brochures, health applications, health signs, Videos, etc.) must be easy to read and understandable for consumers (Sheridan et al., 2011). As interviewee D and E experienced in this study and said that there is easy to understand the health providers when they speak easy

language and use simple words. On the other hand, there is challenging to understand the difficult medical terms in a medical checkup, even though they are not in Norwegian.

The health literacy survey in Norway 2021, clears that people with backgrounds from Turkey and Vietnam have low scores in accessing, understanding, appraising, and applying health information. People with low scores on healthcare have more problems in understanding what their doctor is saying in normal checkups (Le et al., 2021). Therefore, the health workers like doctors, nurses, and other health providers must use easy and friendly language for better understanding. The doctors, most commonly overestimate the patients' literacy levels, and this happens more often with immigrants and minority patients (Kelly & Haidet, 2007). The health providers make sure that the delivered information is understood by the patients or not. If not, there should be a translator or interpreter that can help to complete the dialogue between doctor and patient for better compliance. In addition, the identified migrant women having poor understanding should get particular attention from health providers, and if there is possible, the health providers should arrange an interpreter or translator to ensure that the information provided understood by migrant women.

5.1.4 Expected Outcomes

Using the above-mentioned intervention can get the following outcomes.

1. Can improve basic knowledge and communication skills of MPWs by providing them the basic free language training.
2. Good language proficiency can improve communication skills of target group for better and independent interaction with health providers to get understandable health information for better control on health.
3. Can improve the ability to interact comfortably.

4. The target group can navigate their health problems much more easily as compared to using a translator or interpreter.
5. Better control on health and confidently navigate healthcare can help in disease prevention in MPWs.
6. And finally, improve health literacy and health outcomes.

5.2 Limitations of Study

All research projects have some limits. Limitations of a study are elements that are not in researcher's control. Limitations in a research project are important to discuss and to check the robustness and validity of data. Like other qualitative research, there were also several limitations in this study related to sampling, data collection, generalisability, and data analysis. One of the important limits to conduct this study was unexperienced researcher to conduct the interviews and collect the data. There were limited number of participants than quantitative research. However, the issues like validity and reliability were not clear-cut. Although the qualitative method for research was a good way to get in-depth perceptions and to generate rich data, but the number of limited participants was considered a limitation.

The sample of recently migrated Pakistani women on family immigration visa were well educated and considered purposive. A purposive sample is a sample of people who already have a view of topic (Themes, 2017). So, after talking with the supervisor, there was decided to take heterogenous group with different educational backgrounds to reduce the homogeneousness of the sample. Furthermore, not all migrated Pakistani women were part of the project, there were only women, who recently migrated and living in Norway for less or equal than 5 years that make the sample non-representative of a larger population.

Another limitation in this study was data collection method like semi-structured interviews, in which it was difficult to keep observation, tone, and question sequence uniform from one to another respondent that generate different views. This project has focus on the health literacy of

recently migrated Pakistani women in Norway with limitations to check how they access healthcare, interact with health provider in the form of communication, and how they interpret and understand the health information. So, it was not easy to discuss different aspects at a same time to get desired results.

An important limit of this study was generalizability in which, there were only women who were on family immigration visa with age limit of 20-40 years, and not those who were students and have plans to leave the country after completion of education or all other migrated women with same background. So, the factor of generalizability remains a limitation in this study, in which the views of a specific group of people cannot apply to other group of people, place, and context.

Above mentioned limitations suggest that there is a need to address these limits for further work. Health literacy is a challenge for the migrated Pakistani women in a new Norwegian society, and the health literacy of this specific group can evaluate much better by using a representative large group than only limited participants. A heterogenous representative group can give much broader insight into health literacy.

5.3 CONCLUSION

The World Health Organizations Agenda for Sustainable Development 2030, highlight that health literacy provides foundation on which individuals are enabled to improve their own health by successfully engage with community actions, and push the government and related sectors to meet their responsibilities to maintain health and health equity, and to reduce inequalities in health (WHO, 2023). Existing studies indicate that migrant populations has high level of morbidity due to poor health literacy that make them most vulnerable group with serious health inequalities and poor health outcomes (Park et al., 2018).

The findings of this study concluded that the migrated Pakistani women in Norway have difficulty to communicate with health providers, and to get health information due to poor command on Norwegian language that accelerate to poor health literacy with poor health outcomes. The theme '*communication a main concern'* shed light on that health communication with immigrant population is not only challenge for target group but also for the health

providers. Furthermore, the MPWs have problems to access the healthcare due to language and communication barrier that make them dependent on their husband to seek the health information and to make own health decisions.

The analysis of explored findings suggests that the target group in a new society need attention from health policymakers, public health providers and other relevant stakeholders for multisectoral work to improve health and health outcomes.

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APPENDICES

Consent Form

Information Letter

ARE YOU INTERESTED IN TAKING PART IN THE MASTER THESIS PROJECT?
(*Health literacy in recently migrated Pakistani women in Norway)*

Purpose of the project

You are invited to take part in this master thesis project where the main purpose is to evaluate and get enough information about the health literacy level of recently migrated Pakistani women in Norway to improve their health.

Research question

How do the recently migrated Pakistani women in Norway have access and experience with the healthcare system, and interpret health information to improve their health?

Objectives of the project

The goal of this master thesis project is to elucidate the health literacy level by using the following points.

- how the recently migrated Pakistani women have access and experience to health care in Norway,
- how was their experience with health providers, and
- at which level do they have to interpret the health information to make proper health-related decisions to improve their health?

Which institution is responsible for the project?

Inland university of applied sciences, department of public health, Elverum oversees the project and data controller.

Why are you being asked to participate?

You asked to take part because you come in the eligibility criteria for participation in this project as a Pakistani immigrant woman who recently migrated and lived legally in Norway for less than or equal to five years.

The sample size will be approximately 8 to 12 participants same as you who will be participating. It might use the *snowball sampling* method if needed to find participants(women) with Pakistani backgrounds to conduct the interviews.

A snowball sampling process may use to start the interviews with a small number of participants who fit the research criteria then the agreeable participants will be asked to recommend other participants and so on, sampling usually finishes when the required sample size is achieved, or the saturation point has been reached.

What does participation involve for you?

If you will accept the consent and agree to take part in the project, that means you will participate in the interview which will take almost 30-60 minutes. I as a student will ask simple questions related to the project and you as a participant will give the answers. The interview will be recorded. And for recording, I shall use the Dictaphone mobile application. Dictaphone is an official and secure application that is directly connected with nettskjema to store and analyse data with full security. In addition, I shall make small notes on paper for more details.

To achieve the goal of the study I shall use the qualitative research method by conducting an in-depth interview that consists of simple and open questions. Interview questions consist of three main topics that focus on,

1) how recently migrated Pakistani women have access to health care in Norway,

2) how there was the experience with health providers such as doctors, nurses, pharmacists, and other health providers,

3) at which level do you have to interpret the information to make proper health-related decisions to improve your health?

It may consist of several sub-questions in each main topic.

You as a participant may not have any direct benefit from this project, but your little effort and participation can help many other women from the same background to improve their health.

Participation is voluntary

Participation in the project is voluntary. If you chose to take part, you can withdraw your consent at any time without giving a reason. All information about you will then be made anonymous. There will be no negative consequences for you if you chose not to participate or later decide to withdraw.

In addition, all the information you provide in this project must be treated confidentially. You can ask questions about the project and have the right to withdraw at any time and refuse to answer any question without any reason or consequences.

Your personal privacy – how we will store and use your personal data.

We will only use your personal data for the research purpose(s) specified here and we will process your personal data following data protection legislation (the GDPR). And based on the following points.

- I Waqas Ahmad as a student will collect the data in the form of interviews.

- And Svein Barene as a supervisor and project leader from *Inland university of applied sciences, department of public health*, Elverum is responsible and has access to personal data.
- The data will be collected and stored safely and securely by using the official application Dictaphone directly connected with Nettskjema, an official source from the University of Oslo to store personal data for research purposes.
- The mobile phone and personal computer used to collect and store data must be locked with a personal password without access to any unauthorized person.
- All the participants will be anonymous, and I will replace your name and contact details with a code. The list of names, contact details, and respective codes will be stored separately from the rest of the collected data.

What will happen to your personal data at the end of the project?

The planned end date of the project is approximately 15.05.2023. At the end of the project, the personal data with all digital recordings will be deleted permanently.

Your rights

So long as you can be identified in the collected data, you have the right to:

- access the personal data that is being processed about you.
- request that your personal data be removed.
- request that incorrect personal data about you be corrected/rectified.
- receive a copy of your personal data (data portability), and
- send a complaint to the Norwegian Data Protection Authority regarding the processing of your personal data.

What gives us the right to process your personal data?

We will process your personal data based on your consent.

Based on an agreement with *Inland university of applied sciences, department of public health*, Elverum. The Data Protection Services of Sikt – Norwegian Agency for Shared Services in

Education and Research has assessed that the processing of personal data in this project meets requirements in data protection legislation.

Where can I find out more?

If you have questions about the project or want to exercise your rights, contact:

- *Inland university of applied sciences, department of public health*, Elverum via,

The project leader:

Svein Barene

Email: svein.barene@inn.no

Phone number: +47 62430319

Our Data Protection Officer:

Usman Asghar

Email: Usman.asghar@inn.no

Phone number: +47 61287483

If you have questions about how data protection has been assessed in this project by Sikt, contact:

- email: (personverntjenester@sikt.no) or by telephone: +47 73 98 40 40.

Yours sincerely,

Project Leader	**Student**
Svein Barene	Muhammad Waqas Ahmad

Consent form

I have received and understood information about the project ***Health literacy in recently migrated Pakistani women in Norway*** and have been given the opportunity to ask questions.

I give consent:

- ☐ to participate in the interview.

I give consent for my personal data to be processed until the end of the project.

(Signed by participant, date)

Interview Guide

Interview guide

In-depth interviews for recently migrated Pakistani women in Norway.

The interview guide is a brief list of questions to be asked in semi-structured interviews (Bryman, 2016). The interview guide is consisting of four main parts. Each part has further sub-questions.

Part 1

Information

My name is *Waqas Ahmad*, and I am a student at the Inland university of applied sciences, department of public health Elverum, talking with you because you as a participant give consent to participate in this research project. The aim and purpose of this research project is to evaluate health literacy in recently migrated Pakistani women in Norway. The purpose of this research project is to elucidate the health literacy level by using the following points.

1) How the recently migrated Pakistani women have access and experience to health care in Norway,

2) how was their experience with health providers, and

3) at which level do they have to interpret the health information to make proper health-related decisions to improve their health?

I as an interviewer shall ask questions and you as an interviewee will give the answers. It is not any right or wrong answer to any question, it is just your experience and thinking about the new Norwegian healthcare system and health providers. Moreover, I clearly want to inform you, I shall not collect any personal information about you and your health situation. All the information must be confidential and anonymous.

The interview will be recorded on the mobile phone by using the official mobile application with the name of *Dictaphone* that is secure officially recommended application to gather data. Data

must be protected and secured. Only I and the supervisor of the research project have access to data for interpretation and research purposes.

Part 2

Background questions

1. *How old are you?*
2. *What is your qualification?*
3. *How long you have been lived in Norway?*
4. *What is your marital status?*
5. *Do you have children?*
6. *What is your profession?*
7. *Why have you migrated to Norway?*

Part 3

Introducing questions

Now I shall ask the questions about your ability to access the health care system in Norway.

Access to healthcare

1. Do you know anything about Norwegian health care system?
   Prob: If yes, can you explain little, what?
2. How did you get this information about health care system?
3. Is there any source of information do you think was helpful?
4. Is it easy to navigate the healthcare system?
   Prob: if yes, how?
   Prob: if no, what are possible challenges?

5. How do you compare? Is it easy or difficult to access the healthcare in Norway as compared to health care in your country of origin?

Experience to healthcare and health provider

1. Have you visited to hospital, polyclinic, health station or pharmacy?

Prob: If yes,

how was your experience?

What do you think was good and helpful?

What do you think was challenging?

2. How many times do you visited to your doctor, nurse, or pharmacist?
3. Do you visit alone or with someone else as a supporter?

   Prob: if alone,

   Do you think it was easily managed?

   Yes, how?

   Prob: with someone to support,

   Why was there need for supporter?
4. How was your experience to interact with your doctor, nurse, or pharmacist?
5. How do actively you engage with health providers?

To interpret the health information

1. What do you think about communication with your health provider?

   Prob: Is it easy to communicate?

   Yes, what do you think is helpful to communicate?

   No, what do think is difficult to communicate?

2. Do you get or have sufficient information to manage your health?
3. Is it easy for you to understand the health information?

   Prob: Yes, How, and what are the factors do you think was helpful to understand?

   Prob: No, what are the challenges?
4. Is it easy for you to explain your health condition to your health provider?
5. Do you have any language problems to explain and understanding health information?
6. Any other comment or example, do you think is important to say?

Invitation Letter Used for Social Media.