

**Non-Communicable diseases health information among refugees
in Norway: The Case of Ethiopian and Eritrean refugees in
Bergen**

Tesfaye Tariku Admassie



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Faculty of Psychology

University of Bergen, Norway

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Abstract

Background: Ethiopian and Eritrean refugees are entitled to the same health care access as Norwegian citizens in Norway. NCDs are recognised as public health issues in Norway, but NCD health information is non-existent in the languages of groups of refugees.

Research objective: This study explores refugee-focused NCD health information materials and services accessed by Ethiopian and Eritrean immigrants living in Bergen. Moreover, this study tries to discover the understanding, perceptions, and experiences of these refugees regarding their health issues in general and experiences with NCDs.

Research methods: This study used qualitative phenomenological design to explore the situation of refugee-focused NCD health information and the understanding, perceptions, and experiences of these refugees regarding health and NCDs. The methods for data collection were focus group discussion (FGDs), in-depth interviews (IDIs), and document analysis. The two focus group discussions conducted consisted of a group of females and a group of males, with six participants in each with age ranges between 40 and 50. Two participants, one from each FGD group, with personal experience of cancer and diabetes were selected for individual narrative interviews. Purposive sampling was applied in recruiting participants. The data was coded by using “Nvivo software Version12” and analysed using thematic network analysis. Integral Theory was employed for the theoretical framework in this study.

Findings: This study found that the health information materials on NCDs are not immigrant-focused, the information materials do not consider elements such as language, level of education, or the age of the participants. As a result, they are less likely to take up health services such as screening for cervical cancer. Although NCD health information is found to be lacking among the research participants, health institutions are providing NCD health services to some of the participants.

The participants of this study reported that they feel inhibited from discussing the issue of NCDs and consider talking about NCDs a taboo inside their communities. They also tend to hide their NCD status if they are aware of it. Before their arrival in Norway, they used to have different perceptions about NCDs; for example, considering NCDs as a disease that occurs only among the rich; but as a result of the information they got informally from their social networks, they said that they ‘*no longer consider NCDs as the disease of the rich only*’.

Norwegian health authorities provide information about NCDs in Norwegian only, for example awareness creation materials and letters inviting people to free screening for cervical cancer are written in Norwegian. These offers are seldom taken up by Ethiopian and Eritrean refugees because of language difficulties, experience of fear and cultural silence. Consequently, NCDs may pose an unidentified health risk to this group in the population.

List of Acronyms and Abbreviations

AQAL	All quadrants, all levels
FGD	Focus Group Discussion
IDI	In-Depth Interview
NCDs	Non-Communicable Diseases
NSD	Norsk Senter for Forskningsdata (Norwegian Centre for Research Data)
SSB	Statistisk Sentralbyrå (Norwegian statistics bureau)
UDI	Utlendingsdirektoratet (Norwegian Directorate of Immigration)
UNHCR	United Nations High Commission for Refugees
WHO	World Health Organization

1. Introduction

1.1 Background

The number of refugees¹ in the world has been rapidly increasing since the end of the 1970s, (Hatton & Williamson, 2006). Data from the United Nations High Commissioner for Refugees (UNHCR) show that the number of refugees in 2016 was over 17 million, up from over 2.5 million in the early 1970s (UNHCR, 2018). In 2015, over 1.2 million refugees entered in the European Union countries (Greussing & Boomgaarden, 2017). The number of asylum seekers in the developed world has increased because of reasons such as war, violence, economic and political problems etc. The lion's share of the asylum seekers come from Africa, Asia and Eastern Europe. This had led to political debates in several countries, which resulted in a series of policy changes (Hatton, 2005). With specific reference to Norway, in 2016, 217, 200 people with a refugee background were living in Norway. This corresponds to 4% of the total population, and 30 % of immigrants² in the country (SSB, 2016).

Table 1. Most common countries of origin for refugees in Norway in 2016. (SSB, 2017)

Rank	Country	Number of refugees
1	Somalia	27, 624
2	Iraq	20, 818
3	Syria	19,943
4	Eritreans	19,250
9	Ethiopian	7,888

In 2016, Bergen municipality ranked second in hosting a large number of refugees which is 10, 300 that accounts 3.7% of the total population of the city (SSB, 2016). Currently, there are 602 Ethiopian and 1049 Eritrean immigrants living in Bergen municipality

(SSB, 2017).

There are studies indicating that the challenges faced by refugees before their displacement, during their migration and after their arrival can impact their health status in particular infectious diseases, non- communicable diseases (NCDs), and mental health issues (Abbas et al., 2018). Studies show that, mental health problems have been observed as one of the main public health issues of immigrants in several countries (WHO, 2018). With specific reference to immigrants' mental health status in Norway, adult immigrants from low- and middle-income countries, have been found with more mental health problems compared to Norwegians (Abebe, Lien, & Hjelde, 2014). There are few studies on NCDs among immigrants in Norway.

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1. UN definition: "someone who has been forced to flee his or her country because of persecution, war or violence".
 2. Immigrants are persons born abroad of two foreign-born parents and four foreign-born grandparents (SSB, 2018)

Some studies confirm that immigrants have better NCDs health status than the local population (Diaz et al., 2015).

The integration policy in Norway demands that every refugee attends an introduction programme during the two first years after arrival. The programme provides immigrants and refugees with an understanding of Norwegian language, culture, law and social studies. The programme aims to help immigrants and refugees to be able to take part in the Norwegian society, work and be self-funded.

In Norway the government is responsible for providing health care to the public in accordance with its principle of equal access to health care regardless of age, race, and gender. Municipalities are responsible for primary and social health care such as dental care services for patients with chronic mental disabilities, and patients in nursing homes. The responsibility for specialist care lies with the state (Ringard, Sagan, Saunes, Lindahl, & World Health, 2013). The health system in Norway provides screening services for asylum seekers on infectious disease such as tuberculosis which is compulsory. There is also a voluntary screening for HIV and hepatitis (NOAS). But there is no service concerning NCDs. It is assumed that NCDs is dealt through personal doctor (fastlege). According to WHO (2014), NCDs tend to be of long duration and are the result of a combination of genetic, physiological, environmental and behavioural factors. The main types of NCDs are diabetes, cardiovascular, cancers, and chronic respiratory diseases (WHO, 2014b). Concerning awareness creation about health care services and system in Norway there are various communication materials produced for the public in different language. These languages include the native languages of refugees living in Norway.

1.2 Problem statement

Refugees and asylum seekers³ are entitled to the same access to health care as Norwegian citizens, according to the Norwegian Immigration Act (Government of Norway, 2010). However, immigrants have often limited access to pertinent health information regarding preventive health in Norway (Gele, Torheim, Pettersen, & Kumar, 2015). Other literature also confirms the fact that health information for the asylum seekers is limited to the transit phase, especially when it comes to information supplied about the health care system such as tuberculosis screening, and vaccination. In addition, “*chronic conditions are not prioritised topics*” (Myhre & Bergh, 2017, p.377). As described, asylum seekers have access

3. A person is called an asylum seeker if he or she has applied for protection (asylum) in Norway and the application has not yet been finally decided (UDI)

to information concerning infectious disease and screening in their respective languages. However, the case of NCDs is expected to be conducted by personal doctors. There are studies that confirm the benefit of providing health information in the language of immigrants (Stampino, 2007) Little research has been done on health information on non-communicable disease (NCDs) among refugees in Norway. Therefore, it is in the interest of this study to try to fill this gap.

1.3 Purpose of the study

The overall purpose of this study is to explore refugee-focused health information service in relation to non-communicable disease among Ethiopian and Eritrean refugees residing in Bergen municipality. In addition to this, it tries to identify the relevance of such information to their needs. It also looks at the experience and perceptions of Ethiopian and Eritrean refugees regarding their health with an emphasis on NCDs.

From a health promotion perspective, the study will contribute to the wealth of research focusing on health information⁴ access of refugees in general, and more specifically to Ethiopian and Eritrean refugees living in Bergen.

The findings of this study might contribute to minimising health-related dangers among immigrants and thereby assist the betterment of their well-being. The recommendations of this study may be important inputs for policy-makers, planners, health care providers and development collaborates in non-communicable health promotion aspects particularly those targeting refugees.

2. Objectives and Research Questions

2.1 Objectives

The overall objective of this study was to explore how Ethiopian and Eritrean refugees living in Bergen receive health information on non-communicable diseases (NCDs). Moreover, the study addresses the relevance of NCDs health information materials and methods regarding

4. Health information refers to the availability of information in this case regarding non-communicable disease via different communication methods to Ethiopian and Eritrean refugees living in Bergen.

the use of language, level of education and age of recipients. In addition to this, the study looks at the experience and perceptions of refugees regarding their health with a focus of NCDs.

2.2 Research Questions

How do Ethiopian and Eritrean refugees in Norway define health with emphasis on NCDs, and what enables them to experience health?

- How do Ethiopian and Eritrean refugees experience the support from the health system in Norway?
- What practice & behaviours promote their health.
- What collective / cultural values, attitudes and beliefs promote health?
- What motivates them to promote their health?

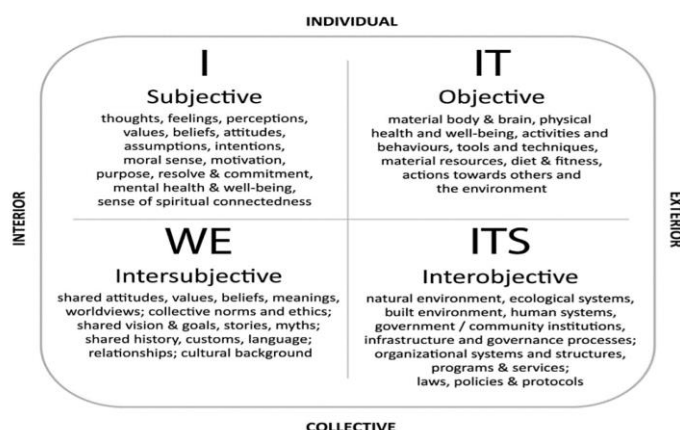
3. Theoretical Framework and Literature review

3.1 Theoretical Framework

Theories guide researchers to explore problems in a systematic way. Accordingly, “Integral theory” is used as a framework in this study. Ken Wilber used the word integral to refer to his approach in 2005. Wilber introduced the all quadrants, all levels and models. Wilber’s quadrant model is usually referred to as the “A-Q-A-L” model, which is for “all quadrants, all *levels*, all *lines*, all *states*, and all *types*” (Wilber, 2005, p.22). Lines can explore multiple intelligences and look at the various aspects of individuals, families, groups, and societies. States can identify the temporary happening or the occurrences of something for a changeable time or period. Types rise on indifferent development levels and refer to as an example personality type, gender types, and blood and body type, religion, and kinship system (Esbjorn-Hargens, 2010). Because of the limited size of the thesis I am only focusing on quadrants. Quadrants is just one of the five dimensions of integral theory. To investigate the Ethiopian and Eritrean refugees’ experience and motivation, behaviour and practice as well as collective perspectives and perceptions regarding their health with an emphasis on NCDs and health information Integral theory” is used as a framework in this study. The integral theory approach to health promotion attempts to have multi-dimensions, complex and evidence-based practice, guiding the whole view of reality (Lundy, 2010). By its nature, an integral theory can be called “meta-theory” which is adopting different theories from various fields and applied to different fields of study (Lundy, 2010). Health promotion is one area where the integral theory can attempt a proper understanding through its comprehensive approach together in research and practice. Four quadrants work together and make the fundamental theory that is an

extensive and complex theoretical approach. Integral theory is employed in this study to explore health with an emphasis on NCDs, as well as NCDs health information among Ethiopian and Eritrean refugees residing in Bergen municipality. The reason for used the integral theory is that the integral approach helps us to bring multiple perspectives and to obtain a detailed understanding of an issue (Esbjorn-Hargens, 2010). Also, integral theory helps to find and develop a holistic picture of those experiences including in the interior quadrants look at the experience and motivations of Ethiopian and Eritrean refugees. In the exterior quadrants looks at health promoting behaviour and practice of the study participants. And, the individual and collective interiors look at the feelings, beliefs, attitudes as well as cultural background, values and norms of the targeted groups. Regarding health promotion, the four quadrants indicates the complex relationships between individuals, and organisations, as well as health determinants. Health promotions seek to address and reflect the complexity and consistence that an actual response needs (Lundy, 2010).

Figure1.Integral model displaying four dimensions of life (Lundy, 2010, p.47)



For this study, the four quadrants are used as analytical tools for gaining insight into and understanding the experiences of Ethiopian and Eritrean refugees regarding health issues with an emphasis on NCDs as well as NCDs health information. The individual exterior looks at the participants' motivation to stay

healthy. The individual interior quadrant provides insight into what their practising activities and behaviours for keeping oneself healthy. The collective interior looks at how their cultural values, beliefs, customs (religions) contributes to keeping them healthy. It looks at how their culture, language, stories, and beliefs influence when receiving relevant health information on NCDs. It creates an understanding of what kind of tools, material, and resources refugees use for health information. Besides this, it also looks at the understanding of the participants regarding health and NCDs. It also looks at what Ethiopian and Eritrean refugees think about receiving health care service and system information as well as NCDs health information. Finally, the collective exterior gives insight into the resources as for how the Norwegian health

system and services influence the provision of health information on NCDs for the Ethiopian and Eritrean refugees residing in Bergen municipality.

3.2 Literature review

3.2.1 Literature processes

Most of the literature used in this study is peer-reviewed and published in academic journals. The primary databases that I searched to find literature relevant for this study were Oria, Web of Science (the University of Bergen Library database), and Google Scholar. I undertook a systematic search using combinations of search terms such as non-communicable disease, NCDs health information, and immigrant health in Norway. Some resources published by the Norwegian government have also been used, these were found on the Government of Norway's websites like Statistisk Sentralbyrå, samfunnskunnskap.no and www.helsebiblioteket.no.

3.2.1.1 Non-communicable diseases

Globally, non-communicable diseases cause for over 75% of all deaths such as cancer, heart disease, diabetes and respiratory disease (WHO, 2014b). In the low and middle-income countries, non-communicable diseases cause over 80 % of all deaths (Alwan & MacLean, 2009). In sub-Saharan African countries, different communicable (HIV/AIDS, malaria, and tuberculosis) and non-communicable disease (diabetes, cancer, and cardiovascular disease) are the main public health issues. Because of the vast problem of communicable diseases, the government have not prioritised the non-communicable disease much (Adewole et al., 2013). For example, some studies show that cervical cancer ranks the most common type of cancer affecting women in sub-Saharan African countries (Adewole et al., 2013).

When people migrate from one region to the another, the picture is mixed. However, some studies show that immigrants⁵ are better than the host countries on NCDs (WHO, 2018). But there is a difference between immigrant - and host - communities when it comes to the prevalence of non-communicable diseases. Other study includes to show that, the occurrence of non-communicable diseases is reported as higher amongst immigrants than amongst the host

⁵ I used the word immigrant in the literature review because much of the literature refers to immigrants rather than refugees, the word refugee could be considered pejorative. However, I used the word refugee in my study participants as all of my participants are come to Norway as asylum seekers.

population (Modesti et al., 2014). A study conducted in the USA found out that 50 % of refugees who are adults had a minimum of one chronic non-communicable disease. The same investigation revealed 10 % of the adult refugees to have three or more NCDs (Yun et al., 2012). Other studies show that immigrants in Europe initially have a low risk of cancer but a higher risk of diabetes and some other diseases, while the risk of cardiovascular disease varies among different groups. This indicated that there is a big difference between immigrant and host countries in the risk of NCDs (Rechel et al., 2011). Other studies show NCDs are a problem for immigrants. They are often vulnerable to serious health problems with non-communicable diseases (Gele, Pettersen, Torheim, & Kumar, 2016). Studies done in Canada have shown that any non-communicable disease disturbs immigrant subgroups such as diabetes, asthma (Simich, 2009).

3.2.1.2 Health Information

“Health information is defined as a series of informational resources about disease prevention and health promotion that should be made available to patients and to the general population.” (Cristancho, Peters, & Garces, 2014, p.41). The distribution of health information is an essential part of health promotion. When it comes to Norway, despite the increasing number of refugees and cultural diversification, most healthcare information like brochures, printed materials (posters and booklets), the internet, and public service announcements on television and radio are available in Norwegian. Studies in Canada suggested that multilingual health information resources help the newcomers to avoid the unnecessary barriers of understanding and handling the health care system. This finding additionally identified health and social services as systemic problems because immigrants find them difficult to understand (Stampino, 2007). Moreover, the research further suggested the importance of producing health information messages that fit to individual populations rather than making them part of the general announcements (Stampino, 2007). Studies show that the inadequacy of purposeful health information may provide a decline in health status of immigrants over time (Zanchetta & Poureslami, 2006). According to Simich, the provision of written material alone does not prove the fact that there is “good health”. Key elements such as the methods of providing health information, social and cultural realities, and the period for the provision of information need due consideration (Simich, 2009). Research supports this argument conducted on immigrants in Norway (Gele et al., 2015). This study found out that the presence of health information might not be enough unless it considers the cultural considerations of the target groups. This indicated that health information should be user-friendly to the clients. Another study

conducted in Canada puts health information as one of the primary demands of immigrants (Simich, 2009). Thus the findings show how getting health information is essential to immigrants and refugees at an early day. Some studies (WHO, 2014a) indicate that the level of information that migrants are provided with is found to be less than the information provided to other non-migrant parts of the population. Other literature on Somali immigrants in Norway also confirms the fact that immigrants have limited access to pertinent health information regarding disease prevention in Norway (Gele et al., 2015).

3.2.1.3 Non-communicable diseases and immigrants in Norway

A review by Abebe (2010) reveals that immigrants have a higher risk than the non-immigrant population of getting a non-communicable disease such as obesity, diabetes, and cardiovascular diseases in Norway, but it varies greatly among immigrant groups (Rabanal, Lindman, Selmer, & Aamodt, 2013). According to Diaz et al., 2015; and Edberg, Cleary, & Vyas, 2011), immigrants have better health than the native population but lose their health status after a long stay in the country.

The cancer registry of Norway (CRN) deliver a screening invitation letter, written in the Norwegian language, to all women between the age of 25 and 69. However, some research confirmed the fact that immigrant women have lower participation rates in cervical and breast cancer screening than non-immigrants in Norway (Leinonen, Campbell, Ursin, Tropé, & Nygård, 2017; and Mohammed-nur, Mburu, & Madar, 2018). In many European countries, the prevalence of cancer is lower among immigrant groups than among the population of the host countries (Rechel et al., 2011). Little research has been conducted on NCDs for immigrants (such as cancer, diabetes, stroke, and heart attacks) in Norway, but more research has focused on communicable diseases and mental health (Abebe, 2010; and Spilker, 2012).

4. Methodology

4.1 Research design

The study explored the NCDs health information among Ethiopian and Eritrean refugees living in Bergen. I chose a qualitative research design for this study, to examine and understand the research participants' understandings, attitudes, perceptions, motivations and behaviours on health with emphasize NCDs as well as health information. The reason why I chose a qualitative research design is that subjective understandings are not easily quantifiable, and I believe qualitative research design is more appropriate to achieve my study objectives. Qualitative methods are chosen when the goal of the research problem is to examine,

understand and describe a phenomenon and often used to study ideas, beliefs, human behaviours (Yilmaz, 2013). Therefore, qualitative research methodology is applied for this study, to explore and understand the research participants' perceptions and assumptions regarding health and the distribution of information on NCDs health information. A qualitative research method is more appropriate to achieve subjective understandings because the individuals who are being researched get, the opportunity to explain in more detail. According to Fossey, Harvey, McDermott, & Davidson (2002), qualitative research has become a popular form of health research today that is more appropriate to explore and understand individuals and groups' subjective experiences, feeling and attitudes of health-related issues.

As the purpose of this study was to explore the refugee-focused health information service on non-communicable diseases, using phenomenological design allowed the I to capture the relevant participants' thoughts, feelings, attitudes, and assumptions. Phenomenology includes an understanding of the internal aspects and discovering or exploring the individual or the group of peoples' lived experience (Creswell, 2013). This is an appropriate research design to (a) realise the context of the problem (b) label the experience of the study participants and (c) discover the meanings for the participants' and link to these experiences (Skovdal & Cornish, 2015). This research design tries to examine the human experience of an actual phenomenon. Moreover, we can collect information from individuals or groups of people in how they had a particular experience by referring to both 'what' they practised and 'how' they practised it through phenomenological research design (Moustakas, 1994, cited in Skovdal and Cornish, 2015).

4.2 Area of the study

The target population of the study were Ethiopian and Eritrean refugees who have legal residence permits and are living in Bergen municipality. Bergen is the second largest city in Norway and is located in the western part of Norway. Bergen municipality has seven districts; Arna, Bergenhus, Fana, Fyllingsdalen, Laksevåg, Ytrebygda, Årstad, and Åsane. According to Bergen municipality, the number of the population living in the city in 2017 was 278 556, from this 47 616 of the communities were immigrants from other countries around the world and this 6 672 are African immigrants. The share of Ethiopian and Eritrean immigrants from this number were 602 and 1 049 respectively (SSB, 2017).

4.3 Participants and recruitment

The participants in the study as shown in Table 2 and 3 were a total of 12 participants comprised 6 Ethiopians and Eritreans. The female groups comprised of 3 Ethiopians, 3

Eritreans (6). The men's group has as the same composition. Purposive sampling method (snowball-sampling techniques) was applied because the research requires participants in a certain age group. Besides it has been a challenge to get participants how are willing to openly discuss in the focus group discussions.

The inclusion criteria comprise being either Ethiopian or Eritrean, between 40 to 50 years old, a refugee with a residence permit, either sex and able to speak Amharic who has been living in Bergen municipality. The reason why I chose this age group was that they are believed to be vulnerable to non-communicable diseases. Efforts were made to recruit participants based on the set criteria but three of the participants in the women's Focus Group Discussion (FGD) were to be under 40 years old. This happened because of recruitment difficulty and snowballing effect. Male FGD participants all fulfilled the requirements. They attended primary or secondary school, and some acquired higher education in their home countries. Most have learnt Norwegian since arriving. I contacted some of the participants through the collaboration of the Christian Intercultural Association (KIA).

Table 2. Group of female participants

Pseudonyms	Age	Marital status	No. of Children	Stay in Norway (in years)	Occupations	Educational level
Marda	41	Single	1	8	Student at a language school	12 years of secondary school
Nardos	37	Divorced	2	6	Health assistance student	College
Alem	42	Married	3	9 1/2	Nursing home assistance	8 years of primary school
Zeretu	47	Married	6	11	Student & nursing home assistance	10 years of secondary school
Danawit	36	Single	no	5	Student at a language school	12 years of secondary school
Aida	35	Married	no	4	Student and working as a cleaner	11 years of secondary school

Table 3. Group of male participants'

Pseudonyms	Age	Marital status	No. of Children	Stay in Norway (in years)	Occupations	Educational level
Muse	48	Married	3	4	University student	Masters level
Abraham	47	Married	1	6 1/2	Student at a language school	7 years of primary school
Dawit	42	Married	2	7	Rehabilitation centre worker	Masters level
Ali	49	Married	3	8	Student & working as a cleaner	12 years of secondary school
Hanok	48	Single	no	9 1/2	Businessman	11 years of secondary
Syed	46	Married	no	5	House cleaner	College student

4.4 Methods of data collection

I applied three data collection methods in this study, namely Focus Group Discussion (FDG) and Individual In-depth Interview (IDIs) and document analysis. The FGD and IDIs create appropriate contexts for the researcher to exploit the 'insider' thoughts, believes and perspective of participants to address the philosophical underpinning of the qualitative research paradigm (Carter & Little, 2007). Those two methods were chosen to provide the opportunity to understand the perceptions, perspectives, knowledges and feelings of the group or the individual experiences about the general thoughts on health with emphasis on NCDs, the relevance of NCDs health information from them as well as how they promote their health. Therefore, in this study, I have chosen a combination of two methods to collect reliable and

comprehensive data, to understand the issues more profoundly as well as to allow participants to articulate their life experience in their understanding and perceptions. The data were gathered from primary sources (FGD and IDIs) while the secondary sources (that were presented to the research participants during FGD interviews) were obtained from websites (see Appendix 1). During data collection, I have been to Haukeland Hospital, different pharmacies, Introduksjons senteret for flyktninger, Centre for migration health, Cancer union and Bergen Røde Kors to get information resources on NCDs prepared in Amharic or Tigrigna languages.

Table 4. Secondary sources of health information

Health information	Mediums of information	Website
Health care service & system information	Amharic, Tigrigna	http://samfunnskunnskap.no
NCDs health information	Norwegian	https://www.helsebiblioteket.no

Two focus group discussions were organized, one group of females and one group of males, with six participants in each group. From those, I

selected one female and one male participant for individual narrative interviews who had personal experience with NCDs. Narrative interview is a particular kind of IDIs to elicit more information about particular story. I used the narrative interview because it gives the opportunity to talk about the personal story of the participant and get details as what happened when they found about their NCDs status. The reason for dividing the group based on gender is to make sure all participants are comfortable enough to freely express their perspectives, opinions, attitudes, and perceptions on the research topic. One of the group participants in the male FGD left the session because of his work commitment. It is to be noted that he has participated in almost an hour of the 90 minutes session. Each group discussions lasted almost one-and-a-half hours. Amharic language was used in both FGDs for the entirety of the sessions. I used the interview guide (see Appendices 3 and 4) with semi-structured questions. Amharic is the native language to all Ethiopian participants, but it is the second language for the Eritreans, but the participants can speak and understand it very well. This is because my study participants grew up when Eritrea was a part of Ethiopia and Amharic was the official language used at school and government bureaus (Hailemariam, Kroon, & Walters, 1999). The group discussion were done voluntarily. All group discussions were recorded with a digital sound recorder and Mobile voice recorder with the full consent of participants. Focus group discussions were conducted at Christian Intercultural Association (KIA) meeting room where only I and the participants were present. Both FGDs were provided with warm drinks and soft drinks like coffee, tea, and soda as well as fruit.

As I mentioned earlier, participants were selected through snowballing sampling techniques. The group discussion began by inviting the participants to say something about themselves. Most of the participants know each other before, but I knew only two participants (my acquaintance with the two was during our time at the introduction program in Bergen municipality). This was meant as an ice breaker and to know about them for a personal profile. I believed that if I asked questions about personal things directly, it might make them hesitant to tell about personal information like about age, marital status, family situation, and level of education because of their cultural and behavioural matters. After they introduced themselves, I explained a little bit about what health information means. Then I started with easy introductory questions based on a standard list of questions that guided the interviews (see Appendices 3 and 4). The discussions were lively. Nevertheless, I determined the topic in order to keep the focus of the discussion under the theme. The participants responded to the questions politely, and they tried to participate as well. Moreover, they respect each other through listening the different ideas, and they helped one other when it came to common issues of discussion in both group discussions. Before asking the questions about the context of health information on NCDs (sources, means, relevance, and understandability), I distributed the health information materials (brochures and internet materials) to the group participants during group sessions, and they discussed the relevance of the information in terms of age, language and level of education both on communicable and NCDs as provided in the brochures and the internet materials (see Appendices 1 and 2). The relevance of non-communicable disease health information was explored based on their understanding of health information materials provided to them during FGDs. However, both female and male participants were given as much time as they needed to articulate their ideas, experiences, perspectives and opinions. Throughout the session of the group discussion, participants were encouraged to use their own local terms, sayings and concepts to describe their knowledge, experience and practice about health including NCDs. In general, all participants expressed their feelings, thoughts, and assumptions without language difficulties. Therefore, this method of research is very important to understand their experience about health including NCDs.

After the FGDs, I arranged separate sessions for one to one individual interviews. I selected one participant from each group. The individual interviews were conducted in quiet private spaces, and at the University in Bergen library group room that is free of interruptions and handle confidentially. A standard list of questions that guided the individual interviews including appropriate follow-up questions (see Appendices 5). A sound recorder recorded all

conversations of individual interviews which a gain were conducted in Amharic. The one-on-one interviews were done voluntarily, and interviews were approximately one-hour.

Through narratives, I got a profound understanding of the individual stories, experience, attitudes, thoughts, perceptions and difficulties of health information about NCDs especially cancer and diabetes.

As mentioned by Rabiee (2004), focus group discussions as a qualitative research technique have become one of the most popular means of data collection in health research. FGD was the most applicable method because it was a well-organised way to access various perspectives from the participants about health including NCDs. Whereas IDI provided multiple personal detailed stories and experiences of a single person about NCDs and developed a deep understanding of the issues. Therefore, both methods complement each other to fulfil the objectives of the study.

4.5 Data Management

The data collected from the two FGD and two IDIs has been kept on a password-protected private computer. The audio data was directly transcribed to Amharic with the hard copy and anonymised during transcription. Then the Amharic data were translated into English. A copy of the anonymised data was shared with my supervisor. Only my supervisor and the I have access to this data. I took photos of my participants during FGD with the participants' consent to have evidence for my supervisor, after I showed those pictures to my supervisor, I deleted the photos from my phone and computer.

4.6 Data Analysis

The data were analysed using thematic network analysis, categorizing ideas into themes. According to Skovdal and Cornish (2015), the aim of unpacking a story within the data, thematic analysis is very significant to index and organise the data into themes. After translation from Amharic to English, my supervisor looked and kept track of the work. Then the data were coded using Nvivo software Version12, and the data were analysed using thematic network analysis of the data succeeding Attride-Sterling (2001). Before data analysis, I took part in a one-day workshop on data management and analysis, it was vital to provide a clear description of the analytical procedure (Attride-Stirling, 2001).

First, I organized coded text from the interview transcripts as they came together from the raw data. Secondly, codes were then grouped based on their similarities and patterns. Basic themes were formed and connected to the codes in the third stage. Finally, I used the organised

themes from the basic themes categories, which were grouped together to summarize more abstract principles. Six organized themes were identified, which are described in the main section below. The global themes could be taken as the four quadrants that I used deductively in the discussion chapter. During the process of analysis, I returned to the data from both the Amharic transcriptions and English translation materials to ensure the ideas matched with the participants had initially been expressed. As seen in the table below, there were six organizing themes that came up deductively, but codes and basic themes emerged inductively (see Appendix 6 also).

Table 5: Summary of themes developed during the analysis of FGD and IDIs with target groups

Basic themes	Organising themes
- Mental and physical health	Understanding about health
- Values, attitudes, and beliefs about health	
-Thoughts, attitudes, and beliefs about NCDs	
-Physical health	Keeping oneself healthy
-Social health	
-Values and attitudes	
-Integration	Health motivation
-Family	
-Have a good life	
-Encouraging environment	
- Social support for health	Health and cultural values
-Cultural and spiritual practice	
-Emotion	
-Cultural silence	
-Behavioural change	Perception about NCDs
-Discovering & symptoms on personal NCDs	
-Health service delivery to NCDs	
-Knowledge acquired about NCDs in Norway	
-Health care services & systems information	Health information
-NCDs health information	
-Source of health information	
-Means of accessing information	

4.7 Trustworthiness

To determine the trustworthiness of the findings of this study, it is crucial to take into account the credibility, dependability and transferability of the research. Credibility refers to “the confidence in the truth of the study” (Polit and Beck, 2014 cited in Connelly, 2016). According to Graneheim and Lundman (2004), it is critical to select the most appropriate method of data collection so as to make the study credible. To that end, I used triangulation of data generation (FGDs, IDIs and document analysis). This helped me not only to triangulate the information, but also one of the methods gave me thick descriptions regarding some of the processes that are not described in the others. Besides I have looked at health information materials regarding

health service and NCDs health information (flyers, brochures, and internet materials) that are designed for refugees.

Dependability is defined as “the stability of the data over time and conditions of the study” (Connelly, 2016, p.435). Dependability is addressed by giving detailed information about selecting, justifying and applying the research strategies, procedures and methods of data generation techniques used (Yilmaz, 2013). I designed this study with guidance from my supervisor. We ensured that the research methodology frames were preferable to the research questions. I used a tape recorder and interview guide to strengthen the dependability. So that I can document the words and sayings of the participants in their originality. All the discussions were transcribed and translated into English with as much accuracy as possible. Besides, to enhance the dependability, the data was coded with the help of my supervisor. I cross-checked translations to ensure I did not commit mistakes during translation.

Transferability is defined as the degree of worthiness of a research’s results for individuals found in other contexts (Connelly, 2016). The fact that the findings of a research project can be transferred “to other similar settings” strengthens its transferability (Yilmaz, 2013, p.320). Some of the findings of this study might be transferable in studies of refugees in similar situation. This study has also used information from other literature that are used to show the gaps or confirm previous studies.

4.8 Role of the researcher

I am a master’s student at the University in Bergen on the Global Development Theory and Practice program specialising in Health Promotion & Development. In the GLODE307-Development Practice course, I had worked on a project with my group members. Our task was “mapping services and activities provided in Bergen for adult refugees and the groups of refugees who excluded or marginalised from participating in the activities”. In this project, I was involved as an interviewer with my other group members I learned a lot about how to be a good interviewer as well as how I could approach refugees.

I am from one of the participant countries in this study. I have been living in Norway as a political refugee for the last 5 years and have now passed through the stages of the asylum process in Norway and am finally settled in Bergen municipality. I had been working as an intern at Christian Intercultural Association (KIA) for the previous four months dealing with immigrants in general, especially refugees. Therefore, my previous experiences are resources to building strong relationships with the study participants; this had an advantage for understanding the respondent’s point of views more easily. I tried to motivate all participants

to reflect on their experience, feelings and beliefs about health including NCDs, particularly NCDs health information from different aspects. Apart from this, I had been working as a journalist, and this experience helped me to be a good interviewer and handle the participants with respect and to be a good listener to raise significant follow up questions. My background as a journalist was not revealed to the interview subjects and I presented myself only as a student. It was important that the participants understood the objectivise of the study , so that they can expires their opinions freely during the discussions.

One of the key roles of the researcher is to tray not affect the quality of data. The age is one of the things that could affect the quality of data. So most of my participants are more than 40 years old and they are pretty well educated. First, I meet with the FGDs and I know very well. I provide same kind warm and soft drinks like coffee, tea, and soda as well as fruit. And I respect them, and that came willing to came to tell me the narrative interviews. I had to work to make sure that I and they did not affect the quality of my data. As much as possible I cared about the credibility of data, and the data should be free from my previous knowledge. I did not want to influence my data due to my prior knowledge of the issue under investigation. I tried to be inquisitive to learn their individual and group experiences especially on NCDs.

4.9 Ethics and Ethical considerations

Before data collection, I applied for ethical clearance to the Norwegian Centre for Research Data (NSD) regarding the confidentiality of the information, the anonymity of the informants and safe storage of the data (see Appendix 7).

Through the study, I provided a detailed explanation for the participants about the overall objective of the research and its purpose, participant right to withdrawal, and the right to seek some clarification before the discussions began through Amharic (see Appendix 8). I distributed the informed consent form to all participants, they read the consent forms correctly after that those who agreed to participate in the study, and they have signed the informed consent forms, the informed consent form written in Amharic (see Appendices 8 and 9). Both focus group discussions and interviews were conducted on the free will of the participants. I did seek informed consent from participants before voice recording during the interviews and focus group discussions. I informed the participants that the information they gave will be kept confidential and will not be transferred to a third party or will not be used for any other purpose apart from this study. I provided them some refreshment warm and soft drinks like coffee, tea, and soda. Moreover, I treated my participants with appropriate respect as well as I arranged a convenient time place where they feel comfortable.

5. Findings

5.1 Introduction

This chapter deals with a presentation of the findings emerged through analysis of the textual data collected from Ethiopian and Eritrean refugees in Bergen concerning information, experience and perception about health with emphasis on NCDs (see Table 5 and Appendix 6). For the convenience of presentation, the findings are divided into six organising themes namely, understanding about health, keeping oneself healthy, health motivation, health and cultural values, and perceptions about NCDs as well as health information. Each organising theme consists of three to four basic themes.

5.1.1 Understanding about health

This organising theme of this study is to understand health. The participants in this study had individual or collective thoughts, feelings, perceptions, and understanding about health. Three fundamental themes created in this organising theme are mental and physical health, values, attitudes, and beliefs about health as well as thoughts, attitudes, and beliefs about NCDs.

Several participants described their understanding about health, as being free from any disease of mental and physical health. Almost all participants described the understanding of health considered physical and mental health issues.

We can't say a person healthy if he or she is affected either physically or mentally (Muse, 48 years old)

Other participant defined health as follows:

We say a person is healthy when he is internally & externally healthy. We keep our health as long as we take care of our body which we are given naturally from God (Zeretu, 47 years old)

Many participants during group discussions expressed the values, attitudes, and beliefs about health. All participants had several feelings, thoughts, perceptions, understandings about the importance of health. Some of the participants articulated their views on the needs of health for all aspects of life.

If a person is not being healthy, he/she can't study, he/she can't establish a family, he/she can't work, he/she can't make a friend. (Danawit, 37 years old).

Other participant described his understanding to underline the value of health.

Health means when a person can perform his or her day to day's activities without any health problems. (Abraham, 47 years old)

According to one participant health is decisive for all aspects of life.

Health is more than anything. If we don't have health, we have nothing (Heanok, 47 years old)

Still, others noted that having a good relationship with society is an important value in health.

For me, I call a person healthy when he works, when he worries about his family, when mountain climbs and when he or she has a healthy relationship with the society. (Alem, 42 years old)

For other participants health is related to ones the attitudes and beliefs.

Unhealthy thinking about others by itself is a disease. If I think evil, it means I am not healthy. For me, jealousy means "a hidden disease!" (Ali, 49 years old)

During both group discussions and individual in-depth interviews, participants talked about their thoughts, attitudes, and beliefs about NCDs. NCDs is not transmitted from person to person, and hereditary disease, as well as something that may occur at an early or old age. Some of the participants expressed their thoughts and perceptions about NCDs in the following manner:

Non-communicable diseases are diseases that can't be transmitted through air, contact or sexual intercourse. They may be identified at an early age or later. They could be results of internal or external causes. They are categorized under deadly diseases. As examples of this, we can mention cancer and hypertension. (Dawit, 42 years old)

Other participant noted NCDs is hereditary and it could be the result of lifestyle.

Non-communicable diseases could be hereditary or the result of our lifestyle. For example, smoking, consuming liquor with a high alcoholic content, unhealthy diet like eating fatty food. These could expose us to non- communicable diseases. (Muse, 48 years old)

Another participant described listing the types of NCDs as challenging.

I can say it is difficult to list down the non- communicable diseases. It is probably less difficult to mention the communicable ones like those that are caused by contact breathing or blood transfusion (Syed, 47 years old)

During IDIs the participants expressed their thoughts, attitudes and beliefs about NCDs, referring them as a fatal disease and with no treatment.

I was afraid because my understanding was that cancer is a deadly disease & there is no cure for cancer. My doctor was asking me repeatedly if I had had a cancer check up. However, I insisted on the fact that I had had the cancer check up. Lastly, I completed my eyes check up & I left the institution. After we left the health facility, I quarrelled with my son. (Marda, 41 years old)

The other IDI participant, Syed, who had an NCDs experience described the impossibility of identifying the NCD immediately.

It is not possible to make sure diabetes by taking the medical examination only once. The sugar level may sometimes go up & other times down. (Syed, 47 years old)

5.1.2 Keeping oneself healthy

Several participants of this study described keeping oneself healthy focusing on both the behaviour and physical health as essential elements. Thus, these themes include the practical strategies of the participants promoting their health through physical health, social health and values and attitudes.

Physical health has several important components including eating a balanced diet, exercising and getting sufficient rest, as well as having medical check up are extremely important for physical health. Some participants stressed the importance of doing labour work.

We ensure our health by working. For example, since most immigrants do labour work, they exercise for a long time. I think this is helpful for our health (Danawit, age 37).

During group discussions, some participants reflected the importance of labour work for physical health.

I used to do physical exercise three times a week. But now as I work on cleaning. I quit the training assuming that my job itself is an exercise (Syed, age 48)

Others noted the importance of avoiding what they called bad behaviour for keeping their health.

We ensure our health by not smoking & not drinking alcohol (Nardos, age 39)

In addition to physical health, social health is important to consider keeping them healthy. A healthy relationship, playing and sharing a meal with the people are highly significant for social health. The participants emphasised more the importance of social health by creating a good social relationship with the people as well as the community.

We promote our health by performing things which make us happy. For example, eating & drinking with people. Here in Norway, there are times when we forget one another with a person we live. This is not good for our health. To avoid this we play in groups, and we relax, and we can keep our health. A good diet without internal happiness is meaningless. Besides by creating a social bond with the community, I ensure my health. I try to prevent depression (Zeretu, 47 years old, have six children)

Other participants similarly expressed the importance of social relation for keeping their health.

I promote my health by creating a healthy relationship with people. Healthy relationship helps me to set my mind free & become happy (Danawit, age 37)

Like social health, most of the participants of this study described the significance of health values, and attitudes to be healthy. Some participants underlined the importance of satisfaction in life for health.

We try to be satisfied with what we have. By this, we create our internal stability and happiness (Aida, 39 years old)

5.1.3 Health motivation

Most of the participants during the group discussions revealed that they are motivated to keep their health for different reasons. Thus, this theme looks at the participants' life experiences and how they get inspired to maintain their health. In terms of what get motivated participants to keep their health, the following major reasons are realised by participants: integration, the family, have a good life and encouraging environment.

Several participants of the study said integration is hugely crucial to succeeding in education and get a professional job in Norway. During the group discussion, participants underscored their very immigrant status they have as encouraging to keep their health.

Being immigrant encourages me to become healthy. Migration without health is rather worthless (Zeretu, 47 years old).

Another participant described that integration has a vital role for immigrants, and they were highly motivated to be healthy.

I am forced to keep my health as the situation as an immigrant is difficult if you are sick. And also, I feel that I should be healthy to integrate myself with the Norwegian

community and to be employed as if it is even difficult to work for the healthy migrants let alone the sickness (Dawit, 42 years old)

Overall, most of the participants stressed that health is essential for all aspects of life. According that they are motivated to be healthy because health is everything for them.

My health is very essential to do everything like to study, to work and to establish a family. So, these things encourage me to keep me healthy (Abraham, 47 years old)

During the group discussions, participants said they get motivated to keep themselves healthy because of their family situations. The motivation of women participants to keep their health comes from the responsibility for their children.

I must be healthy for my children. "I would like to live for my child's sake!" (Alem, 42 years old, mother of three children)

Other single women participants noted the desire to establish a good family as an inspiration for being healthy.

My interest to establish a good family motivates me to take care of my health. To help my family (relatives), I must be healthy. If I am not healthy, I will be a burden to my family and the government. So, I must be healthy. (Aida, 39 years old)

In addition to a family, to have a good life is found to be very significant to motivate the participants to control their health. Some participants stressed their desire to live better and longer as reasons for taking care of their health.

To live better and longer and to lead our life better, we are motivated to keep our health (Muse, 48 years old)

Another motivation that participants mentioned as inspiring them to keep their health were the availability of mountain climbing track and walking paths in the town. One of the women participants during the group discussions described the existence of mountain climbing track and walking paths in Bergen initiated her to keep herself healthy.

Mountain climbing track and walking ways which are built by the Bergen municipality motivates me to keep my health. (Alem, 42 years old)

5.1.4 Health and cultural values

In FGD and IDIs participants described the significance of their collective cultures, values, and relationships as encouraging to promote the participant's health. On the other hand, participants described the culture influencing to discuss freely on NCDs issues. This organising theme encompasses four basic themes namely social support, cultural and spiritual practices, emotions, and cultural silence.

Almost all the participants of the study mentioned the importance of culture in helping exchange health-related information as extremely crucial for social support for health.

When I first came to Norway (seven years ago) since I was alone, I used to feel depressed and stressed. However, when my family came, and my social interaction gets better, I feel healthier. I found social interaction to be very useful. The doctors' advice and treatment might be important for us, our social interaction is vital for keeping as healthy. I say, "social interaction is a part of our life". When you interact with the same language and culture and discuss with immigrants, your internal health has a chance of stability (Dawit, 42 years old)

During focus group discussions, several participants of this study agreed on the importance of social inclusion for the exchange of health-related materials as well as the social networks better than health information materials.

Since we are immigrants, we get together on birthdays and religious occasions like in churches and mosques. So, the health information we exchange during such gatherings are better than those we get from reading. For example, we discuss the importance of fat-free food, the importance of our health, we also discuss about the importance of a balanced diet, and we eat in groups. This is also helpful for our health. We also discuss about the importance of physical exercise, swimming and likes. Health information we get from such social events are better than that of flyers, the internet, magazines and newspapers. (Dawit, 42 years old)

Like social support for health, cultural and spiritual practice are considered by the participants for significant for health. A culture of visiting and sharing information about health practice is an incredibly significant part of cultural and spiritual practices. During group discussions, most of the participants noted the vital role of social gatherings for health.

Our culture is suitable to reduce stresses. Our cultural values & beliefs are very important to reduce mental health problems which are caused by the country's system & weather condition. Generally, we can say our cultural values, beliefs & customs are very useful for our health (Nardos, 39 years old)

Another participant of the group discussion stressed the culture of family visits as very decisive for health.

We ask each other about sick relatives, children's health and about family's health. This is not customary here in Norway. This culture of visiting each other's family is very essential for our health. What we brought from our country will help us to talk about ourselves. When we meet each other, we ask one another about our health. Our culture is very useful to keep our health. For example, if a person who usually goes to mosque stops going the others ask and discuss about that person. If he is sick, we go and visit him. The person doesn't feel lonely and many recovers soon because of the hope and strength they get from us (Ali, 49 years old)

Another participant said

when a person passes away, we visit his family and share their mourning in condolences. When you are away, if you don't have a family, you will be exposed to the feeling of stress and pain. However, visiting a person or a family who lost one of his family members is very helpful for their health (Dawit, 42 years old)

Other participants in the group discussion noted the contribution of fasting and other health practices in the church as very significant for health.

When we go to church (Protestant) tea and coffee programs immediately follow the prayers. During this program we discuss many different affairs which reduce or avoid our stresses. The church in which we participate regularly organises a trip where we climb mountains once a week, we eat and drink light food and which we brought. There we discuss and relax. This is essential for our health (Syed, 48 years old)

Another participant noted the importance of fasting as per one's religion.

In our church (Orthodox) we have a number of fasting periods. During these fasting periods, we don't eat meat and milk products; our religious fathers also advise this. This, in turn, reduces weight and fat accumulation, so spiritual practices are very essential for our health (Abraham, 47 years old)

During the individual in-depth interview, an informant with diabetes shared his experience regarding the contribution of culture. He noted that cultural practice usually helps

to avoid stress, but they also provide us with a variety of foodstuff to chose from which helped him a lot.

When we go to weeding, birthday party and other ceremonies, there are different types of foodstuffs. So, the diabetic patient has a chance to select what is appropriate to his health. Therefore, we can say our culture helps us to get varieties of foodstuffs (Syed, 48 years old)

The participants of this study explained that common discussing issues generate happiness, and they feel peaceful internally which are extremely important for the emotions of the participants. Some of the participants argued that cultural values generate happiness.

Our cultural values generate happiness. Our culture contributes a lot to our health. Many people in Norway tell us, “Norway is a country which brings stresses. People get stressed, get mad and even commit suicide. But “rich countries are full of stresses”. We do not even know this disease in our country. But here they are in everyone’s day to day discussions. To avoid these problems, we need to have strong social contact. (Danawit, 37 years old)

Other participants of the study described that cultural values are very significant to discuss matters and have good health.

When we are invited for a birthday, wedding or any holiday, we meet lots of people. This will help us discuss matters which make us feel happy (Alem, 42 years old)

Another participant said:

I go to church and discus with the people I meet there. Since we are talking the same language we don’t face a problem, we believe in God, and as a result we feel internally peaceful (Marda, 41 years old)

Fear and denial about NCDs are remarkably explained as cultural silence by the study participants during group discussion and the individual in-depth interviews as well. During the women’s group discussion, they described the reasons why they did not go for check up.

“I don’t want to hear about cancer. I am very scared” (Aida, 39 years old)

During the women's group discussions out of the six participants, five of them received the letter via post from the government to get a health check up for cervical cancer, but they did not show up for the check up.

When I was offered a residence permit, I had been given a letter to get check up for cervical cancer. However, I didn't do that due to the information I had that there is no cure for cancer. (Zeretu, 47 years old)

Only one participant in the women's group discussion had not received a letter from the government to get a cancer check-up. But she did the check up because of her sister's advices who lives in Sweden.

During the in-depth interviews, a participant disclosed the fact that she had received letters for check-ups but got tested only recently. It was a few months ago that she did that check because of a request from her personal doctor.

When I was legally allowed to live in this country, I was also repeatedly given a letter from Oslo to check up for cancer. Nevertheless, since I was afraid & I had no awareness, I didn't do the check-up. (Marda, 41 years old)

Overall, getting scared to speak about NCDs and hide NCDs status are observed that is in contrast to the usual social practice of open discussions.

In the first place, the community is afraid of discussing about cancer, and they don't even want the topic to be raised. Talking much about cancer doesn't have acceptance. I think there is a problem. The awareness about cancer most people have is limited. (Marda, 41 years old)

Other participants also agreed on the discomfort in the community when discussing about NCDs.

Our community doesn't like to discuss about NCDs. We hide information about NCDs. Nevertheless, there is one saying in my homeland "There is no cure for him who hides an illness!" (Syed, age 47)

In the IDIs, Marda, who had NCD experience described the reasons as to why people hide information and get and scared about NCDs.

We had no awareness and relevant information about NCDs. Probably because of a lack of awareness about NCDs health. (Marda, 41 years old)

5.1.5 Perceptions about NCDs

This organising theme of this study is a perception about NCDs health which focused on the individual and collective understanding participants of thoughts, feelings, and perceptions about NCDs. The data from this organising theme were taken from two narrative interviews-based information that comes up during the FGD sessions. This is done because the FGD sessions did not allow answer questions related to personal NCDs experiences. Four

basic themes are created in this organising theme: First is discovering and symptoms on personal NCDs. The second theme is behavioural change. The third theme is health service delivery to NCDs. Knowledge acquired about NCDs in Norway is the fourth and final theme.

The two individuals interviewed in IDIs had experience in cancer and diabetes, and they described the symptoms and how they discovered both NCDs problems during the in-depth interview. Both personal NCDs symptoms identified and discovered through diagnosis from health institutions. Marda had a problem with walking properly, bleeding in the womb and finally symptoms defined in the cervix at Haukeland hospital.

They told me that a symptom was seen in my cervix . They also told me that they couldn't be sure about whether or not it was cancer. They told me that I had to make an additional diagnosis. Then after I had the additional check-up with lots of medical tools, I was told to come for the result after a month. I went to the hospital on the date of the appointment. Again, they told me that there was still something in my cervix . I was also told to make a further diagnosis. They showed me the sample which is taken from my cervix. I had to wait for a month & a half to see the result. Fortunately, I was told that I was free from cancer. However, they also told me that there is something to be removed from the womb through operation. The doctor told me that if it was not removed, it would turn in to cancer. They asked me if I agreed to be operated. Then I agreed & I was given an appointment for the operation, and they removed it. Finally, they confirmed to me that I am free from cancer. "He who conceals his disease cannot expect to be cured!" (Marda, 41 years old)

Though the doctor at last verified that Marda is free from cervical cancer she had suffered a lot in the process of various diagnosis.

I was not sleeping & eating properly; I was always crying. I was unable to work. I dropped out of my language school. Since I was totally hopeless, I was immensely stressed. I was calling my intimates to tell them that I was going to die. I also caused stress not only on myself but also on my family & children. (Marda, 41 years old)

Like Marda, Syed also discovered his diabetic problem through hospital examination.

I found out my diabetic status after two or three medical examinations. I remember my sugar level was usually measured before any meal. It is checked through urine & blood examination. It was a specialist doctor, not the general doctor whom I was visiting. The problem is an increase in sugar level. (Syed, 47 years old)

Those participants who had NCDs experiences are very aware of the importance of cervical cancer check up and that affect that they are advising others are the indication of behavioural change they have for NCDs.

Now I have got a lesson, and I have learned the importance of having cancer check up. This time around I advise my friends to have a cancer check up. When I ask my friends if they had a cancer check up, most of them tell me that they haven't had one. They are afraid; they usually tell me not to mention anything about cancer. However, I tell them it is useful if they have the check up. The problem is people do not have the information about cancer. (Marda, 41 years old)

Another participant in the in-depth interview emphasised on refraining from high carbohydrate foodstuffs and doing health-related practices as very crucial for the diabetic case.

I have been performing several things after I found out that I am a diabetic patient. For example, In the evening I take snack food, fruits & vegetables for dinner. If I do physical exercise in the morning, I take some food. I also take light foodstuffs for breakfast. I am aware of not only the volume of the food I take but also the time when I have to take. I usually don't take foodstuffs with carbohydrate contents. I regularly walk & do physical exercise I select the type of foodstuffs I eat. I don't eat sugar, carbohydrates, and fatty food. I visit my doctor for check up every three months. We discuss about the drug I take. (Syed, 48 years old)

According to informants of this study counselling service, getting an essential examination and obtaining apparatus are some of the health service delivery to NCDs. Both Marda and Syed have made descriptions of the health service support they have been getting.

I got the check up & other services. I have got pieces of advice on the importance of having a check up for cancer from a private doctor. I have got the necessary examination from Haukeland university hospital (gyneklogisk avdeling). They removed something that could have caused cancer from my womb. I can check up for cancer every three months. I have got counselling services. I want to say thank you for all doctors who helped me during that difficult time. (Marda, 41 years old).

Similarly, Syed expresses his experience regarding the health service he has got from health services.

In addition to my private doctor, I am supported by a doctor who specialised in diabetes. I visit the doctor once in three months & get diagnosed. I get essential drugs.

I also get counselling services. I was provided with the apparatus to measure my sugar level (Syed, 47 years old)

All participants of this study have been in Norway for 4 up to 11 years. Most participants stated that they have a better understanding on NCDs after they came to Norway. They have now realised the categorisation of (communicable and NCDs), and they have learnt the varieties of NCDs (diabetes 1 and 2, different types of cancer, heart disease, and hypertension). Overall most of the participants of this study acquired knowledge about NCDs in Norway. Before came to Norway, they had different perspectives. Some participants have started to give priority to gaining knowledge about NCDs as they no longer consider the disease of the rich only.

It is after I had come to Norway that I got a better understanding about NCDs. For instance, hypertension, diabetes & cancer are so-called “Diseases of the rich” in my country. However, after I had come to this county, I realised the fact that they don’t only belong to the rich. When I was in my country, I didn’t have the knowledge and awareness. I understood them after I came here. (Zeretu, 47 years old)

Other participants of the study realised the issue that children are also victims of NCDs as new information.

After I came here, I learned & realised more about the fact that children are also victims of NCDs. I in particularly, realized the fact that there are children who are suffering from of diabetes & cancer. (Alem, 42 years old)

Another participant described how she used to associate NCDs with age.

I also learned the fact that there are varieties if diabetes & cancer after I came to Norway. When I was in my country I thought that only overage so were NCDs victims. (Aida, 39 years old)

For another participant being inactive physically exposes to NCDs.

Our day to day movements here in Norway are relatively less. Therefore, I know sitting for a long time exposes as to NCDs (Ali, 49 years old)

Several participants also considered good to learn and practice the Norwegian culture and lifestyle

Regarding our lifestyle, information about the ingredients and amounts of nutrients of the food items like meat, milk is written on the packed food in shapes. These will help us prevent NCDs by getting information. I have also learnt about the culture after I came here. Norwegians do like walking like climbing mountains, probably I have learnt

the fact that this will help to prevent the NCDs. I thought that it is connected with health. (Muse, 48 years old)

During the group discussion another participant said he got a better knowledge of the complication of diabetes after he came to Norway.

Especially, regarding diabetes, if a person doesn't get check up & didn't know for a long time the fact that he has the disease, it may lead to blindness. I realised the fact that diabetes related complications can lead to blindness. (Ali, 47 years old)

5.1.6 Health information

The findings of this section on health information is based on the reaction of FGD participants on the material I presented to them. The materials are grouped into two namely - those with information on health care service and system information and that information on NCDs (cancer, diabetic, and heart disease). The materials on health care service and system information are taken from <http://samfunnskunnskap.no>. They are produced in Amharic and Tigrigna. The NCDs health information materials are taken from <https://www.helsebiblioteket.no>. These materials are entirely written in the Norwegian language. All of them are presented in printed format at the FGD.

Accordingly, almost all participants highly emphasised on the importance of health information. (*Better to take preventive measure than suffer in pain latter!* (Direct translation) (Ali, 49 years old). They described the role of health information in preventing NCDs. Four basic themes are considered here: health care services and systems information, NCDs health information, source of health information, and means of accessing information.

Almost all participants have used the health care service and systems information from the government when seeking support such as emergency, paediatric care, and mental health care. Most of the participants stressed that they received health information mainly on the seeking of support from health institutions by their language.

When I came to this country the health information I received focused mainly on how we can get health institution's services. We, immigrants usually receive health information mainly about communicable diseases from the government. (Muse, 48 years old)

Overall, the participants emphasised health care service and systems information presented in their own language is essential and is benefiting them.

It is good that the health services information are written in our own language. (Muse, age 48)

On the other hand, almost all participants of this study noted the difficulty of understanding NCDs health information in terms of language and level of education during group discussions. All participants stressed on the importance of NCDs health information for them. However, they did not get any health information on NCDs from their respected languages. None of the research participants have mentioned the presence of such materials in their languages.

Health information regarding NCDs are written in the Norwegian language. It is difficult to understand except for educated person. Because, in the first place, there is a language problem, Again, secondly, it is difficult to understand the medical terms it contains. (Dawit, 42 years old)

All participants have passed through the introduction programme, and they have learnt the Norwegian language, but they stressed that health information materials on NCDs are not immigrant-focused.

Health information regarding NCDs are not immigrant-centred. It is difficult to understand unless you are educated or you lived in Norway for a long time. (Muse, age 48)

Another participant said:

Health information about NCDs are prepared for Norwegian but not for immigrants; I don't think an immigrant can read and understand this information. An immigrant who studies health education can understand, but we don't feel that we immigrants can understand it fully. Generally, health information that we access regarding NCDs are not prepared based on language and education level. Probably even if they existed, we couldn't access them. (Ali ,49 years old)

During group discussions, most participants agreed that the health information materials are not inclusive when it comes to immigrants.

We immigrants even though we have learnt the language, it is still difficult to fully understand information written in the Norwegian language. Hence, it is not possible to say that the information is immigrant centred (Muse,48 years old).

Participants noted the difficulty of misunderstanding the information on NCDs during group discussions.

As far as my language knowledge is concerned I can't understand the information completely. I read it, but I can't understand it. (Syed, 47 years old)

This statement is supported by other participants:

We understand health information about NCDs is that they are written in the Norwegian Language for Norwegian. (Alem, 42 years old)

A website, you-tube and pharmacy are some of the sources of health information described by the study participants. The majority said that health institutions, introduction programme and personal doctor are the primary source of health information for them.

We immigrants usually receive health information mainly about infectious diseases from the government. (Muse, 48 years old)

Other participants described that people and community are also other sources of health information for them.

We get health information from the community. People talk about a person when that person is sick. We start than asking and discussing how he got sick and how he got better. Therefore, we receive health information from friends, relatives and families. (Ali, 49 years old)

Another participant said that the school book is another source of health information. *When we learn the language (norskopl ring p  Nyg rd skole) the book “stein p  stein”, we have learnt about the causes, types and the solutions for diabetes. For example, “Kom deg opp av sofaen!” (Syed, 47 years old).*

For participants of this study printed documents, internet, orally and face- to- face information from personal doctors (*fastlege*) are the primary means of accessing information. Almost all participants received health care service and systems information through an introduction programme ([Introduksjonssenteret for flyktninger](#)) in Bergen municipality.

We receive health care services. We get information by learning face-to-face in different sessions like the ones arranged by “Introduction program” for example we learn about the private doctor, emergency care, child health care, dental health care, etc. (Zeretu, 47 years old)

6. Discussion

6.0 Introduction

The purpose of this study is to explore the situation of refugee-focused non-communicable diseases health information materials and services accessed by Ethiopian and Eritrean immigrants living in Bergen. Moreover, this study tries to discover the understanding,

perceptions, and experiences of these refugees regarding health issues in general and NCDs concerning health information.

The discussion part of this study is essentially framed by the integral theory. Integral theory employs an analytical tool as a means of bringing multiple perspectives to understand the issue in detail by systematically emphasising and demonstrating various areas that encompass health, NCDs, and health information in the context of this study. Overall, the theory has four fundamental quadrants that can be used to examine any phenomena. The quadrants do not look at one point of the experience but explore the different dimensions or aspects of an experience (Wilber, 2005). In other words, the quadrants are closely linked and influence each other profoundly. When applying Integral Theory to this study, the quadrants look at various aspects of understanding, perception and experiences regarding health, NCDs and health information. This approach is very helpful in organising, explaining and pointing out the individual and collective experiences of the people. To understand the complexity of the perceptions, perspectives and experiences each aspect must consider and be associated with the nature of the four quadrants. As put by (Wilber, 2005) the quadrants “tetra-mesh” which means that all the aspects are parts of the same experience, and they are all interconnected to each other.

In this section, I will try to discover the links, relations, and influences in order to create a better insight in to the understanding, perception and experience of research participants. This includes investigating knowledge regarding health, NCDs, and health information including the role of social, cultural and spiritual practice on health among Ethiopian and Eritrean refugees regarding in Bergen. We can see how the interaction of the quadrants beased on the findings of this study.

Figure 2: connections between the four quadrants

<p>Individual interior (I) Values and attitudes for health Integration, family, having a good life Encouraging an environment</p>	<p>Individual exterior (IT) Physical and social health, Behaviour change Means of accessing information Discovering & symptoms on Personal NCDs</p>
<p>Collective interior (WE) Social support for health, Cultural & spiritual practices, emotions, cultural silence, mental and physical health, Values, attitudes, and beliefs about health and thoughts, attitudes, & beliefs about NCDs, Knowledge acquired about NCDs in Norway</p>	<p>Collective exterior (ITS) Health service delivery to NCDs Health care services and systems information NCDs health information Source of health information</p>

Before looking at the interaction of the quadrants, I summarise the findings briefly in each of the above quadrant. The findings in the lower-left quadrant showed that the participants' understanding about health and being healthy is to be 'free from any physical and mental disease', and they have awareness about the values of health. In addition to this, participants have different perception about NCDs. Some participants described NCDs as non-infectious, while others defined it as hereditary and still others characterised it as something that has no cure at all. Cultural values were found to be important by the study participants for helping them to exchange health-related information and to share information about health practice. They point out that, social gatherings can reduce stress, and create happiness which they said can make them 'feel peaceful internally'. However, they reported that they have fear discussing NCDs which is denial about the issues. Participants of the study disclosed that they started to acquire knowledge about NCDs after they came to Norway. According to the findings, the upper-right quadrant showed that some participants received NCDs health services from health institutions. The participants who had cancer and diabetes experiences are now more aware of the importance of NCDs check-up. However, this change comes after they went to health institutions and started to know more about the disease. The key factors to keeping oneself healthy, reported by participants, were eating a balanced diet, doing physical exercise, having a medical check-up, and creating a social bond with the community. On the other hand, in the upper-left quadrant show that the main motivations reported by participants for keeping themselves healthy were integration, family, having a good life, and conducive environment. Based on the findings of the study the lower-right collective exterior quadrants the findings showed that health care services and systems information to be immigrant centred while the opposite is true for the NCDs health information for the targeted groups. Regarding the sources and means of receiving health information participants mentioned pharmacy, website, YouTube, health institutions as some of the sources and face to face, internet, oral and printed documents as means of getting health information.

6.1 Collective exterior and individual exterior

Collective exterior comprises components such as health institution systems, services, structures, as well as the physical environment that play a significant role in shaping individual exterior elements, such as behaviour and physical health and well-being. Likewise, the components described under individual exterior have an impact on the collective exterior.

Basically, immigrants in Norway are entitled to have access to health service in the same manner as the local population. To facilitate the public's access to health issues, the government provides health information about health care services and systems both on communicable and non-communicable diseases. Information provision channels such as the internet, brochures, and face-to-face communication are used to create awareness about health care service and system. In addition to the provision of health information, the health institutions in Norway supply different kinds of health services concerning NCDs. The systems and services play a significant role in shaping the individual behaviour of the study participants.

On the other hand, immigrants have an access to get health information from different sources such as the internet, website, YouTube and health institutions. These sources of health information are essential to creating awareness, how the immigrants use health care services and system, as well as they can gain knowledge to keep their health. This personal awareness helps a lot for the government to control and prevent disease. Also, individuals can keep oneself healthy through eating well, doing physical exercise, having a regular medical check up. This is extremely helpful for both the individuals and the government also for disease prevention. Conversely, individual's activity to keep their physical health and mental health care support the work of the health system. In addition, the awareness levels of individuals regarding health can assist the function of the health system. The efforts and willingness of the people to make follow-ups on their health and especially their NCDs status can benefit the health system and services. On the contrary, the failure by reluctance by individual or communities to engage in the above-mentioned activities may result in impacting the health system and services. Therefore, individual exterior is highly interactive with the collective exterior and vice versa.

The findings show that almost all participants agree on the importance of getting health information for preventing NCDs. All participants confirmed that they had received information regarding health services such as emergency, paediatric care and mental health care. This statement is supported by a study (Stampino, 2007) that stressed the significance of providing health care service information to immigrants to avoid the unnecessary barriers of understanding and using of the health care system. The participants further noted the fact that the health care service and systems information which is provided in their respective languages as helping them. The study conducted in Canada suggested that supplying multilingual health information resources help immigrants (Stampino, 2007).

As to the key sources of information participants mentioned pharmacy, website, YouTube, health institutions, introduction program, school books as well as people and the community. In contrast to health care service and systems information, existing NCDs health information is not found to be relevant for the participants. They said NCDs health information is not prepared in their own language that makes it difficult to understand (see Appendix 1). Even though all participants of this study have been to Norwegian language classes, they found the information provided to them to be difficult to understand. Even those participants with more than 7 years of stay in Norway responded that they had found the materials challenging to understand. This situation has made participants consider the available health information on NCDs to be somewhat less immigrant centred. Furthermore, I was unable to find NCDs health information materials in either *Amharic* and *Tigrigna* languages relevant for Ethiopian and Eritrean immigrants, in different health institutions as well as in organisations working on immigrants in Bergen⁶. However the participants mentioned about the different events like introduction programme (Introduksjons senteret for flyktninger), and social studies for adult immigrants (samfunnskunnskap) where they have received information on communicable diseases like tuberculosis as well as harmful traditional practices (HTPs) such as female genital mutilation (FGM). But they could not mention a single forum other than a reading on diabetes related topic at a language lesson where they have received awareness or education.

Even though NCDs health information is found out to be lacking among the research participants, health institutions are providing NCDs health service to some of the participants. These participants were able to get diagnosis and counselling services as well as the supply of apparatus and medicines. The Norwegian government distributes an invitation letter for a cancer screening service through postal addresses to all immigrant women aged between 25 and 69. This concerns those who are living legally in the country. Even though the government sends the letters for immigrant women, they have not utilised the services. The findings show that in fact out of the six women, five have received the letters via post from the government to get a health check-up for cervical cancer. However, they said they did not actually go for a check up because of the lack of information on its benefits. This shows how awareness of the participants is affecting the performance of health institution systems and services. On the other hand, the health institution system and services also influence the participants' behaviour and exercise because of lack of awareness. Other empirical studies have shown similar results

⁶ During the data collection, I have tried to look for NCDs health information materials produced in the two languages (Amharic & Tigrigna). But I was unable to find ones.

(Mohammed-nur et al., 2018), providing the evidence the immigrant women are less likely to participate in cervical cancer screening in Norway. The study describes the reasons as to why Somali immigrant women are less likely to engage in cervical cancer screening in Norway such as unfamiliarity with cervical cancer screening, culture and religion, fear and embarrassment. The authors suggest for reducing these barriers and facilitating screening participation, awareness creation and the availability of translated materials to be significant.

Of particular interest in my findings is the case of one of my research participants and how she described her cancer experience. She has been receiving letters frequently for a cancer check up, but she did not follow up the check. Marda said she was able to conduct a cancer check up because of her doctor who insisted on the cervical cancer test. She needed a test because she said she had a problem with '*walking properly and bleeding in the womb*' (Marda). But she did not tell the symptom for her personal doctor because of fear and denial. Eventually, it was her test at Haukeland university hospital that confirmed cervical cancer. Another participant also recounted his experiences about how he came to discover his diabetes problem through hospital examination. In the study (Mohammed-nur et al., 2018), it was found out that the consulting with a doctor for NCDs screening and illness prevention is unfamiliar among most of the Somali immigrants who go to health care when they get sick in Norway. Therefore, many NCDs are likely to go unidentified until a difficult situation arises. Other recent study shows the fact that, immigrant women have been found to have breast cancer earlier than women do in western countries. They also get a more aggressive type of breast cancer than western women. I think it can be due to many factors such as the cultural difference in diet, physical training, etc. They also believe that cancer is not discovered earlier because in Norway women are invited to mammography after they turn 50. For the immigrant women that would be too late (NRK, 2019).

The findings reveal that out of 12 participants in this study only two were tested for NCDs through health institutions. A review of other studies shows the fact that migrants in Norway have better health than the host country population on NCDs (Diaz et al., 2015). (Diaz et al., 2015) On the other hand, in the low and middle- income countries over 80% of all deaths occur as a result of (Alwan & MacLean, 2009). In the same way, in sub-Saharan African countries, NCDs especially cancer, diabetes, and cardiovascular disease are the leading public health issues (Adewole et al., 2013). According to some studies, immigrants are much vulnerable to a severe problem with NCDs (Gele et al., 2016). According to a study conducted

in Denmark more incidence of coronary heart disease is registered in non-western immigrant groups than the Danish ones (Bo, Zinckernagel, Krasnik, Petersen, & Norredam, 2015). On the other hand, a study regards migrants to have better health conditions than the locals at the early periods of their arrival. But it also admits that some of these migrants will be susceptible to risk of NCDs due mainly to lifestyles (De Backer & Maggioni, 2018). Based on other studies, it is not possible to conclude that my study participants have better health than the local Norwegians regarding NCDs. It is uncertain whether they are free from NCDs or not as they are not making check-ups through health institutions. Therefore, this calls for further investigation before they are claiming that the immigrants have better health than host countries concerning NCDs in Norway.

The participants who had NCD experiences are now more aware of the importance of NCDs check-up. This change is witnessed after they went to health institutions and started to know more about the disease. Because of their knowledge and experience on NCDs, they have started their advice includes the importance of cervical cancer check-up, refraining from high carbohydrate foodstuffs and doing health-related exercise.

6.2 Collective exterior and collective interior

Government health institution systems, structures, and services can influence culture, norms, beliefs, language, and a shared history of communities, but these norms, cultures and languages can also be influential to the development of those systems, structures and services. This is explained in this study by the connection between the Collective exterior and Collective interior that are linked and are mutually interaction. It is clear that the collective culture, beliefs, shared history and language have an impact on both the refugees and the Norwegian health system and service. It seems collective exterior is extremely significant to the provision of health information materials and delivering the health care service for the targeted groups, and the collective exterior plays a central role in the prevention of disease of the people. While the collective culture, values and beliefs are the most important for the health of the targeted groups, those factors are at the same level beneficial to the Norwegian health system. This denotes that, the collective culture, belief, language, and shared history have impacts of the Norwegian health system and services. Thus, how these two quadrants interact shapes much of the different aspects of health, NCDs, and health information experiences and perception of Ethiopian and Eritrean refugees in Bergen.

The findings show that the study participants have not received any relevant NCDs health information that considers their languages and level of education. Therefore, this shows how the Norwegian health institution system influences the health information immigrants have on NCDs. On the contrary, the collective interior influences the reception health information on NCDs. The NCDs health information which are written Norwegian language and the impact of the promotion of health among Ethiopian and Eritrean refugees living in Bergen.

The study shows how the common culture, value and relationships of the participants are supportive in promoting their health, helping both participants of the study and the health institution services and systems when dealing with health issues. The study participants identified their common culture as a significant element to exchange health-related information. Besides benefiting the participants in their health information, the culture of exchanging health information between participants helps the health system to function well.

Participants noted that social interaction is vital for the exchange of health-related information, and that getting health information materials from social networks are better than health information materials. The study on Somali immigrants' women in Norway suggested the importance of receiving health information in their languages through means of oral information, while considering written health information materials are not preferable (Mohammed-nur et al., 2018). A cultural and spiritual practice that entire vesting one another and sharing information are found out by participants to be significant for health. Other empirical studies have shown spirituality and religion can have a considerable influence on human health and behaviour (Miller & Thoresen, 2003).

The issue of hesitation to speak about NCDs is another finding in my study. There are studies indicating prevalent perception in communities considering NCDs as deadly and contracted by those who are sinners (Oystacher et al., 2018). The participants of my study said that they feel inhibited from discussing the issues and consider talking about NCDs a taboo inside their community. They also tend to hide their NCDs status if they know it. This clearly shows that this cultural silence has an impact on the health institution service and systems. However, two of the participants went to the health facilities seeking service. These individuals are resources as they will be creating awareness about NCDs in their community. This implies that the Norwegian health system needs to wake up and start providing NCDs health information through the respective languages of refugees.

The participants of this study mentioned cultural values as generating happiness for them. They argued that their culture allows them to discuss all health matters which help them to have good health. Overall the participants of this study said that their culture of discussing issues together creates happiness which they claim makes individual feel peaceful internally. Studies conducted on the contribution of health have similar conclusions. Research conducted in the USA revealed that cultural activity is useful for immigrants' health and well-being. This helps in improving psychological well-being, enhancing positive emotions and feelings and developing social connections with others. The study findings described that by engaging in various culturally meaningful activities, Korean immigrants have gained a sense of social, cultural, and psychological significance in life (Kim, Kim, Han, & Chin, 2015).

Concerning the participants' understanding about health, the findings showed that being 'healthy' meant to be free from any physical and mental disease as per most participants. Overall, the participants had several understandings, feelings, thoughts, perceptions about the importance of health such as the needs of health for all aspects of life and having a good relationship with society as an essential value in health. Like health, participants have different perception about NCDs. Some participants described NCDs as not infectious, while others defined as something as hereditary and something that could be the result of lifestyle. Similar results have been identified in other empirical studies that consider a sedentary lifestyle and an unhealthy diet as the most risk factors for NCDs especially diabetes. Sedentary lifestyle combined with the consumption of an unhealthy diet because of poor access to health information are considered causes of NCDs among Somali immigrants in Norway (Gele et al., 2015).

As mentioned above, some of my research participants described NCDs as diseases with no cures at all. Still, others characterised NCDs as fatal and with no treatment. This participant perception has an impact on health services. Even though the participants have various perspectives about health and NCDs, most of the participants of this study learned new knowledge about NCDs after they came to Norway. The participants of this study have been in Norway for four up to eleven years. Before they came to Norway, they had different perception about NCDs like considering NCDs as a disease that only occurs among the rich. But as a result of the information they got informally they said that they '*no longer consider NCDs as the disease of the rich only*' (Alem). They now understand the categorisation and characteristics of effects of communicable and NCDs. Also, they have learnt about the varieties

of NCDs such as diabetes 1 and 2, different types of cancer, heart disease and hypertension. Overall the participants of this study acquired better knowledge about NCDs than before they moved Norway. Because, they use sources of health information by themselves like YouTube and social media. Even though the change in awareness about NCDs came about without the contribution of the health information system, it could be helpful for health institutions systems and services in Norway.

6.3 Collective exterior and individual interior

The collective exterior and individual interior have also strong links as it is the case with the other quadrants. The individual internal thoughts, perceptions, attitudes and assumptions are usually shaped by the government structure, system, and the environment. The components of the individual interior equivalently can be influencing the government structure, system and the environment within the collective exterior. A more efficient use of systems, services and structures influence the individual interior components such as attitudes, perceptions and motivations to keep one's health. The fact that the health care service and system information is available in the languages of the refugees (i.e., Amharic and Tigrigna) enables them to have understanding and efficient use of the system. It must also be noted that the information provided pertains to infectious diseases only. This indicates more concern for infectious diseases rather than NCDs in this case. This shows how the collective exterior components are very important to shape individual attitudes and motivations and vice versa. The health institutions which are part of collective exterior create awareness which in turn contributes to the health of the public. In this act of health information, the two quadrants become highly connected by knowledge transfer and awareness creation through health information. Existing collective system and services and the physical environment can motivation of the individuals. If, on the other hand, individuals do not receive information their own languages and cannot understand the health system, there will be less use of the health service. This in turn implies underutilisation of the health system.

The government of Norway provides health information for people to create awareness. In addition to this, the municipality of Bergen is availing and building different infrastructures like mountain climbing path and walking track in the town for its residents. The availability of a conducive environment in the surrounding inspires people to work towards keeping their health. The surrounding environment which is collective exterior is very important to motivate people who belong to the individual interior component. On the other hand, the efficient use of

the existing conducive infrastructure and physical environment as well as the health awareness creation, in the betterment of the health of the people. This helps government's disease prevention efforts. This is a clear showcase of the interaction between the individual interior and the collective exterior in the study. This interaction may be affected by other factors such as access to healthy food items. For example, the affordability of fresh fruit and vegetables in the market by individuals may impact their ability to fulfil the motivation to consume healthy food. Other studies also support the performances of individuals to take fruits and vegetables on regular basis as a means of reducing susceptibility to NCD (Charles Surjadi, 2015).

With regard to keeping one health, participants have expressed different attitudes. They motivated physical exercise as not the only way of keeping their health. Some participants expressed their feeling of being satisfied with what they have in life as making them healthy. In the same way the participants of the study, almost all participants revealed that they are being motivated to keep their health for several reasons such as family, integration, have a good life, and inspiring environment. The findings also revealed that immigrant status by itself is a motivation for the participants to keep their health. They think that the only way of having a secure life as an immigrant is to become healthy and work.

Interestingly one of the women participants in my study, who is a mother of three children says she is motivated to keep her health for the sake of her children. Other women in the group also show this view. It is evident that women bear significant responsibility for their children. But I did not find a participant from the mean's group who mentioned that he is motivated to keep his health for the sake of his children. This indicated that the role of women's responsibility for children's is very important to motivate to keep in their health.

Farther, the study also reveals that the availability of mountain climbing track and walking path in the town of Bergen were inspiring for some participants to keep their health. with regard to this, participants of the study consider the infrastructures like waking path and climbing track as safe and encouraging facilities to use. Overall the collective exterior and individual interior quadrants are highly connected by knowledge transformation as well as awareness creation through health education. Collective system and services also institute for the recognition of how motivation arises from the external surrounding. And individuals are motivated to keep their health is very important for disease prevention. On the other hand, they affect each other. As health promotion scholars argue, one needs to understand environmental factors that can influence the characteristics of individual motivations in the investigation of

the surrounding environment and individual motivation in health. (Green, Tones, Cross, & Woodall, 2015). This shows the interaction between the components of collective exterior and individual interior.

6.4 Collective interior and individual interior

Collective interior consists of segments such as cultural values, beliefs, attitudes, relationships, and cultural background that play a vital role the individual interior element, such as thoughts, attitudes, sense of spiritual connectedness, beliefs and motivations. In a similar manner, the components identified under individual interior affect the elements of collective interior. This indicates that these two quadrants are possibly the most apparently mutually interconnected quadrants. As a human being we are continually shaping one another through interactions. As we know we have subjective assumption, attitudes, beliefs, and emotions individually. We have also universal values, norms, and beliefs collectively on the other side. These two quadrants are highly connected and influence each other. A community is made up of individuals what have cultural values, beliefs, attitudes and norms. These common things of the community shape the individuals. Moreover, cultural values, norms, beliefs as well as relationships develop in every individual member of the community. Therefore, the individuals have a contribution to the communities' belief, attitude, value, norms, ethics, and relationships. This indicates the fact that, the shared cultural background, shared history, and beliefs interact with individual attitudes, perceptions, feelings, understandings, and motivations.

My first questions to the participants of the study were concerning how they define health in general with emphasis on NCDs. Findings show that my participants have several thoughts, feelings, perceptions and understandings about health collectively and individually. Almost all participants in my study have a common understanding of what health meant to them which they consider to be free from any disease of 'physical and mental health'. Despite their understanding health, participants have different perceptions, thoughts, attitudes, beliefs when it comes to NCDs. Most of the participants have a sense that NCDs refers to something that is not transmitted from person to person. Some of the participants associated NCDs with a hereditary disease such as hypertension, diabetes and asthma. Some participants have described NCDs as challenging to list down as well as the impossibility of identifying the NCDs early. This study reveals that overall most of the participants believed that NCDs is a fatal disease and with no diagnoses. This kind of perceptions have an impact on the individual attitudes of the people. Because of these types of perceptions might influence individual decision to be tested for NCDs. The study participants indicated that their shared culture, values and

relationships are essential in promoting their health. When a person dies, there is a culture of coming together ground fancies of the deceased to express condolence and comfort relatives. During such occasions they discuss each other on the cause of death. that time, they ask each other how the person died.

Findings also show participants to have different thoughts, perceptions and understandings about the significance of health. Some of the participants put the importance of health for all aspects of life (study, work, and establishing family). Findings revealed that participants have understanding and beliefs about the values of health. Health is critical for all aspects of life for my participants. Moreover, they mentioned having a good relationship with society as vital for health. Unhealthy thinking about others is considered as a disease according to some of the participants of this study. These kinds of thoughts, assumptions, and perceptions have an impact on shaping individual attitudes about health values.

The other investigation of this study is understanding how cultural values, beliefs and relationships promote the participant's health. My findings point out that, collective cultures, values, and relationships are important to promote the participants' health. The participants' collective culture is helping the exchange of health-related information among them. This shows how individual attitude and understanding promotes health. For example, once Marda overcame the cultural silence she became a resource to her community members in creating awareness. This is mutually beneficial and helps each other. But the participants of the study revealed that there is a problem of discussing freely on NCDs issues. This perception has an impact on both the individuals and collective perceptions regarding NCDs. Almost all of the participants reported that they get health-related materials through social networks better than health information materials such as flyers, the internet, and magazines. A culture of visiting (family visiting) and sharing information about health practice is significant for my participants. They invit each other during birthdays, weddings and religious events like in church and mosques. This event creates the opportunity to the participants to exchange health-related information. And they can also have the chance to discuss matters which helps to reduce stress, and generate happiness, very vital to reduce the mental health problems which are caused by different health determinants.

6.5 Collective interior and individual exterior

Cultural values, beliefs, shared attitudes, and relationships can influence the development of physical health and well-being, behaviours, and activities of the individuals, but these individual behaviours and activities can also be influential to the collective cultural values, beliefs and shared attitudes.

The Ethiopian and Eritrean community have a common culture and tradition of inviting each other on birthdays and wedding and convening to gather during religious occasions in churches or mosques where they also discuss health issues. This is helpful for health information exchange and to gain knowledge about how community members keep themselves healthy. This helps in shaping individual behaviours. The collective cultural values and practices create strong social contact among individuals. Because of the social interaction, the individuals discuss matters of common interest like health. It is a forum for individuals who can express their feelings and emotions. This helps to avoid stress and generate happiness. The social occasions are events where a variety of food is served. This could also be helpful for individuals to have a chance to select what they like to eat and get to know food item that suits their health.

On the contrary, the common shared attitudes can impact individual behaviours. As observed during discussion with the study participants individual fear and denial about NCDs might be creating an impact on collective attitude on NCDs . These two quadrants are closely interacting with each other in terms of behavioural change on NCDs check up and use of health service on NCDs.

The findings indicate that collective cultures, values, and relationships are significant for the study participants' health. They have a common culture for example to get together on a birthday party, wedding ceremonies, and religious events in church or mosques. The cultural values and practice can create the opportunity for the participants to exchange health information through face to face communication. This is helpful for awareness creation about health for the participants as individuals can share their understanding of how they keep their health. An individual in the group shares own practical strategies for promoting health- through eating well, not smoking and drinking alcohol, and having a regular medical check-up. In addition, participants consider keeping their health through playing, sharing a meal with the people as well as having a good relationship with the community as helpful. The overall interpersonal relationships have their contribution to individual's health practices the

community. This shows the interaction between the collective interior and individual exterior quadrants.

My findings point out to the role of fasting and health practice in the church where participants belong to as avital for their health. Those who belong to Orthodox Christianity say they have a number of fasting periods which is approximately 250 days in a year (Seleshe, Jo, & Lee, 2014). During the fasting periods, followers do not eat meat, and dairy products such as egg, butter, milk, and cheese. This helps the individuals to lose weight and reduce fat accumulation, and it might be important in preventing NCDs. Among participants of the study, some of the protestant church members described that they have tea and coffee programmes where they discuss different matters which help to reduce or avoid stress. Their church also organized trips where the group members engage in climbing mountains and other activities. This helps people's health and to reduce stress and it might be helpful for NCDs. Similarly, other studies indicated that, religious involvement have strong positive outcomes in mental and well-being (Miller & Thoresen, 2003). The role of religious institutions in promoting the health of individuals is also supported by other studies According to my findings, the participants have reservation to discuss freely on NCDs. All participants admitted that their community does not like to discuss issues on NCDs and individuals also hide about their NCDs status. These collective beliefs, shared attitude and cultural background about NCDs affect individual behaviours. The fact that individuals are scared of discussing NCDs issues and rather hiding their status has its impact on the communities' attitude towards NCDs. I observed how much the participants were in discomfort when asked to discuss about cancer especially the women participants. Concerning their attitudes beliefs and perceptions about NCDs, most of the participants label NCDs as fatal and with no treatment. The prevalence of such perceptions towards NCDs by most participants can impact their motivation for earlier diagnosis or seeking treatment.

Of particular interest to this study is one participant's argument about this views that it would not make any difference in my life whether I find out my cancer status or not, because it will be going to kill me any way as it is not curable. Normally knowing my status rather adds stress in my life *I do not want to hear about cancer* (Aida, one of female participants). I can say the participants have limited awareness about cancer. Out of six women participants, five of them have received letters repeatedly from the government to check up for cancer. Nevertheless, they did not show up for a check up since they were afraid because of lack awareness and relevant information on NCDs. The same as true among the male participants,

out of six participants only one participant has a NCDs check up. Findings show that two participants with NCDs experience were able to go a hospital and did the NCDs check up when they got sick. But interestingly enough they have gotten a behaviour change and they are now trying to advise the others to check NCDs early in the health institutions.

The study shows that the participants of this study have got better knowledge about NCDs after they came to Norway. Some participants think now that being inactive physically exposes to NCDs. Some also said they learn and practice Norwegian culture and life style which encourage taking walks and always checking on information about the ingredients of nutrients of food items that are sold in the market (the packed food in shapes). This practice and knowledge could be helpful in the prevention on NCDs. This knowledge about NCDs contributes to the community's attitudes and individuals' behaviour.

6.6 Individual interior and individual exterior

The individual interior comprises components such as values, beliefs, and motivations that directly impact the individual exterior of behaviours, activities and physical health and well-being. In the same manner, the components described under individual exterior have an impact on the individual interior. The individual interior is not visible, but it is about internal attitude, thoughts and motivations that shape behaviours which in turn affect health outcome and physical health. On the other hand, the individual exterior is visible, and the individual behaviour and activities can raise the motivations and commitments of the individuals, and the individuals can understand the values of health. This interaction is particularly important in terms of what motivates to promote the participants' health as well as what do the study participants do to keep their physical and mental health.

Of the particular interests in my findings were also make them mention different explanations for getting participants of the study have different life experiences which inspired to maintain their health. The study found out that they are getting motivated for several reasons such as integration, family, for having a good life and inspired by the environment which are identified by participants themselves. As participants of study are refugees or immigrants, integration is found to be very important for them to succeed in education and get a professional job in the country. *'migration without health is rather worthless'* (Zeretu). Because of this, they are highly motivated to be healthy. Overall most of the participants get motivated to keep their health because they consider health as essential to do everything like to study, to work and to establish a family.

The findings show that family situations motivate the participants to keep their health such as the responsibility they have for their children, to establish a good family, to live a better life and longer. Beside the integration and family situation, the availability of mountain climbing tracks and walking paths in Bergen initiates one of my study participants. On the other hand, the findings show the fact some that participants are keeping their health to feel what they have (they feel satisfied what they have).

Most of the participants keep their physical health by eating balanced diet, exercising, getting enough rest, by not smoking, and drinking much alcohol. The fact that so few participants reported having regular health check-up indicates something missing in the motivation or understanding of its benefits. Studies recommended that, access to health care for all refugees and migrants is ensured through regular health checks for both communicable and NCDs by health institutions (Khan et al., 2016).

Some participants of the study are engaged in laborious work such as cleaning. This kind of job makes exercise them for a long time and so they find their job to be important for their physical health. In addition, some participants say, are keeping themselves healthy by making a health relationship with others such as playing and sharing meal with others. This helps according to the participants to avoided stress and depression.

To sum up, the quadrants highlight important components such as values and attitudes for health including NCDs, actions and behaviours, socio-cultural values and beliefs, cultural silence on NCDs, government health service system and structures. All components interact and influence one another and must be understood together to have a complete picture of the experience of the health including NCDs health information.

6.7 Limitations of the study

One of the limitations of this research is related to challenges faced while recruiting participants. During the recruitment of participants, it was not easy to pick study participants based on specific criteria, such as only those between the age of 40 and 50. As discussed in the Methodology chapter (Chapter 5), efforts were made to recruit based on the set criteria, but three of the participants in the females' group happened to be under 40 years old. In addition, getting the required number of participants especially for FGD session was challenge. I was compelled to cancel planned sessions three times. Most of the refugees feel uncomfortable and scared due to mainly personal political stands to participate in the study with others.

To collect qualitative data from a significant sample size needs time, but this work used a short time because of the limited size of the thesis. Therefore, from the sample size in this study, one could only understand the context and cannot draw a generalisable conclusion about Ethiopian and Eritrean refugees' experience, understanding, and perception about health with emphasises on NCDs as well as health information. Besides, even though I used a combination of qualitative methods to collect data, such as FGD, IDIs and document analysis, it would have been better to include stakeholders such as the centre for migration health office, and health information communication experts regarding the provision of health information on NCDs. Due to time and page limits of the research, it was not possible to include these stakeholders. The language used for presenting this study is English while I collected the data from participants in Amharic. During translation, I have exerted at most efforts to keep the opinion and message of the research participants. Difficulties of having literature reviews was another limitation. To my knowledge, there is a limited number of research outputs on refugees or immigrants in Norway concerning NCDs health information. More of the research has focused on communicable disease and mental health issues instead (Abebe, 2010; Spilker, 2012)

7. Conclusion and Recommendation

7.1 Conclusion

The overall objective of this study was to explore how Ethiopian and Eritrean refugees living in Bergen receive health information on NCDs and how relevant the NCDs health information materials/methods are with regard to issues such as language, level of education and age. Besides, the study intended to examine the experience, perceptions, and understanding of refugees about health with the emphasise on NCDs. A summary of key findings and implications in the study is presented below.

NCDs health information is not found to be unacceptable and accessible form for the participants because the information materials do not consider elements such as language, level of education and age for the participants. The available NCDs health information materials are produced only in the Norwegian language. The materials are not prepared in Amharic and Tigrigna languages and that makes it difficult to understand for my study participants. Even those participants have been to Norwegian class for a long time and have stayed in Norway for more than seven years find NCDs health information materials to be challenging to understand. Because of this, participants consider the NCDs health information to be less immigrant centred and they are less likely to take up health services such as screening for cervical cancer. The

participants confirmed that they have received information on communicable diseases like tuberculosis as well as harmful traditional practices (HTPs) such as female genital mutilation (FGM).

Concerning their understanding about health many participants, as an individual or a group, have different thoughts, feelings, perceptions and understandings. However, almost all participants in this study have a common understanding of health which they consider to be free from any disease of 'physical and mental health'. Despite this general understanding of health, participants have different perceptions, thoughts, attitudes, beliefs about NCDs. All participants reported that NCDs are not transmitted from person to person, are hereditary, and they thought the theme difficult to identify immediately. The participants also believe that NCDs is a fatal disease and with no treatment.

The government provides health information about health care services and systems on both infectious diseases and NCDs in Norwegian and other languages but not NCDs provided by other languages. Information provision channels such as the internet, brochures, and face-to-face communication are used to create awareness about health care service and system. The health institutions supply different kinds of health services including NCDs for the study participants such as diagnosis, counselling service and supply of apparatus and medicine for those who have NCDs.

The systems and services are playing a role in supporting the health of the study participants in Bergen. They have access to general health information from the Norwegian health institutions, websites, and the introduction program. As a result, the immigrants are able to use the health care services and systems such as emergency, paediatric care, mental health care, ambulance, medical specialist, family doctor, dentist, and emergency ward. Even if most of the study participants did not utilise the service, the government sends an invitation letter for a free cervical cancer check-ups service to all immigrant women aged between 25 and 69 in the Norwegian language.

The key practices and behaviours that participants mentioned for keeping oneself healthy were: balanced diet, physical exercise, by having a medical check-up, taking rest and enough sleep, avoid bad behaviour, ensure their health by engaging in laborious work (like

cleaning). Besides some mentioned, creating a social bond with the people and the community as helpful.

My findings point out that, collective cultures, values, and relationships are extremely important to promote the participants' health. The participants' collective culture is helping the exchange of health-related information. Almost all the participants agreed on the benefits of the health-related information they get through their social network better than the health information materials such as flyers, the internet, and magazines. The overall culture of visiting (family visiting) and sharing information about health practice is significant for my participants. Social occasions such as birthdays, weddings and religious ceremonius help move the participants to exchange health-related information. However, it needs to be noted here that the participants of the study revealed the existence of fear and hesitation to discuss freely NCDs among in their respected communities.

The study participants have different life experiences when it comes to being inspired to stay healthy. Reasons such as integration, family, having a good life and an inspiring environment (access able walking paths in the mountains), are identified to be major sources of motivation for participants.

7.2 Recommendation

My study can help as a stepping-stone for those interested in conducive more research in refugee's health information and NCDs issues in the future. The following set of recommendation may be considered for implementation by government and non- government structures involved in the integration and health support of refugees. This can include Norwegian Institute of Public Health (Folkehelseinstituttet), Introduction programme for Refugees (Introduksjonssenteret for flyktninger) and Centre for migration health (Senter for migrasjonshelse) in Bergen municipality and other like the Norwegian Cancer Society (Kreftforeningen), the Norwegian Diabetes Association (Diabetesforbundet) and The Norwegian Heart and Lung Patient Organisation (LHL).

- The study can by no means give an exhaustive investigation to “Non-Communicable diseases health information among refugees in Norway: The Case of Ethiopian and Eritrean refugees in Bergen”. There is a need to conduct more research on the subject to come up with a complete picture and result of the issue. A case in point, in this case, is that the assumption that migrants in Norway have better health than the local

population which is supported by some research findings. However, as it is evident from my study, it is not possible to conclude that the research participants have better health status than the local Norwegian population. Therefore, this calls for a future investigation.

- There is a need to provide NCDs health information which considers refugees with lower education level who cannot read and write as well as people of old age. It is also plausible to produce short film or documentary films on NCDs health information to create awareness among refugees or immigrants. The materials need to be in the mother tongue of the refugees.
- According to the participants, they have reservations discussing health problems related to NCDs. Awareness campaign on NCDs that could break the fear and silence of NCDs to be designed. Also, health information especially on NCDs which focus on prevention than cure needs to be provided.
- There is also a trend of visiting a doctor only if one gets sick, according to the information from participants. Awareness creation efforts also need to target this and encourage refugees to make regular health checks as well.
- Developing a website that deals with health issues including NCDs in the respective languages of refugees can also be helpful. Communication channels with refugees like sending invitation letters to females for a free cervical cancer test also need be in the languages of the refugees themselves.
- Health information in particular about NCDs needs to employ the involvement of key figures in the community such as religious and community leaders. They can use respect and trust in the community to pass messages related to health and NCDs in Particular.

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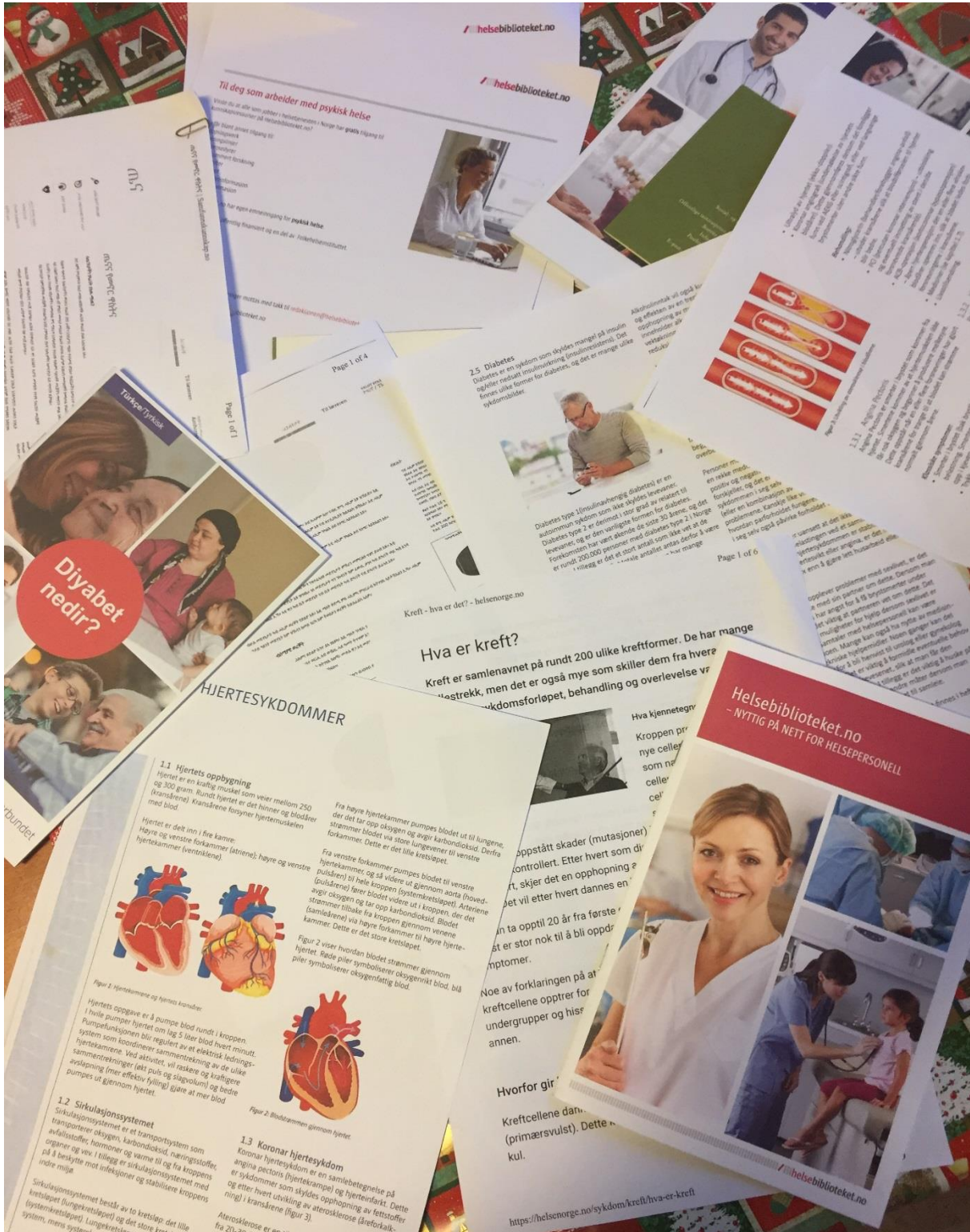
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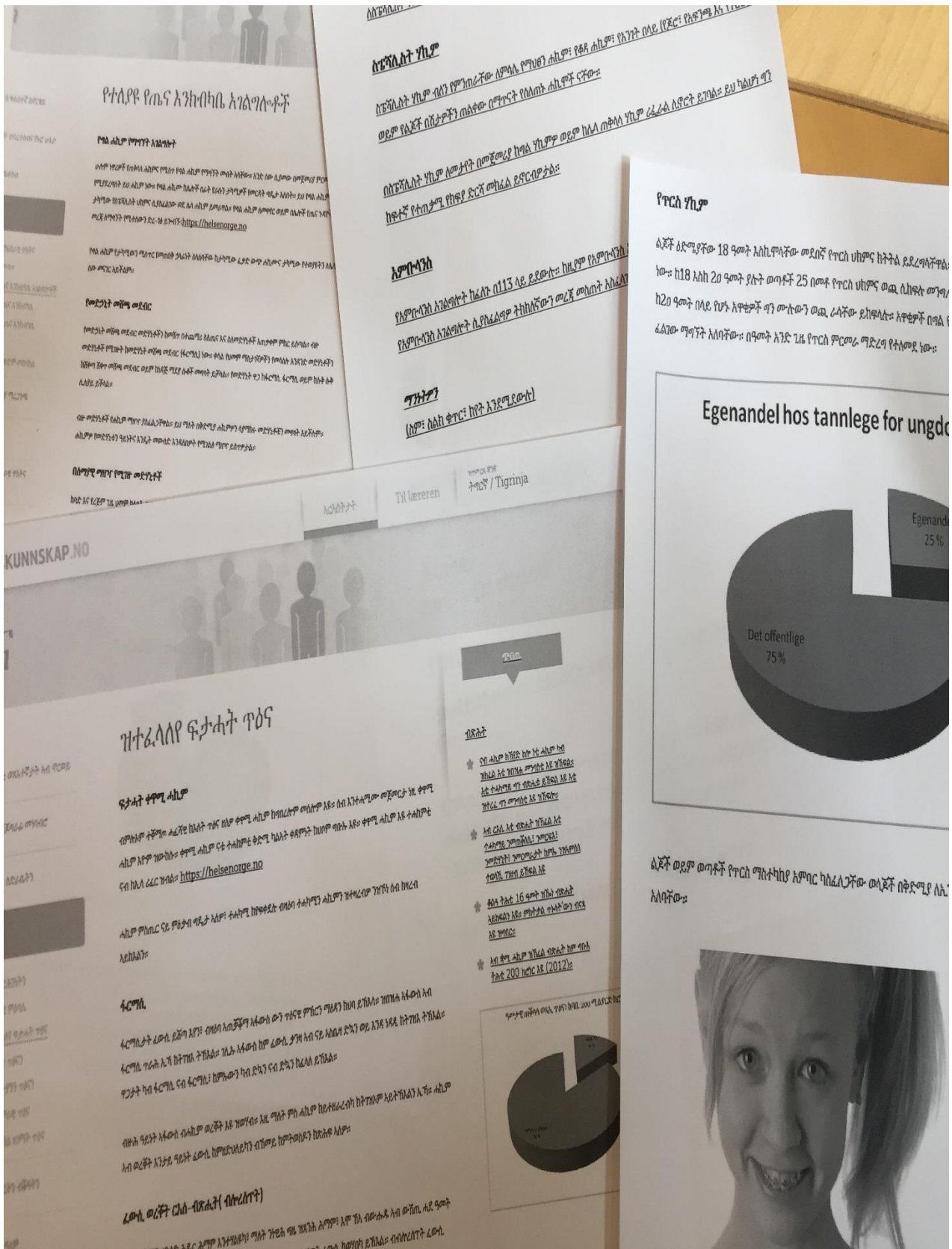
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APPENDIX 1: NCDs health information (internet materials and brochures) provided to the participants during FGD



APPENDIX 2: Health care service and system information (internet materials) provided to the participants during FGD written in Amharic and Tigrigna



Preliminary interview guide for Group discussion

Interview briefing

First and for most, I would like to thank you for taking time to participate in my research. My name is Tesfaye Tariku. I am a master's student in the Global Development Theory and Practice, Department of Health promotion & Development, Faculty of Psychology, University of Bergen. My specialization is Health Promotion. My thesis research topic is "Non-Communicable diseases health information among refugees in Norway: The Case of Ethiopian and Eritrean refugees in Bergen". I would like to discuss with you today about how do you receive and how health information on non-communicable diseases is relevant (user-friendly) to you. In addition to this, I want to know about your experience, thoughts, feelings, assumptions and attitudes about health including NCDs and how do you promote your own health.

I would first ask you to read the informed consent letter here that will give you a brief information about my research project. In the informed consent letter put your rights as participant and interpret how your group dissections and individual interview will be used. If you have any questions about this, you can ask me. I want to draw your attention to the letter regarding this interview; you can stop the interview at any time without giving a reason. I will use sound recorder and also I will take written notes during the group dissection and individual interview but I will ask your permission first. Finally, I can analyse the group discussions and individual interview responses in more detail at another time. This focus group discussion will finish within one hour and individual interview will take forty minutes. If you have any question before we begin the group dissection and individual interview please ask me.

Definition of health information: Before we began our discussions, now I will explain a bit about what is health information mean. Health information is very important to transfer health information for awareness creation and knowledge transfers about disease prevention and health promotion through different communication methods such as face-to face discussion, brochure, internet, print materials, films etc.

Interview guide for FGD

1. General thoughts about health including NDS

- How do you define health in general?
- What do you understand by non-communicable diseases?
- **Context of health information**
- How do you receive health information in general? (Face-to-face, text message, print document, e-mail etc.)
- How do you get health information? (At the doctor? on the internet or at the pharmacy?)
- What do you receive health information on NCDs?
- Through what mediums did you receive health information on NCDs?
- How relevant is health information is to your health information need? (How appealing is to you?)
- How understandable is the information to you? (in terms of language, level of education and age)
- What new things did you learn regarding on non-communicable disease after you came to Norway?

3. Context of Health promotion

- What do you do promote your health?
- Health behaviour Physical
- **Mental**
- How do your cultural values, beliefs and customs promote your health?
- What motivates to promote your health?

4. Concluding Questions

- Would you like to say more about anything we have talked about to day?
- Would you like to say whatever else about NCDs health information?

Thank you so much for taking part in this focus group discussion and participating in this research project.

APPENDIX 4: Interview guide translated in to Amharic for FGD

ለቡድን ወይይት የሚሆኑ መሪ ጥያቄዎች

የጥናቱ አጭር ገለጻ

በመጀመሪያ ጊዜያቸውን ሰጥታችሁ ለዚህ ውይይት ፈቃደኛ በመሆናችሁ አመሰግናለሁ። ተላላፊ ያልሆኑ በሽታዎችን በተመለከተ የምታገኛቸው የጤና መረጃዎች ምን ያክል ከእናንተ ፍላጎት ጋር የተዛመዱ እና አመቺ እንደሆኑ እንወያያለን። ከዚህ በመቀጠል የናንተን ልምድ፣ ሀሳብ፣ ሰሜትና ግንዛቤ በጤና ጉዳይ ላይ ምን እንደሆነና ስለተላላፊ ያልሆኑ በሽታዎች በተለይ ትኩረት በማድረግ እንወያያለን። ማንኛውም አይነት ጥያቄ ካላችሁ መጠየቅ ትችላላችሁ። ወይይቱን ከመጀመሪያችን በፊት የጤና መረጃ ማለት ምን ማለት ነው የሚለውን በትንሹ እገልጻለሁ።

የጤና መረጃ ማለት እጅግ አስፈላጊ የሆኑ የጤና መረጃዎችን በተለያዩ ዘዴዎች በመጠቀም ለምሳሌ ፊትለፊት በማስተማር፣ በራሪ ወረቀቶችን በማዘጋጀት፣ በኢንተርኔት፣ በፊልም እንዲሁም በህትመት ውጤቶች የጤና መረጃዎችን ማስተላለፍና ግንዛቤ ማስጨበጫ እና የእውቀት ሽግግር በማድረግ ጤናን በማስተማር በሽታን ለመከላከል የሚያስችል ነው።

1. አጠቃላይ የሆነ ጤና እና ተላላፊ ያልሆኑ በሽታዎችን በተመለከተ ሀሳብ
 - 1.1. ጤናን እንዴት ትገልጹታላችሁ?
 - 1.2. ተላላፊ ያልሆኑ በሽታዎችን?
2. የጤና መረጃዎችን እና ተላላፊ ያልሆኑ በሽታዎችን በተመለከተ አረዳድ
 - 2.1. በምን አይነት መንገድ ነው የጤና መረጃዎችን ተላላፊ ያልሆኑ በሽታዎችን ጨምሮ ታገኙ የነበረው?(ለምሳሌ ፊትለፊት በመነጋገር፣ በጽሁፍ መልክ፣ በኢሜል ወዘተ)
 - 2.2. ተላላፊ ያልሆኑ በሽታዎችን በተመለከተ የምታገኛቸው ወይም የሚሰጣችሁ የጤና መረጃዎች ከናንተ ፍላጎት ጋር ተያያዥነት ያላቸው ናቸው ወይ?
 - 2.3. የጤና መረጃዎችን ምን ያክል ትረዱቸዋላችሁ? (በቋንቋ፣ በእድሜ፣ በትምህርት ደረጃ)
 - 2.4. ኖርዌይ ሀገር ከመጣችሁ በኋላ ስለተላላፊ ያልሆኑ በሽታዎች ምን የተማራችሁት/የተረዳችሁት አዲስ ነገር አለ?
3. ጤናን ማስተዋወቅ/ማስፋፋትን በተመለከተ
 - 3.1. ጤናችሁን ለመጠበቅ ምን ታደርጋላችሁ?
 - 3.2. የባህል እሴቶች፣ ዕምነታችን እና ወጎች ጤናችንን ለመጠበቅ ምን ያክል አጋዥ ናቸው?
 - 3.3. ጤናችሁን ለመጠበቅ እንዴት ነው የምትካሄዱት?
4. ተጨማሪ ጥያቄዎች
 - 4.1. ካደረግኩት ውይይት በመነሳት ተጨማሪ የምትሉት ነገር ካለ?
 - 4.2. ተላላፊ ባልሆኑ በሽታዎች የጤና መረጃዎችን በተመለከተ የምትሉት ነገር ካለ?

የዚህ የጥናት ፕሮጀክት አካል ሆናችሁ በዚህ ወይይት ላይ ስለተሳተፋችሁ አመሰግናለሁ!!

APPENDIX 5: Interview guide for IDIs

Interview guide for Individual interview

1. How old are you?
2. What nationality are you?
3. How long have you been in Bergen and in Norway in general?
4. During our group discussion, you have told us that you have experience about non-communicable diseases. Could you tell us about that?
5. How did you know that you are a NCDs patient?
6. What are the symptoms?
7. What happened in the process that you were diagnosed several times?
8. What awareness do you think you have got regarding NCDs?
9. How do your cultural values, beliefs & customs help you?
10. How do the health services help you?
11. What preparation have you made regarding NCDs?
12. Would you like to say more about anything we have talked about to day?

Thank you so much for taking part in this focus group discussion and participating in this research project.

APPENDIX 6: Data analysis coding table from both FGD and IDI interviews

Code	Basic Themes	Organising Themes
Free from any physical and mental disease Free from any disease	Mental & physical health	Understanding about health
Health is more than anything Health needed for all aspects of life Have a good relationship with society Unhealthy thinking about others is a disease	Values, attitudes, and beliefs about health	
Not a transmitted disease A hereditary disease Deadly disease & no cure May occurred at an early age or at old age Can't be identified immediately It could be the results lifestyle Difficult to list down NCDs	Thoughts, attitudes, and beliefs about NCDs	
Balancing diet physical exercise Taking rest and sufficient sleep Avoid bad behaviour (smoking and drinking alcohol) To ensure our health by working (labour work) Having medical check up	physical health	Keeping oneself healthy
A healthy relationship with people Creating a social bond with the community Sharing a meal with people Playing in groups	Social health	
Trying to be satisfied	Values and attitude	
Immigrant status To integrate with Norwegians To get employed To be successful in education To get a professional job	Integration	Health motivation
For the child's sake To my family To establish a good family	Family	
To live better and longer	Have a good life	
Mountain climbing track And walking paths in town	Encouraging environment	
Discuss health matters Helping exchange health-related information Health information from social network better than health materials	Social support for health	Health and cultural values
A culture of visiting a person Sharing information about health practice Social gatherings (weddings, birthdays) reduce stress Fasting & other health practice in church or mosque Variety of food to choose	Cultural & spiritual practices	
Discussing matters Generating happiness Feeling peaceful internally	Emotions	
Fear on NCDs Denial on NCDs	Cultural silence	
A symptom identified in the cervix		

<p>Feeling distressed Feeling hopeless Unable to walk properly Bleeding in womb Checked through urine & blood examination Feeling tired & sweating Getting disturbed & irritated</p>	<p>Discovering & symptoms on personal NCDs</p>	<p>Perception about NCDs</p>
<p>Importance of cervical cancer cheek up Advising others on the importance of cancer cheek up To refrain from high carbohydrate food stuff Use of regular medical cheek up</p>	<p>Behavioural change</p>	
<p>Counselling service Support from hospitals Getting an essential examination Obtaining apparatus to cheek & measure the sugar level</p>	<p>Health service delivery to NCDs</p>	
<p>Children also victims of NCDs NCDs no longer disease of the rich only Being inactive physically exposes to NCDs About complication of diabetes Learning & practicing the Norwegian culture and lifestyle Children also victims of NCDs NCDs no longer disease of the rich only Being inactive physically exposes to NCDs About complication of diabetes Learning & practicing the Norwegian culture and lifestyle</p>	<p>Knowledge acquired about NCDs in Norway</p>	
<p>From the government (infectious disease) How to seek support such as emergency, paediatric care, and maternal health care. The information presented in our language</p>	<p>Health care services and systems information</p>	<p>Health information</p>
<p>Difficult to understand Not immigrant-focused No NCDs information in our language</p>	<p>NCDs health information</p>	
<p>Pharmacy Website YouTube Health institutions Introduction programme School book From the people and the community</p>	<p>Source of health information</p>	
<p>Face to face Orally and by printing documents Internet</p>	<p>Means of accessing information</p>	



Marguerite Daniel
Christiesgt. 13
5015 BERGEN

Vår dato: 03.07.2018

Vår ref: 61226 / 3 / OOS

Deres dato:

Deres ref:

Tilråkning fra NSD Personvernombudet for forskning § 7-27

Personvernombudet for forskning viser til meldeskjema mottatt 21.06.2018 for prosjektet:

61226	<i>Non-Communicable diseases health information among refugees in Norway: The Case of Ethiopian and Eritrean refugees in Bergen.</i>
Behandlingsansvarlig	Universitetet i Bergen, ved institusjonens øverste leder
Daglig ansvarlig	Marguerite Daniel
Student	Tesfaye Tariku Admassie

Vurdering

Etter gjennomgang av opplysningene i meldeskjemaet og øvrig dokumentasjon finner vi at prosjektet er unntatt konsesjonsplikt og at personopplysningene som blir samlet inn i dette prosjektet er regulert av § 7-27 i personopplysningsforskriften. På den neste siden er vår vurdering av prosjektopplegget slik det er meldt til oss. Du kan nå gå i gang med å behandle personopplysninger.

Vilkår for vår anbefaling

Vår anbefaling forutsetter at du gjennomfører prosjektet i tråd med:

- opplysningene gitt i meldeskjemaet og øvrig dokumentasjon
- vår prosjektvurdering, se side 2
- eventuell korrespondanse med oss

Meld fra hvis du gjør vesentlige endringer i prosjektet

Dersom prosjektet endrer seg, kan det være nødvendig å sende inn endringsmelding. På våre nettsider finner du svar på hvilke [endringer](#) du må melde, samt endringskjema.

Opplysninger om prosjektet blir lagt ut på våre nettsider og i Meldingsarkivet

Vi har lagt ut opplysninger om prosjektet på nettsidene våre. Alle våre institusjoner har også tilgang til egne prosjekter i [Meldingsarkivet](#).

Vi tar kontakt om status for behandling av personopplysninger ved prosjektslutt

Ved prosjektslutt 24.06.2019 vil vi ta kontakt for å avklare status for behandlingen av personopplysninger.

Dokumentet er elektronisk produsert og godkjent ved NSDs rutiner for elektronisk godkjenning.

Request participation in the Research Project

Project title: “Non-Communicable diseases health information among refugees in Norway: The Case of Ethiopian and Eritrean refugees in Bergen”

Background and Purpose: My name is Tesfaye Tariku. I am a master’s student in the Global Development Theory and Practice, Department of Health promotion & Development, Faculty of Psychology, University of Bergen. My major area of study is Health Promotion. I am doing a research project on non-communicable health information among Ethiopian and Eritrean refugees living in Bergen. The purpose of this study is to explore if there is refugee focused health information service on non-communicable disease to Ethiopian and Eritrean refugees residing in Bergen municipality. In addition to this, identify whether non-communicable disease health information materials provided for refugees from Ethiopia and Eritrea living in Bergen are relevant to their needs. Moreover to look at the experience and perceptions of Ethiopian and Eritrean refugees about health including NCDs.

Your participation: Your participation in this project is complete voluntary. We will have to focus groups discussion, one group of women and one group of men, with six participants in each group. From those I will ask two women and two men participants for individual interviews. Your participation in this study will consist of an interview lasting approximately one hour. You will be asked questions about non-communicable disease health information services for Ethiopian and Eritrean refugees residing in Bergen. How do you receive health information on non-communicable diseases and how relevant are non-communicable diseases health information materials/methods for you. Moreover, how do you define health including NCDs and how do you promote your own health. If permitted, I will use sound recorder and I will take written notes.

Benefits and risk: The benefit of your participation is to contribute information to the other researchers and the results of the project may help, the refugees and the municipality and the other researchers in the future. There are no risks associated with participating in the study.

Confidentiality: All your information and personal data will be treated confidentiality. If permitted, I will use sound recorder and I will also take written notes, and I will keep in the recording a password-protected computer. When I report the results of my research project, I

will not use your name and any other personal identifying information. I will use pseudo names and report my findings in a way that protecting your confidentiality. Only my Advisor Dr. Marguerite Daniel at University of Bergen, and I will have access to the information. If you want to have a copy of my Master's thesis after it has been submitted, I will send you key findings from the project. You can contact me the end of the project, May 2019.

If you have any question, please contact the researcher or my supervisor in the Global Development Theory and Practice, Department of Health promotion & Development, Faculty of Psychology, University of Bergen.

Researcher: Tesfaye Tariku (tariku.tesfaye@yahoo.com)

Supervisor: Dr. Marguerite Daniel (Marguerite.Daniel@uib.no)

The study has been notified to the Norwegian Centre for Research Data (NSD)

Consent for participation in the study

I am willing to participate in the focus group discussion.....

I am willing to participate in the individual interview.....

Signed by (Name):

Date:

APPENDIX 9: Informed consent form translated in to Amharic

ጥናታዊ ፕሮጀክትን በተመለከተ መረጃና መተማመኛ ስለመስጠት

የፕሮጀክቱ ርዕስ፡- በኖርዌይ ሀገር በበርገን ከተማ የሚኖሩ ኢትዮጵያውያን እና ኤርትራውያን ስደተኞች ተላላፊ ያልሆኑ በሽታዎችን በተመለከተ ያላቸው የጤና መረጃ እና ግንዛቤ ምን ይመስላል?

የዋናቱ አሰራራትና የኋላ ታሪክ፡- ስሜ ተሰፋዬ ታሪኩ እየላለሁ። በበርገን የኒቨርሲቲ በዓለም አቀፍ ልማት ጽንሰ ሃሳብና አተገባበር፣ በጤና ማስፋፋትና እድገት ትምርት ክፍል በሰነልቦና ፋኩሊቲ የሁለተኛ ዲግሪ ተማሪ ነኝ። የኔ ትምህርት በጤና ማስፋፋትና እድገት (Health Promotion and Development) ላይ ያተኮረ ነው። በአሁኑ ወቅት ለሁለተኛ ዲግሪ ማረፊያ ጥናታዊ ጽሁፍ በመስራት ላይ እገኛለሁ። የዋናቱ ዋና ዓላማ በበርገን ከተማ አስተዳደር ውስጥ የሚኖሩ ኢትዮጵያውያን እና ኤርትራውያን ላይ ትኩረት ያደረገ፤ ተላላፊ ያልሆኑ በሽታዎችን በተመለከተ የሚሰጣቸው የጤና መረጃዎች ምን እንደሚመስሉ ማሰብ፣ ተላላፊ ያልሆኑ በሽታዎችን መሰረት በማድረግ የሚሰጣቸው የግንዛቤ ማስጨበጫ መረጃዎች እነርሱ ከሚፈልጉት መረጃ ጋር ተዛማጅነት አላቸው ወይስ የላቸውም የሚለውን መግለጽ። በመጨረሻም ጤናና ተላላፊ ያልሆኑ በሽታዎች ላይ ያላቸውን ልምድና ግንዛቤ/ እይታ ምን እንደሚመስል መመልከት ነው።

የዋናቱ ተሳታፊዎች፡- የዋናቱ ተሳትፎ የሚሆነው በሙሉ ፍቃደኝነት ይሆናል። ሁለት የቡድን ውይይቶች ማለትም፤ አንድ የሴቶች እና አንድ የወንዶች የቡድን ውይይት ይደረጋል። በየአንዳንዱ የቡድን ውይይት ላይ ስድስት ተሳታፊዎች ይገኛሉ። ከቡድን ውይይት ተሳታፊዎች ውስጥ ሁለት ሴቶች እና ሁለት ወንዶችን በተናጥል በመመልመል የግል ቃለመጠይቆች ይደረጋል። የተሳታፊዎች የቡድንም ሆነ የተናጠል ቃለመጠይቆች የሚወስደው ጊዜ አንድ ሰዓት ይሆናል።

የዋናቱ ተሳታፊዎች የምትጠየቁት ተላላፊ ያልሆኑ በሽታዎችን በተመለከተ የጤና መረጃዎች ላይ ያተኮረ ነው። ለምሳሌ ያህል ተላላፊ ያልሆኑ በሽታዎችን በተመለከተ የጤና መረጃዎችን እንዴት ታገኛላችሁ? የምታገኙት የጤና መረጃዎች እናንተ ማግኘት ከምትፈልጉት መረጃ ጋር ምን ያክል ተዛማጅነት አላቸው? ጤናን እንዴት ትገልጹታላችሁ? ተላላፊ ያልሆኑ በሽታዎቹን? ጤናችሁን በምን ምንገድ ትጠብቃላችሁ? ወዘተ

የዋናቱ ተሳታፊዎች ጥቅም እና ጉዳት፡- የዋናቱ ተሳታፊዎች በዚህ የዋናት ፕሮጀክት ላይ በመሳተፋቸው የሚደርሰባቸው ምንም ጉዳት የለም። ይሁን እንጂ የዋናቱ ውጤት ለስደተኞች፣ ለበርገን ከተማ አስተዳደር እና ለወደፊቱ አጥኝዎች መረጃ በመስጠት አስተዋጽኦ ያደርጋል ተብሎ ይታመናል።

ሚሰጥር ጠብቂነት፡- ከዋናቱ ተሳታፊዎች የሚገኝ ማንኛውም መረጃ እና የግል ሁኔታ ሚሰጥር የተጠበቀ ነው። ፍቃደኛ ከሆናችሁ መቅረቡ ደምፅ በመጠቀም ውይይታችንን እቀርጻለሁ። አጫጭር መረጃዎችንም በመጻፍ እይዛለሁ። ሁሉም መረጃዎች በሚሰጥር ቁጥር በተደበቀ ኮምፒውተር ላይ ይቀመጣል። የዚህን ጥናታዊ ጽሁፍ ውጤት ሪፖርት በማደርግበት ወቅት የተሳታፊዎችን ትክክለኛ ስም አልጠቀምም። የግል ሁኔታችሁን የሚገልጽ ነገርም እንዲሁ አልጠቀምም። የዋናቱ ግኝት ሪፖርት በሚደረግበት ወቅት የእናንተን ሚሰጥር የጠበቀ ይሆናል። ይህን መረጃ የማግኘት ዕድል የሚኖራቸው የዋናት አማካሪዬ ዶ/ር ማርጋሪታ ዳንኤል ብቻ የሆናለ። ማንኛውንም አይነት ጥያቄ መጠየቅ ከፈለጋችሁ የዋናቱ አድራጊንም ሆነ የዋናቱ አማካሪዎን ከታች በተቀመጠው አድራሻ በመጠቀም ማግኘት ይቻላል። ይህንን ጥናት ለማድረግ በኖርዌይ የዋናት መረጃዎች ማዕከል ፈቃድ ተሰጥቷል።

የዋናት አማካሪ ዶ/ር ማርጋሪታ ዳንኤል ኢሜይል Marguerite.Daniel@uib.no

የዋናት አድራጊ ተሰፋዬ ታሪኩ ኢሜይል tariku.tesfaye@uib.no

እኔ በዚህ የቡድን ውይይት ላይ ለመሳታፍ ፈቃደኝነቴን በፊርማዬ አረጋግጣለሁ።

ፊርማ፡- _____ ሥም፡- _____ ቀን፡- _____

እኔ በዚህ የዋናት ፕሮጀክት ላይ የግል ቃለመጠይቅ ለማድረግ ፈቃደኝነቴን በፊርማዬ አረጋግጣለሁ።

ፊርማ፡- _____ ሥም፡- _____ ቀን፡- _____