Proceedings of the BOBCATSSS 2023: A New Era - Exploring the Possibilities and Expanding the Boundaries, Oslo Metropolitan University (OsloMet), Oslo, Norway, January 25-27, 2023

# Cues to taking health action among people with asylum-seeking background— Findings from Norway and Finland

**Hamed Ahmadinia**
Åbo Akademi University, Turku, Finland
Hamed.ahmadinia@abo.fi
https://orcid.org/0000-0002-3505-8101

**Kristina Eriksson-Backa**
Åbo Akademi University
kristina.eriksson-backa@abo.fi
https://orcid.org/0000-0001-9758-0467

**Jannica Heinström**
Oslo Metropolitan University, Oslo, Norway
jannicah@oslomet.no
http://orcid.org/0000-0003-3729-0497

**Shahrokh Nikou**
Åbo Akademi University & Stockholm University
shahrokh.nikou@abo.fi
https://orcid.org/0000-0002-0029-5852

## Abstract

**Background**— Studies on people with asylum-seeking backgrounds reveal different needs for and challenges with utilisation of health-related information and healthcare services in host countries. In order to explore such needs and challenges, we need to identify influential factors that affect the motivation of people with asylum-seeking background to seek health-related information and healthcare services. Awareness of a health problem and cues to action may vary from one person to another. Cues to action may, moreover, it can be internal (such as symptoms or changes in body shape) or external (such as messages). Studying cues to action, particularly among minorities with different ethnic backgrounds is therefore important. **Purpose**: This study investigates internal and external cues to take health actions among people with asylum-seeking background living in the two Nordic countries Finland and Norway. **Design/methodology/approach**: Two sets of semi-structured interviews were conducted from May to August 2022 with a total of 16 participants with asylum-seeking background in Finland (N = 7) and Norway (N = 9). The interview guide was developed based on the Health Belief Model (HBM) to identify internal and external factors acting as motivators for taking health actions in the studied group. **Results-** The findings indicate that common cues to health actions among the participants were related to changes in health, access to free medical check-ups, health educational TV or radio programmes, and social media. The participants mentioned different internal and external motivations for taking health action, which correspond to their cultural differences or beliefs. These were advice from family members and friends, advice from a healthcare professional from their country of origin and receiving information about physical or mental health risk factors at church, mosque, or their community meeting. Finally, receiving information about physical or mental health risk factors from universities, employers, local health authorities, or medical professionals, and advice from a local healthcare professional were reported more among participants from the Norwegian sample group (three out of nine) compared with the Finnish sample group (one out of seven).

**Findings**-The findings reveal that while different officials and stakeholders provide health-related information in terms of emails, letters (such as invitation letters for mammography check-ups), and guidelines to non-native minorities; only a small part of this information will reach and be used by the target population. **Practical implications:** This study has twofold practical implications, (a) to provide practical insights to healthcare providers, immigration authorities, and policymakers on factors influencing taking health action among non-native minorities, and (b) to highlight the role of cultural factors and beliefs in the utilisation of different health-related information and healthcare services among minorities in Nordic countries. The findings showed factors such as health-information being simple, related to the immediate health needs of the audience, as well as easy to access are the most important factors that lead to more utilisation of health-related information and healthcare services among the studied population. **Originality/value:** This is one of the first studies on cues to health actions among residents with asylum-seeking background living in two Nordic countries and provides reflections on the role of personal social networks and official cues in providing awareness of health problems.

**Keywords:** Health action, Health information, Minorities, Stimulators

## Introduction

Finland and Norway have received more than 160,000 asylum seekers[1] since 2012. However, a record 63,627 asylum seekers registered in Finland and Norway after the 2015 refugee crisis (SchengenVisaInfo, 2022; Statista, 2022a; Statista, 2022b; Sisäministeriö, 2022). Studies on people with asylum-seeking backgrounds reveal different needs for and challenges with the utilisation of health-related information and healthcare services in host countries (Ahmadinia et al., 2021). In order to gain insights into people with asylum-seeking backgrounds and their health needs and health access challenges, we need to identify influential factors in their motivation to seek health-related information[2] and healthcare services (LaMorte, 2019). Moreover, people with different ethnical backgrounds and beliefs may have different interpretations of a health problem (Brainard & Zaharlick, 1989; Elliott et al., 2018; Savic et al., 2016).

Individuals may react differently toward stimuli and triggers in their decision-making process to accept a recommended health action (Ahmadinia, 2022). There is a need for Finnish and Norwegian healthcare providers who deal with these newcomers, to culturally adapt their health services to meet the needs of these vulnerable people who may have different health-seeking behaviour[3] compared to the native population (Ahmadinia et al., 2022a; Ahmadinia et al., 2022b). Investigating cues to action among minorities with different ethnic backgrounds is therefore important. This study investigates cues to action based on the Health Belief Model (HBM) (Clarke et al., 2021; Kennedy & Rogers, 2009; Meillier et al., 1997), which describes cute to action that influence health behaviours. This research is designed based on the Health Belief Model (HBM) and is analysed with insights from Grounded Theory (Glanz et al., 2008; Glaser, 1978; Glaser & Strauss, 2017; Janz & Becker, 1984).

This paper aims to investigate cues to action among people with asylum-seeking backgrounds living in Finland or Norway. It aims to provide a holistic picture of different internal cues (such as symptoms of disease) or external cues (such as social influences) as triggers in the decision-making process of members of the studied population to take health action. The research objectives guiding this study is "*To explore internal and external cues to take health actions among people with asylum-seeking backgrounds living in Finland and Norway"*.

## Literature review

Many interventions are aimed at improving public health (e.g. Maller et al., 2006; Pennucci et al., 2022), but an emphasis on people with asylum-seeking backgrounds is needed for many reasons. First, recent research shows that cultural norms and values, stigma, and taboos play a significant role in the healthcare-seeking behaviour of asylum seekers, refugees, and undocumented immigrants (Assefa et al., 2021; Mahajan et al., 2021; Poudel-Tandukar et al.,

[1] Asylum seeker refers to "an individual who has left their country and is seeking protection in another country, but who has not yet been legally recognized as a refugee and is waiting to receive a decision on their asylum claim" (Amnesty International, 2022).

[2] Health information refers to "any information related to healthcare that is organized for a particular reason which may range from medical information to the monitoring of personal health status" (Ahmadinia & Eriksson-Backa, 2020).

[3] Health seeking behavior refers to "any activity undertaken by individuals who perceived themselves to have a health problem or to be sick aiming at finding an appropriate treatment" (Ward et al., 1997).

2019). Particularly, many studies highlighted the roles of cultural factors as barriers to mental health seeking of different ethnic groups (e.g. Behnia, 2003; Teunissen et al., 2014; Tomasi et al., 2022). Second, studies on people with asylum-seeking and refugee backgrounds highlighted that religious association or following a certain religion might facilitate access to health-related information seeking or adoption of healthier behaviour (Devillanova, 2008; Noh et al., 2015). Moreover, religious beliefs and religious actors[4] shape their beliefs about health, constitutes health, the cause of illness, and ways to overcome an illness (e.g. Al Laham et al., 2020; Ballard-Kang et al., 2018; Fox et al., 2020). In addition, it has been found that segregation such as social isolation, lack of emotional support, discrimination, the feeling of being trapped, and separation from family and community were important factors influencing the health of these minorities (e.g. Hassan and Wolfram, 2020; Knipscheer et al., 2015; Mulé, 2021).

Studying motivations as a ground for improving health or changing health behaviour among people with asylum-seeking backgrounds is an important part of establishing a tailored intervention (Becker, 1974; Joseph et al., 2019; Kennedy & Rogers, 2009). A frequently used technique to study individuals' personal reasons for behaviour change is motivational interviewing (Feldstein Ewing et al., 2022; Ghizzardi et al., 2022; Hardcastle et al., 2013).

From a theoretical perspective, the Health Belief Model (HBM) described motivation or cues to action as important triggers of behavioural change (Bean & Catania, 2013; Rosenstock et al., 1988). The HBM is one of the widely used explanatory models for investigating individual behaviour change regarding physical and mental health (Clarke et al., 2021; Kennedy & Rogers, 2009; Meillier et al., 1997). This model has been used in many studies to explore individuals' behaviour and reasons behind them (Karimy et al., 2021; Orji et al., 2012). It has been applied in studies with asylum-seekers as participants regarding different health problems such as cardiovascular disease, diabetes, mental health, sexual health and HIV, and women's health (Dhar et al., 2017; Elliott et al., 2018b; Kamimura et al., 2017; Kennedy & Rogers, 2009; Savic et al., 2016). The HBM suggests that individuals need a cue to persuade readiness to employ a healthy behaviour or accept a recommended health action (Glanz et al., 2008; LaMorte, 2019). A cue to action occurs when a person perceives the threat of a health problem (e.g. susceptibility and severity), the benefits of avoiding a health issue, or that she or he has sufficient confidence and beliefs in overcoming the condition and perceives more benefits than barriers to performing a health behaviour (Glanz et al., 2008).

At the more theoretical level, the HBM classifies two types of cues to action including internal and external cues. Internal cues refer to intrapersonal elements like perception, cognition, and outward manifestations of health or illness (LaMorte, 2019; Solhi et al., 2010). External cues, on the other hand, refer to interpersonal and communication matters, such as the function of social influence, interaction, and the mass media (LaMorte, 2019; Mattson, 1999; Solhi et al., 2010). When appropriate motivational cues are identified, communication content and framing can be adjusted accordingly (Walker et al., 2015).

[4] Religious actor refers to "experts or practitioners of a religious tradition, who have background in studying the principles in the religion and engage in the application of these principles to public life" (Sandal, 2017).

Researchers have classified cues to action for individuals in terms of their perception of symptoms of illness, change in self-image[5], exceeding limits[6], social influence, media exposure, and reminders to visit health professionals (Brainard & Zaharlick, 1989; Elliott et al., 2018; Jones et al., 2015; Meillier et al., 1997; Piran, 2004; Saadi et al., 2015; Simmelink et al., 2013). The research, however, not been conclusive.

The advice of a doctor, educational programmes, counselling by doctors and other healthcare professionals, and guidance from family and friends were frequently mentioned as the triggers to action among people with asylum seeking and refugee backgrounds (Elliott et al., 2018; Gilman et al., 1992; Kennedy & Rogers, 2009; Papadopoulos et al., 2003; Saadi et al., 2015; Simmelink et al., 2013). For instance, it has been discovered that using reminder letters, or providing free medical check-ups as immunisation-related cues to action, can boost the uptake of influenza vaccines and condom use behaviours (Clarke et al., 2021; McCaul et al., 2002).

In many prior studies, the consultation of traditional healers and neighbourhood pharmacists served as particular prompts for action among refugees from Cambodia, Laos, and Vietnam (Brainard & Zaharlick, 1989; Gilman et al., 1992; Kemp, 1985; Rocereto, 1981). Studies with Somalians, Ethiopians, Eritreans, and Sudanese revealed that community support was a significant factor in their decision to seek care (Savic et al., 2016; Simmelink et al., 2013).

In research on women's health and diabetes, refugees from Afghanistan and Syria highlighted access to health information and community health workers as their primary cues to action (Piran, 2004). Similarly, a study on men who are at risk for coronary heart disease recognised many forms of cues as motivating factors, such as social influence, self-image, and disease of friends and family (Meillier et al., 1997). Finally, it has been argued that perceived barriers (such as time constraints and anxiety associated with getting a cognitive status examination), and cues to action (such as social pressure to act) will predict motivation to seek cognitive status examinations (Werner, 2003). However, there has not been much research on cues to action, and very little, if any, of the existing studies have focused on how people with asylum-seeking backgrounds manage physical or mental conditions.

## Material and method

### Measure

Two sets of semi-structured interviews were conducted with a total of 16 participants with asylum-seeking backgrounds in Finland (n = 7) and Norway (n= 9). The interview guide was developed to track events, people, or things that trigger people with asylum-seeking backgrounds to change their behaviour since their arrival in the studied countries. The interview questions were developed according to the recommendation by Meillier et al. (1997),

[5] Self-image refers to "total subjective perception of oneself, including an image of one's body and impressions of one's personality, capabilities, and so on." (Coon, 1994).

[6] Exceeding limits refers to "the limits that an individual consider for himself such as obesity, alcohol overdose, or smoking. These limits may be exceeded unnoticed, but when they are noticed, this sometimes results in turning point experiences." (Meillier et al., 1997).

focusing on the changes in health habits of the participants since moving to the studied countries, situations involving changes in their health behaviour, and illnesses among family members and friends, as well as desires to modify their health habits, stance on health education, and ideas for future health education programmes. During the interviews, the main focus was placed on the elements that the participants felt were most crucial since their arrival in the studied countries. For example, participants were asked to provide examples which prompt them to act for their physical or mental health since their arrival in Norway or Finland (such as reminder postcard from a dentist, product health warning labels, advice from others, illness of a family member, newspaper article, etc.). The consent form and semi-structured interview guide were written in English, translated into Persian and Kurdish by a native speaker and were double-checked for reliability and validity by another native speaker.

## Data collection

The participants were recruited through convenience sampling. The condition for participation was that the participants were over 18 years old, currently lived in Norway, or Finland, belonged to the first generation of non-native minorities, and was willing to join this study voluntarily. The recruitment was done through three channels: (1) the personal network of the lead researcher consisting of Iranian, Afghan and Tajik residents in Norway and Finland, (2) announcements made on the webpages and social media or local cultural community centres for Persian-speaking residents in the countries of the conducted research, and (3) using a snowball sampling strategy by asking previously recruited interviewees to suggest further participants. Interviews were conducted in three languages including English, Persian, or Kurdish language either through face-to-face meetings or using an online communication channel over the period of four months between May 2022 and August 2022. Due to slight differences in Persian language dialects between Iranian, Afghan, and Tajik participants, the interviewer used English to elaborate more on some interview questions. The Persian language was the second language of some participants and some of the interviews were conducted by a bilingual person in Kurdish language. In all interviews, the semi-structured interview guide was used, but participants were given the opportunity to share additional comments on each answer. The interviews were voice recorded along with note-taking, and each interview lasted from approximately 30 to 60 minutes, with an average length of 45 minutes.

## Data analysis

All recorded interviews were transcribed into Persian or Kurdish language, and then the transcripts were translated into English for qualitative analysis using NVivo 1.7. With a few minor modifications, the interview and analytic process were based on the HBM and insights from Grounded Theory (Glanz et al., 2008; Glaser, 1978; Glaser & Strauss, 2017; Janz & Becker, 1984). As opposed to incorporating interview responses into a present theory, the goal is to record the respondents' own logic and opinion.

The analysis was carried out as follows:

- Defining codes: we designed 23 codes for retrieving themes and general characteristics of participants. Out of these codes, 13 codes were taken directly from the interview guide and 10 codes were created from extra discussions that emerged throughout the interviews.
- Coding of interviews and memos: all interviews were coded with two parallel strategies including using sticker notes on handwritten transcripts on each new aspect arising from the interviews and NVivo 1.7 for coding text file transcribes. The memos were grouped together in the codes from which they originated so that all aspects arising from the interviews and originating from the code "cue to take action" are found together.
- Creating a link between codes and memos: the responses from the interviews were linked between all identically coded text fragments. Memos for a particular code were linked to the interview text for relevant code.

Small changes have been made to the respondents' speech patterns where interview quotations are used. Grammatical errors have been corrected, sentence repetitions removed, and text omitted is indicated by dots, as in [I mean …] , or [It was…].

## Findings of the study

### Sample description

Participants' (n = 16) average age was 45 years old. Six participants were male and ten females with an approximately even distribution of males and females (see Appendix 1). Twelve participants were married and living with their families, while two participants were divorced, one single and one widowed. Participants described their current health status on a five-point scales ranking from excellent to very poor. Seven individuals perceived their health status as being poor or very poor. From the religious point of view, ten participants elaborated their religious beliefs as not practising any religion or being slightly religious and, in addition, most of the participants were currently working in the host countries. Finally, nine participants had lived in the studied countries for less than 10 years (see Appendix 1).

### Cues to action

Previous research has shown that people respond differently when it comes to health concerns depending on their knowledge, experiences, social influence, habits, self-confidence, attitude, and underlying potential for change (e.g., Elliott et al., 2018; Jones et al., 2015; Saadi et al., 2015; Simmelink et al., 2013). However, as we examined the interview transcripts of our participants, we discovered two additional crucial pieces of influence: social media and public health services in the host countries. All of these components interact in a complex way, and it is the interplay between them that defines how an individual with an asylum-seeking background living in the studied countries reacts to health concerns.

While we interviewed the participants, we could initially identify interviewees' attitudes, self-confidence, and motivation as influencing their health behaviour. Their experiences and susceptibility for behavioural and social influence were other fundamental influences which shaped their health behaviour. We identified cues to action directed towards physical or mental health concerns such as symptoms of disease, exceeded limits, self-image, disease and death among relatives and friends, social influence, public health service in a host country, and social media. It is also important to highlight that changing life circumstances, relocation, facing a new culture and language, different healthcare structures and systems in a host country, and many other changes may affect motivation towards physical or mental health concerns for people with asylum-seeking backgrounds.

Nearly all of the interviewees who had previously sought asylum in Norway or Finland mentioned one or more incidents, that were sparked by one of the aforementioned cues. This study's participants could typically recognize when a trigger started a process of change, where their behaviour was altered as a result of addressing a physical or mental health concern. The cues, the thoughts they sparked, the actions they prompted, and the intentions they inspired were all described in great detail. Next, we present findings based on different types of cues to action that we have identified through interviews transcribe analysing method (see Appendix 2).

### *Internal cue to action*

- **Symptoms of the disease**

Previous research identified measles, cholera, meningitis as common physical health problems (Altare et al., 2019) and post-traumatic stress disorder (PTSD), major depression, generalised anxiety, panic attacks, adjustment disorder, and somatization as common mental health problems among people with asylum-seeking backgrounds (Murray et al., 2013). Nearly all of this study's participants stated that different symptoms of disease like fever, diarrhoea, fatigue, muscle aches, and coughing were the most conspicuous and predictable ways for them to take action to address their physical or mental health concerns. Previous research has shown that psychological elements such as symptom perception and illness threat may not always result in adequate health behavioural shifts (e.g., Michael Cummings et al., 1980; Meillier et al., 1997). As previously stated, the participants were of both genders and had varying health statuses, which was reflected in their elaboration of various disease symptoms as an incentive to act on their health concerns. For example, we can highlight the following comments:

One male respondent from the Norwegian interviews stated, "*…. for me allergic reaction of my body to food, weather, medicine …. is my first motivator to seek for medical support…..* ". Similarly, a highly educated female participant who moved to Norway for humanitarian reasons mentioned that *".. I have been always my mom's sick child,.. have been on sick leave many days during my school days… there are always different symptoms like joint pain, tiredness and abdominal pain, I am facing them one after another… for me these are the first obvious signs of something being wrong about my health….I am always listening to my body…..* ".

Regarding mental health concerns, a female participant who is living in Finland stated that "*I arrived in Finland during the dark and cold wintertime,…. while I was in a refugee reception center in [name of a city in southern Finland], I felt depressed and without me noticing it… I used to cry…… these were symptoms of depression and mental health problems…".* Likewise, a young participant stated that *"…. I lost my wife while we were escaping from the war in my country [name of a foreign country], it was a very tragic situation for me,…., since then I am very depressed and have*

*nightmares ….. I am suffering from delusions, disorganized thinking, and many other symptoms of schizophrenia…. I sought for psychologist and mental health support since my arrival in [name of a city in northern part of Finland]…, currently I have weekly meetings with a psychologist in [name of a health center in northern part of Finland]…".*

- **Disease and death among relatives and friends**

Participants in this study cited diseases and deaths among their friends and family, such as liver cancer, Covid-19, brain cancer, and asthma, as motivators to have a health check-up and/or health behavioural change. It creates an especially powerful effect when a family member or acquaintances of the same age have identical symptoms of illness.

Regarding sickness among family and friends, a female participant with a very poor health status remarked "*I had a friend from the refugee reception time at my arrival in Norway….. She was suffering from obesity, and she was a heavy smoker …. She started to lose weight without trying like over 20 kg within 3 months.. at first she was happy about losing weight ….. she was saying to me it is because she cut her food intake…… later on she developed more symptoms like her skin became yellowish, and had upper abdominal pain… after a year or so she was diagnosed with liver cancer… she passed away 5 years ago…. I must admit that losing her came as a shock to me and left me feeling depressed and helpless….* ".

This interviewee also told another story which was a motivator for her to change her health behaviour: "*... another friend of mine was often complaining about headaches and having difficulty in thinking….. he had trouble communicating, and as time went on, his behaviour altered…… He displayed hostile behaviour…… He would occasionally be very silent, and we were worried about his psychological condition….. He had difficulties finding a physiologist who could assist him….. Later, he discovered he had a brain tumour……"*

Participants from Finland also indicated how comparable experiences with death or illness among their family members or close friends inspired them to take action to protect their own health. When friends or family members of the same age experienced the same symptoms, some interviewees expressed their thoughts about this issue as "*being strongly impressed with the death or disease of my acquaintance*" or "*this made me think about my own health*". Finally, a female participant continued by saying, "….*when a friend or family member develops symptoms of a disease, this will motivate me to act for my own health concerns…I will seek for a health check-up, schedule a doctor's appointment, or I will modify my lifestyle.....".*

- **Changes in self-image**

Another cue to action among some of the responders was changes in their perceptions of themselves. The personal view, or mental picture, that we have of ourselves is referred to as self-image. Self-image is an "internal dictionary" that describes one's own attributes, such as intelligence, beauty, and ugliness, as well as talent, selfishness, and kindness (Cleveland Clinic, 2020). A woman with asylum seeking background gives the following reason for changing her lifestyle:

"*In 2018, I arrived in Norway as an asylum seeker with my husband and two children... I have a bachelor's degree in computer science and was able to get a full-time work immediately after we arrived in Oslo..... I used to spend most of my time programming and staring at a monitor.... My friends labelled me as an antisocial person and a workaholic.... I felt that I needed to change my lifestyle…… I decided to spend more time with my family and friends.... It was a bad habit to spend so much time at work and miss out on opportunities to interact with the local community, as well as my family and friends.....one day I told myself that I needed to find a balance between my career and my personal life....*".

Participants frequently mentioned experiences with their physical abilities in combination with their perceptions of themselves. This form of stimulation is also quite effective at changing these people's health behaviours. For example, a male participant who has lived the last 8 years in Finland stated:

"*I work as a hairdresser, and I am on my feet for long hours every day... I was playing with my kids the other day when I jumped from a block... my legs were instantly in terrible pain... I've observed that I'm no longer physically fit or strong... It upset me much because I was in pain as a result of this unfortunate thing.... then I remembered it's been a long time since I've been to the gym.....*"

- **Exceeded limits**

Exceeding limits that an individual sets for himself or herself is another form of trigger to act for health. These limits may be crossed without being observed, but when they are, this action can potentially lead to health behavioural changes. Participants of the current study referred to it as " It needs to end now!", " It must now come to an end!" or "This needs to end right away!". Respondents described exceeding their limits as a stimulator to take health action in relation to obesity, alcohol overuse, or smoking.

For example, one participant said, "*I've gained so much weight since relocating to Norway.... I haven't been employed since I arrived in Oslo..... I gradually began to eat more junk food...it was my way of distracting my mind... .... I was no longer physically active enough..... My wife was often commenting on my appearance..... I was so depressed and embarrassed about my appearance... I told myself one day "This needs to end right away"*."

Regarding exceeding limits and smoking, one of the participants stated, "*after getting approval on my asylum-seeking application in Norway… I started my own hairdressing business....I work long hours on my feet.....I have pain in my foot joints.....I started smoking one cigarette a day.....notice I can no longer run.....my family was complaining about me smelling awful...I smoked 2 to 3 packages of cigarettes..... I became a heavy smoker after a while..... I had breathing issues..... I lost several of my teeth.....one day I told myself, "It must now come to an end!*"

There were also similar stories related to exceeding drinking limits and some of the participants mentioned they stopped drinking after observing negative impacts of the overuse of alcohol on their personal life and health.

*External cue to action*

- **Social influences (important individuals)**

There were many examples of receiving health advice from individuals or communities important to the person interviewed, and respondents described how this advice affected their health actions. These examples ranged from modest recommendations on losing weight, increasing physical activity, or nutrition and diet to more serious health concerns such as considering medical operations.

Regarding receiving advice from family members or acquaintances, one of the participants stated, "*I work at a large grocery store in Oslo....they sell cheap and tasty burgers....I used to buy and eat a hamburger from [name of a fast food chain] with a [name of a soft drink brand] daily during my lunch break....I quickly gained so much weight....I had to buy extra-large clothes... I began to lose my flexibility....my boss also complained about my work performance....my wife advised me to choose between continuing to consume junk food and expecting serious health problems soon, or changing my eating habits..."*

Another common story was related to symptoms of COVID-19 and many interviewees explained how they got motivated to go for COVID-19 tests after receiving advice from their partner or family members during the first or second wave of COVID-19 outbreaks in Finland and Norway.

Local ethnic or religious communities for minorities in Finland or Norway were the other social influences for people with asylum-seeking background in taking health action. A man with asylum-seeking background who is currently living in Norway stated that "*I lost my wife while we were escaping from the war in my country [name of a foreign country], it was a very tragic situation for me, which I am thinking about it during every minute of my life…I learned of a monthly gathering in a community center....met many people from my own country [name of a foreign country]... I was encouraged to speak with [name of a healthcare professional in a public health centre] about my mental health problem by the community centre's leader….".*

Receiving advice from a family physician or a healthcare professional from the home country was a very common way among participants of receiving advice to take health action. Many participants mentioned that they would seek advice or wish to receive support from a physician or nurse from their home countries in times of serious medical situations such as cardiovascular diseases or different types of cancers, and for psychological support. Mostly, participants referred to support from a healthcare provider in early detection of a chronic medical situation.

For example, a woman in her early forties stated that "*I started losing weight… feeling very full after eating a small portion of food….and sometimes I was feeling itching… my sister who is living in [name of a foreign country] explained my symptoms to our family doctor in [name of a foreign country]…the doctor after hearing about my symptoms... asked my sister to ask me to do a future medical examination as soon as possible…unfortunately, I am diagnosed with liver cancer…".*

- **Public healthcare services**

Respondents indicated receiving advice from a local healthcare provider, access to free medical check-ups, or receiving health-related information through the media as the other motivators for them to take health action.

Regarding receiving advice from a local healthcare provider, a male participant stated "*We recently moved to a new neighbourhood in Oslo... relocated to a new apartment... I took a lot of heavy things up to the fourth floor... I began to get backpain…the pain was really bothering me…a doctor prescribed me [name of a painkiller]…it did not help at all…then, I was referred to a physiotherapist in [name of a health center in Oslo], … the physiotherapist explained how to regain my mobility and instructed me to perform the recovery exercise while she observed me... After a few days, I was free of all my aches and problems...".* However, we need to highlight a female participant's comment on language barriers and written instruction as*"… I have been referred many times for physiotherapy sessions...I will always get a paper full of instructions, which I do not fully understand.*"

Another example is from a female participant with a history of a genetic disorder , "*I have history of Familial Mediterranean Fever and every now and then I used to be in hospital for my high fever, pain in the abdomen, chest, or joints….I have been in hospital many times …visited many physicians.. but my last doctor's visit was very useful...the doctor advised me to change my diet…eat more fresh vegetables and fruits…eat fewer fast foods and processed foods…it has been many years that I have not been in the hospital for the same health problem…*". There were many other examples of receiving recovery exercise or treatment in action among participants that motivate them to act for their own health benefit. However, there were more comments about receiving advice from a healthcare provider to act on a health concern among participants in Norway than among participants in Finland.

Having access to free medical check-ups was the initial cue for some respondents who were unaware of their medical situation. It was especially mentioned among interviewees fleeing from war in their own countries. For example, a couple in their twenties stated "*my wife and I escaped from the current war in my country [name of a foreign country],…after a long journey we arrived in a refugee reception centre in Norway…there was a free medical check-up for all newly arrived asylum-seekers and refugees…after receiving the results, I was diagnosed with tuberculosis and my wife with diabetes…"*

Finally, there were some comments that were more common among participants in Norway about receiving health related information or advice through official letters or emails, medical social media channels, health educational radio or tv programmes. Two female participants in Norway from Norwegian interview groups explained similar stories related to receiving invitation letter from local health centre for a free mammography check-up as they were over a certain age and had increased risk of developing breast cancer. Moreover, a woman who recently was faced with a mobility limitation stated that "*I am following news through [name of a national tv channel in Norway]…recently I came across a tv work out programme in [name of a tv channel]…there is a physiologist who is teaching and explaining the benefits of each work out also…I started to follow this program…do exercises according to the program…I am now feeling much better..".*

- **Social media**

Rapid and creative developments in social media, or participatory Internet communications, present prospects for changing health behaviour (Korda & Itani, 2013). Improvements in health habits because of societal changes might be perceived as new opportunities to attempt activities that the individuals were already planning to perform (Meillier et al., 1997). There were many examples of individuals using health advice from various websites, online social media platforms like Instagram and Facebook, and video content sharing websites like YouTube as a trigger to take health action. Participants discussed how these online content sharing platforms influenced their nutrition and dietary habits, their awareness of the local healthcare system, and their ability to identify potential health conditions.

One participant who is a single parent gave the following example: "*The other day, I saw a page on Instagram about vitamins and minerals my baby girl needs...There was information about different types of vitamins that are essential for my kid's need…… building blocks of bones and teeth... and there was nutrition advice about foods that contain them….. like dairy products, fish, and eggs... I now provide my child the meals she needs to grow stronger and healthier..*"

A male participant stated that "*When I arrived in Norway, I had no formal education... I'm following pages on Facebook in my mother tongue... I heard of a doctor in Norway who is from [name of a Middle Eastern nation]... When my family or I have a health problem, we schedule an appointment with him...*". Other participants who were not highly educated shared similar stories about how following Instagram or other social media pages in their native language informed and motivated them to act for their health.

## Discussion and conclusion

This study investigated stimulators to take health action among people with asylum-seeking backgrounds in two Nordic countries. The interviews with the participants were conducted to explore internal and external cues to take health actions among these minorities. The results of the interviews show that different types of internal cues to take health action, such as symptoms of disease, disease and death among relatives and friends, changes in self-image, and exceeded limits, were the most noticeable ways for the participants to take action for their physical or mental health concerns. Similar to previous studies on investigating cues to take action among minorities (LaMorte, 2019; Meillier et al., 1997; and Solhi et al., 2010), the participants have emphasised that common cues to act on their health concern are different disease symptoms such as pain, fever, diarrhoea, fatigue, muscle aches, and coughing. Participants reported diseases and fatalities among their friends and family, such as liver cancer, Covid-19, brain tumour, and asthma, as motivators for having a health check-up and/or changing their health behaviours. Previous research has found measles, cholera, and meningitis as frequent physical health problems, and PTSD, depression, generalised anxiety, panic attacks, adjustment disorder, and somatization as common mental illnesses among those seeking asylum (Altare et al., 2019; Murray et al., 2013).

Another main form of cue to action among participants was social influence or influential persons. These types of triggers included receiving health advice from individuals or communities that were important to the participants. These cues ranged from modest recommendations on losing weight, increasing physical activity, or nutrition and diet to more serious health concerns such as considering surgery. Previous studies reported similar cues

to take health action among people with asylum-seeking or refugee backgrounds including support from family and friends, consulting with traditional healing specialists, and support from the community (Elliott et al., 2018; Kemp, 1985; Savic et al., 2015; Simmelink et al., 2013). The other form of stimulus to action among participants was public healthcare services in the host countries. According to those interviewed, guidance from a local healthcare professional, access to free medical check-ups, or receiving health-related information through the media were the other cues to take health action among these minorities. Similarly, previous studies highlighted the role of physicians' recommendation, consulting with local pharmacists, help from physicians and other healthcare providers, educational programmes, and support from the university, school, etc. as other cue to take health action among these minorities (Ahmadinia et al., 2022c; Brainard & Zaharlick, 1989; Gilman et al, 1992; Kennedy & Rogers, 2009; Saadi et al., 2015).

Particularly, participants mentioned that when they are informed about appropriate health behaviour, they would strongly consider acting on this information. The participants in this study reported receiving health related information or advice through official letters or emails, medical social media channels, health educational radio or tv programs as the other type of motivators to act for their health. However, the simplicity and learning how act were mentioned as influential factor to actually stimulate them to do the right behaviour. Similar to a previous study on vulnerable people, the results of the current study show that free medical check-ups were reported to be the only cue to action among many interviewees fleeing from war in their own countries (Clarke et al., 2021).

Finally, there have been many examples from participants comments on how contents from different websites, social media, and YouTube motivate these vulnerable people to take health action for their own health. Healthcare providers and related authorise must be aware of the importance of sharing reliable and easy to understand health-related information and material which may trigger these minorities to take the right health action (Jones et al., 2000; Piran, 2004). This study has some limitations. For example, as this study was conducted with only 16 participants, the generalisability of the findings is limited. Moreover, to investigate the uniqueness of the findings for participants with asylum seeking background, it is highly recommended to do the same study with native people of the studied countries and compare the findings. In addition, it is essential to acknowledge that these findings may not represent the cues to take health action among all people with asylum seeking background in the studied countries. The participants did not have the same educational background, age group and they expressed different depth of faith and following religious believes. Nevertheless, the study shows indications of important cues to health actions among residents with asylum-seeking backgrounds living in two Nordic countries. Further research is needed to elaborate on the findings, which may have important implications for health information and services in hosting countries.

## Acknowledgement

Writing this paper would not have been possible without the exceptional support by Sara Arzideh, and this research was supported by grants from the Finnish Cultural Foundation, Karl-Erik Henriksson Foundation and travel grants from Åbo Akademi University.

## Ethics approval and consent to participate

The study was performed following the examination and approval statement by the Board of research ethics at Åbo Akademi University. The participants gave informed consent before participation.

## References

Ahmadinia, H. (2022). A Review of Health Beliefs and Their Influence on Asylum Seekers and Refugees' Health-Seeking Behavior. In: Li, H., Ghorbanian Zolbin, M., Krimmer, R., Kärkkäinen, J., Li, C., Suomi, R. (eds) Well-Being in the Information Society: When the Mind Breaks. WIS 2022. *Communications in Computer and Information Science*, *1626*. Springer, Cham. https://doi.org/10.1007/978-3-031-14832-3_11

Ahmadinia, H., & Eriksson-Backa, K. (2020). E-healthservices and devices: Availability, merits, and barriers - with some examples from Finland. *Finnish Journal of EHealth and EWelfare*, *12*(1), Article 1. https://doi.org/10.23996/fjhw.64157

Ahmadinia, H., Eriksson-Backa, K., & Nikou, S. (2021). Health-seeking behaviours of immigrants, asylum seekers and refugees in Europe: A systematic review of peer-reviewed articles. *Journal of Documentation*, *78*(7), 18–41. https://doi.org/10.1108/JD-10-2020-0168

Ahmadinia, H., Eriksson-Backa, K., & Nikou, S. (2022a). An investigation of unmet health-related information and healthcare services needs of people with asylum-seeking backgrounds: A Case Study of Persian-speaking Minorities in Finland. *Informaatiotutkimus*, *41*(2–3), Article 2–3. https://doi.org/10.23978/inf.122552

Ahmadinia, H., Heinström, J., Eriksson-Backa, K., & Nikou, S. (2022b). An investigation of health information needs and use of healthcare services among people with asylum seeking background living in Norway. *Informaatiotutkimus*, *41*(2–3), Article 2–3. https://doi.org/10.23978/inf.122554

Ahmadinia, H., Eriksson-Backa, K., & Nikou, S. (2022c). Health information seeking behaviour during exceptional times: A case study of Persian-speaking minorities in Finland. *Library & Information Science Research*, 44(2), 101156. https://doi.org/10.1016/j.lisr.2022.101156

Al Laham, D., Ali, E., Mousally, K., Nahas, N., Alameddine, A., & Venables, E. (2020). Perceptions and Health-Seeking Behaviour for Mental Illness Among Syrian Refugees and Lebanese Community Members in Wadi Khaled, North Lebanon: A Qualitative Study. *Community Mental Health Journal*, *56*(5), 875–884. https://doi.org/10.1007/s10597-020-00551-5

Altare, C., Kahi, V., Ngwa, M., Goldsmith, A., Hering, H., Burton, A., & Spiegel, P. (2019). Infectious disease epidemics in refugee camps: a retrospective analysis of UNHCR data (2009-2017). *Journal of Global Health Reports*, *3*, e2019064. https://doi.org/10.29392/joghr.3.e2019064

Amnesty International. (2022). Refugees, Asylum-seekers and Migrants. Amnesty International. Available: https://www.amnesty.org/en/what-we-do/refugees-asylum-seekers-and-migrants/ [2022, December 11].

Assefa, M. T., Frounfelker, R. L., Tahir, S. A., Berent, J. M., Abdi, A., & Betancourt, T. S. (2021). Traditional Medicine and Help-Seeking Behaviors for Health Problems Among Somali Bantu Refugees Resettled in the United States. *Qualitative Health Research*, *31*(3), 484–497. https://doi.org/10.1177/1049732320970492

Ballard-Kang, J., Lawson, T. R., & Evans, J. (2018). Reaching Out for Help: An Analysis of the Differences Between Refugees Who Accept and Those Who Decline Community Mental Health Services. *Journal of Immigrant and Minority Health*, *20*(2), 345–350. https://doi.org/10.1007/s10903-017-0612-6

Bean, S. J., & Catania, J. A. (2013). Vaccine perceptions among Oregon health care providers. *Qualitative Health Research*, *23*(9), 1251–1266. https://doi.org/10.1177/1049732313501891

Becker, M. H. (1974). The Health Belief Model and Sick Role Behavior. *Health Education Monographs*, *2*(4), 409–419. https://doi.org/10.1177/109019817400200407

Behnia, B. (2003). Refugees' Convoy of Social Support: Community Peer Groups and Mental Health Services. *International Journal of Mental Health*, *32*(4), 6–19. http://www.jstor.org/stable/41345067

Brainard, J., & Zaharlick, A. (1989). Changing health beliefs and behaviors of resettled Laotian refugees: Ethnic variation in adaptation. *Social Science & Medicine*, *29*(7), 845–852. https://doi.org/10.1016/0277-9536(89)90083-x

Clarke, R. D., Fernandez, S. B., Hospital, M., Morris, S. L., Howard, M., Wagner, E. F., & Wales, E. (2021). Getting Their Feet in the Door: Communication Cues to Action for HIV Testing and Condom Use Behaviors Among Hispanic/Latinx College Students. *The Journal of Primary Prevention*, *42*(4), 331–341. https://doi.org/10.1007/s10935-020-00610-3

Cleveland Clinic. (2020). Positive Self-Image: How to Improve Self- and Body-Image. *Cleveland Clinic*. Available: https://my.clevelandclinic.org/health/articles/12942-fostering-a-positive-self-image [2022, December 15].

Coon, D. (1994). *Essentials of Psychology: Exploration and Application*, 6th ed. Los Angeles, West Publishing Co.; 471, ISBN 13: 9780314206299.

Devillanova, C. (2008). Social networks, information and health care utilization: Evidence from undocumented immigrants in Milan. *Journal of Health Economics*, *27*(2), 265–286. https://doi.org/10.1016/j.jhealeco.2007.08.006

Dhar, C. P., Kaflay, D., Dowshen, N., Miller, V. A., Ginsburg, K. R., Barg, F. K., & Yun, K. (2017). Attitudes and Beliefs Pertaining to Sexual and Reproductive Health Among Unmarried, Female Bhutanese Refugee Youth in Philadelphia. *The Journal of Adolescent Health: Official Publication of the Society for Adolescent Medicine*, *61*(6), 791–794. https://doi.org/10.1016/j.jadohealth.2017.06.011

Elliott, J. A., Das, D., Cavailler, P., Schneider, F., Shah, M., Ravaud, A., Lightowler, M., & Boulle, P. (2018). A cross-sectional assessment of diabetes self-management, education and support needs of Syrian refugee patients

living with diabetes in Bekaa Valley Lebanon. *Conflict and Health*, *12*(1), 40. https://doi.org/10.1186/s13031-018-0174-9

Feldstein Ewing, S., Bryan, A. D., Dash, G. F., Lovejoy, T. I., Borsari, B., & Schmiege, S. J. (2022). Randomized controlled trial of motivational interviewing for alcohol and cannabis use within a predominantly Hispanic adolescent sample. *Experimental and Clinical Psychopharmacology*, *30*, 287–299. https://doi.org/10.1037/pha0000445

Fox, S. D., Griffin, R. H., & Pachankis, J. E. (2020). Minority stress, social integration, and the mental health needs of LGBTQ asylum seekers in North America. *Social Science & Medicine*, 246, 112727. https://doi.org/10.1016/j.socscimed.2019.112727

Ghizzardi, G., Arrigoni, C., Dellafiore, F., Vellone, E., & Caruso, R. (2022). Efficacy of motivational interviewing on enhancing self-care behaviors among patients with chronic heart failure: a systematic review and meta-analysis of randomized controlled trials. *Heart failure reviews*, *27*(4), 1029–1041. https://doi.org/10.1007/s10741-021-10110-z

Gilman, S. C., Justice, J., Saepharn, K., & Charles, G. (1992). Use of traditional and modern health services by Laotian refugees. *Western Journal of Medicine*, *157*(3), 310–315. PMID: 1413776; PMCID: PMC1011284.

Glanz, K., Rimer, B. K., & Viswanath, K. (Eds.). (2008). Health Behavior and Health Education: Theory, Research, and Practice (*4th edition*). Jossey-Bass.

Glaser B. G. (1978). *Theoretical sensitivity: advances in the methodology of grounded theory*. Sociology Press. ISBN-13. 978-1884156014.

Glaser, B. G., & Strauss, A. L. (2017). *The discovery of grounded theory: Strategies for qualitative research*. Routledge. Chicago: Aldine. ISBN-13: 978-1138535169.

Hardcastle, S. J., Taylor, A. H., Bailey, M. P., Harley, R. A., & Hagger, M. S. (2013). Effectiveness of a motivational interviewing intervention on weight loss, physical activity and cardiovascular disease risk factors: A randomised controlled trial with a 12-month post-intervention follow-up. The International *Journal of Behavioral Nutrition and Physical Activity*, *10*, 40. https://doi.org/10.1186/1479-5868-10-40

Hassan, M. D., & Wolfram, D. (2020). "We Need Psychological Support": The information needs and seeking behaviors of African refugees in the United States. *Aslib Journal of Information Management*, *72*(6), 869–885. https://doi-org.ezproxy.vasa.abo.fi/10.1108/AJIM-10-2019-0299

Janz, N. K., & Becker, M. H. (1984). The Health Belief Model: A decade later. *Health Education Quarterly*, *11*(1), 1–47. https://doi.org/10.1177/109019818401100101

Jones, C. L., Jensen, J. D., Scherr, C. L., Brown, N. R., Christy, K., & Weaver, J. (2015). The Health Belief Model as an Explanatory Framework in Communication Research: Exploring Parallel, Serial, and Moderated Mediation. *Health Communication*, *30*(6), 566–576. https://doi.org/10.1080/10410236.2013.873363

Jones, T., Fowler, M.C., & Hubbard, D. (2000). Refining a tool to measure cues to action in encouraging health promoting behavior: The CHAQ. *American Journal of Health Promotion*, 14, 170–173. https://doi.org/10.4278/0890-1171-14.3.170

Joseph, R., Fernandes, S., Derstine, S., & McSpadden, M. (2019). Complementary Medicine & Spirituality: Health-Seeking Behaviors of Indian Immigrants in the United States. Journal of Christian Nursing: *A Quarterly Publication of Nurses Christian Fellowship*, *36*(3), 190–195. https://doi.org/10.1097/CNJ.0000000000000546

Kamimura, A., Sin, K., Pye, M., & Meng, H. W. (2017). Cardiovascular Disease-related Health Beliefs and Lifestyle Issues Among Karen Refugees Resettled in the United States From the Thai-Myanmar (Burma) Border. *Journal of preventive medicine and public health = Yebang Uihakhoe chi*, *50*(6), 386–392. https://doi.org/10.3961/jpmph.17.098

Karimy, M., Bastami, F., Sharifat, R., Babaei Heydarabadi, A., Hatamzadeh, N., Pakpour, A. H., Cheraghian, B., Zamani-Alavijeh, F., Jasemzadeh, M., & Araban, M. (2021). Factors related to preventive COVID-19 behaviors using health belief model among general population: A cross-sectional study in Iran, *BMC Public Health*, 21, 1934. https://doi.org/10.1186/s12889-021-11983-3

Kemp, C. (1985). Cambodian refugee health care beliefs and practices. *Journal of Community Health Nursing*, *2*(1), 41–52. https://doi.org/10.1207/s15327655jchn0201_6

Kennedy, A. P., & Rogers, A. E. (2009). The needs of others: The norms of self-management skills training and the differing priorities of asylum seekers with HIV. *Health Sociology Review*, *18*(2), 145–158. https://doi.org/10.5172/hesr.18.2.145

Knipscheer, J. W., & Kleber, R. J. (2001). Help-seeking attitudes and utilization patterns for mental health problems of Surinamese migrants in the Netherlands. *Journal of Counselling Psychology*, *48*(1), 28–38. https://doi.org/10.1037/0022-0167.48.1.28

Knipscheer, J. W., Sleijpen, M., Mooren, T., ter Heide, F. J. J., & van der Aa, N. (2015). Trauma exposure and refugee status as predictors of mental health outcomes in treatment-seeking refugees. *BJPsych Bulletin*, *39*(4), 178–182. https://doi.org/10.1192/pb.bp.114.047951

LaMorte, W. (2019). The Health Belief Model. Boston University Medical Campus (BUMC), Available: https://sphweb.bumc.bu.edu/otlt/mph-modules/sb/behavioralchangetheories/behavioralchangetheories2.html [2022, December 10].

Mahajan, S., Meyer, S. B., & Neiterman, E. (2021). Identifying the impact of social networks on mental and emotional health seeking behaviours amongst women who are refugees from Syria living in Canada. *Global Public Health*, *0*(0), 1–17. https://doi.org/10.1080/17441692.2021.1872679

Maller, C., Townsend, M., Pryor, A., Brown, P., & St Leger, L. (2006). Healthy nature healthy people: 'Contact with nature' as an upstream health promotion intervention for populations. *Health Promotion International*, *21*(1), 45–54. https://doi.org/10.1093/heapro/dai032

Mattson, M. (1999). Toward a reconceptualization of communication cues to action in the Health Belief Model: HIV test counseling. *Communication Monographs*, *66*(3), 240–265. https://doi.org/10.1080/03637759909376476

McCaul, K. D., Johnson, R. J., & Rothman, A. J. (2002). The effects of framing and action instructions on whether older adults obtain flu shots. *Health Psychology*, *21*, 624–628. https://doi.org/10.1037/0278-6133.21.6.624

Meillier, L. K., Lund, A. B., & Kok, G. (1997). Cues to action in the process of chaning lifestyle. *Patient Education and Counselling*, *30*(1), 37–51. https://doi.org/10.1016/S0738-3991(96)00957-3

Michael Cummings, K., Becker, M. H., & Maile, M. C. (1980). Bringing the models together: an empirical approach to combining variables used to explain health actions. *Journal of behavioral medicine*, *3*(2), 123-145. https://doi.org/10.1007/BF00844986

Mulé, N. J. (2021). Mental health issues and needs of LGBTQ+ asylum seekers, refugee claimants and refugees in Toronto, Canada. *Psychology & Sexuality*, *13*:5, 1168-1178, https://doi.org/10.1080/19419899.2021.1913443

Murray, K. E., Davidson, G. R., & Schweitzer, R. D. (2010). Review of refugee mental health interventions following resettlement: best practices and recommendations. *The American journal of orthopsychiatry*, 80(4), 576–585. https://doi.org/10.1111/j.1939-0025.2010.01062.x

Noh, J.-W., Yun, H.-Y., Park, H., & Yu, S.-E. (2015). A Study of Predictive Factors Affecting Health: Promoting Behaviors of North Korean Adolescent Refugees. *Journal of Preventive Medicine and Public Health*, *48*(5), 231–238. https://doi.org/10.3961/jpmph.14.045

Orji, R., Vassileva, J., & Mandryk, R. (2012). Towards an Effective Health Interventions Design: An Extension of the Health Belief Model. *Online Journal of Public Health Informatics*, *4*(3), ojphi.v4i3.4321. https://doi.org/10.5210/ojphi.v4i3.4321

Papadopoulos, I., Lay, M., Lees, S., & Gebrehiwot, A. (2003). The impact of migration on health beliefs and behaviours: The case of Ethiopian refugees in the UK. *Contemporary Nurse*, *15*, 210–221. https://doi.org/10.5172/conu.15.3.210

Pennucci, F., Rosis, S. D., Murante, A. M., & Nuti, S. (2022). Behavioural and social sciences to enhance the efficacy of health promotion interventions: Redesigning the role of professionals and people. *Behavioural Public Policy*, *6*(1), 13–33. https://doi.org/10.1017/bpp.2019.19

Piran, P. (2004). Effects of Social Interaction between Afghan Refugees and Iranians on Reproductive Health Attitudes. *Disasters*, *28*(3), 283–293. https://doi.org/10.1111/j.0361-3666.2004.00259.x

Poudel-Tandukar, K., Jacelon, C. S., Chandler, G. E., Gautam, B., & Palmer, P. H. (2019). Sociocultural Perceptions and Enablers to Seeking Mental Health Support Among Bhutanese Refugees in Western Massachusetts. *International Quarterly of Community Health Education*, *39*(3), 135–145. https://doi.org/10.1177/0272684X18819962

Rocereto, L. (1981). Selected health beliefs of Vietnamese refugees. *The Journal of School Health*, *51*(1), 63–64. https://doi.org/10.1111/j.1746-1561.1981.tb02104.x

Rosenstock, I. M., Strecher, V. J., & Becker, M. H. (1988). Social learning theory and the Health Belief Model. *Health Education Quarterly*, *15*(2), 175–183. https://doi.org/10.1177/109019818801500203

Saadi, A., Bond, B. E., & Percac-Lima, S. (2015). Bosnian, Iraqi, and Somali Refugee Women Speak: A Comparative Qualitative Study of Refugee Health Beliefs on Preventive Health and Breast Cancer Screening. *Women's Health Issues: Official Publication of the Jacobs Institute of Women's Health*, *25*(5), 501–508. https://doi.org/10.1016/j.whi.2015.06.005

Sandal, N. A. (2017). Religious Leaders and Conflict Transformation: Northern Ireland and Beyond. *Cambridge University Press*. https://doi.org/10.1017/9781316676592

Savic, M., Chur-Hansen, A., Mahmood, M. A., & Moore, V. M. (2016). 'We don't have to go and see a special person to solve this problem': Trauma, mental health beliefs and processes for addressing 'mental health issues' among Sudanese refugees in Australia. *The International Journal of Social Psychiatry*, *62*(1), 76–83. https://doi.org/10.1177/0020764015595664

SchengenVisaInfo. (2022). Norway Received Over 27,000 Asylum Applications From January Until August 2022. Available: https://www.schengenvisainfo.com/news/norway-received-over-27000-asylum-applications-from-january-until-august-2022/ [2022, December 11].

Simmelink, J., Lightfoot, E., Dube, A., Blevins, J., & Lum, T. (2013). Understanding the health beliefs and practices of East African refugees. *American Journal of Health Behavior*, *37*(2), 155–161. https://doi.org/10.5993/AJHB.37.2.2

Sisäministeriö. (2022). Refugees flee persecution in their home countries. *Sisäministeriö*. Available: https://intermin.fi/en/areas-of-expertise/migration/refugees-and-asylum-seekers [2022, December 11].

Solhi, M., Zadeh, D. S., Seraj, B., & Zadeh, S. F. (2010). The Application of the Health Belief Model in Oral Health Education. *Iranian Journal of Public Health*, *39*(4), 114–119. PMID: 23113044; PMCID: PMC3481698.

Statista. (2022a). Finland: Number of asylum applications 2021. *Statista*. Available: https://www.statista.com/statistics/523556/asylum-applications-in-finland/ [2022, December 11].

Statista. (2022b). Norway: Number of asylum seekers 2021. *Statista*. Available: https://www.statista.com/statistics/1174907/number-of-asylum-seekers-in-norway/ [2022, December 11].

Teunissen, E., Sherally, J., Muijsenbergh, M. van den, Dowrick, C., Weel-Baumgarten, E. van, & Weel, C. van. (2014). Mental health problems of undocumented migrants (UMs) in the Netherlands: A qualitative exploration of help-seeking behaviour and experiences with primary care. *BMJ Open*, *4*(11), e005738. https://doi.org/10.1136/bmjopen-2014-005738

Tomasi, A.-M., Slewa-Younan, S., Narchal, R., & Rioseco, P. (2022). Professional Mental Health Help-Seeking Amongst Afghan and Iraqi Refugees in Australia: Understanding Predictors Five Years Post Resettlement. *International Journal of Environmental Research and Public Health*, *19*(3), 1896. https://doi.org/10.3390/ijerph19031896

Walker, K. K., Steinfort, E. L., & Keyler, M. J. (2015). Cues to Action as Motivators for Children's Brushing. Health Communication, *30*(9), 911–921. https://doi.org/10.1080/10410236.2014.904030

Ward, H., Mertens, T. E., & Thomas, C. (1997). Health seeking behaviour and the control of sexually transmitted disease. *Health Policy and Planning*, *12*(1), 19–28. https://doi.org/10.1093/heapol/12.1.19

Werner, P. (2003). Factors influencing intentions to seek a cognitive status examination: A study based on the Health Belief Model. *International Journal of Geriatric Psychiatry*, *18*(9), 787–794. https://doi.org/10.1002/gps.921

Korda H, Itani Z. Harnessing Social Media for Health Promotion and Behavior Change. *Health Promotion Practice*. 2013;14(1):15-23. https://doi.org/10.1177/1524839911405850

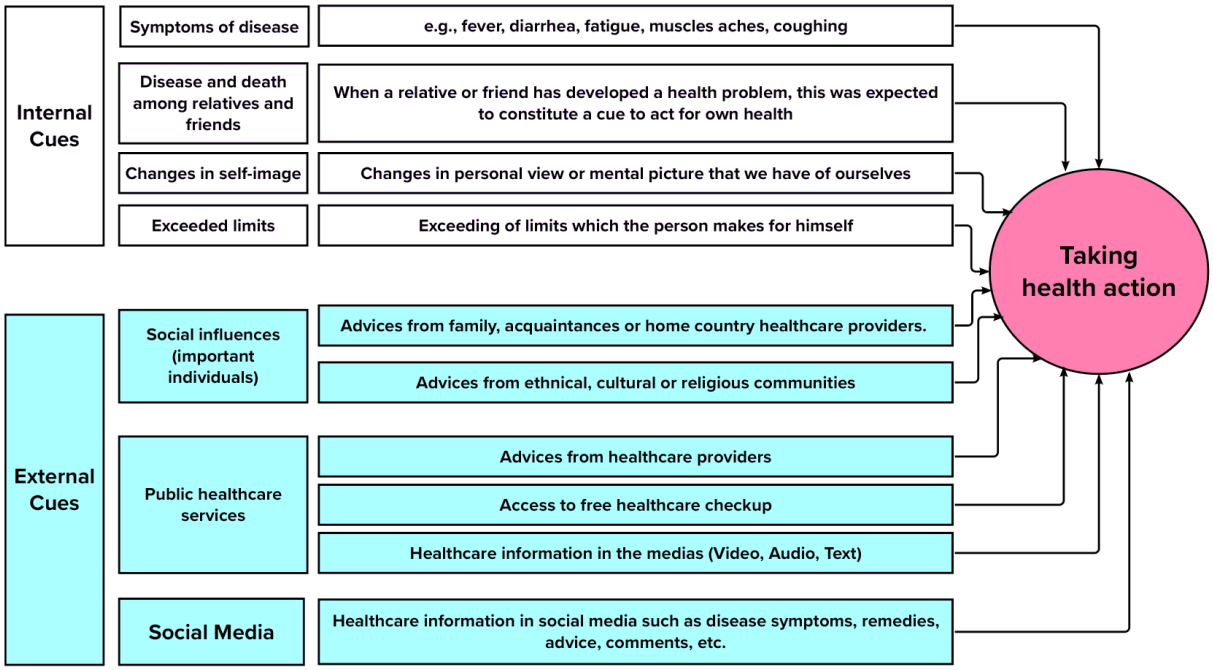
## Appendix

**Appendix 1** Demographic information of participants *(n = 16)*

| Participant characteristics | | N |
|---|---|---|
| Gender | Male | 6 |
| | Female | 10 |

| | | |
|---|---|---|
| Age group | 21 - 30 | 4 |
| | 31 - 40 | 6 |
| | 41 - 50 | 4 |
| | 51 & more | 2 |
| Marital Status | Single | 1 |
| | Married | 12 |
| | Divorced | 2 |
| | Widowed | 1 |
| Health status | Excellent | 4 |
| | Good | 4 |
| | Fair | 1 |
| | Poor | 5 |
| | Very poor | 2 |
| Education | No formal education | 1 |
| | Elementary school, lower secondary school | 2 |
| | Upper secondary or Vocational school, Institute | 3 |
| | Associate degree | 3 |
| | Bachelor's degree | 5 |
| | Master's degree | 2 |
| Social context | Alone | 3 |
| | Family | 12 |
| | Single parent | 1 |
| Religious beliefs | Religious | 0 |
| | Moderately religious | 6 |
| | Slightly religious | 5 |
| | Not religious | 5 |
| Occupation status | Job seeker | 2 |
| | Studying | 2 |
| | Working | 11 |
| | Edema disabled | 1 |
| Residency length | 1 to 5 years | 3 |
| | 6 to 10 years | 6 |
| | over 10 years | 7 |

**Appendix 2** Cues to take health action among people with asylum-seeking backgrounds




## Suggested citation to this article:

Ahmadinia, H., Eriksson-Backa, K., Heinström, J. & Nikou, S. (2023). Cues to taking health action among people with asylum-seeking background— Findings from Norway and Finland. *Proceedings of the BOBCATSSS 2023: A New Era - Exploring the Possibilities and Expanding the Boundaries*, Oslo Metropolitan University (OsloMet), Oslo, Norway, January 25-27, 2023.