

This is an electronic reprint of the original article. This reprint may differ from the original in pagination and typographic detail.

Health Susceptibility Perceptions among Iranian, Afghan, and Tajik minorities in three Nordic countries

Ahmadinia, Hamed; Heinström, Jannica; Eriksson-Backa, Kristina; Nikou, Shahrokh

Published in:
International Journal of Migration, Health and Social Care

DOI:
[10.1108/IJMHS-03-2023-0028](https://doi.org/10.1108/IJMHS-03-2023-0028)

E-pub ahead of print: 03/04/2024

Document Version
Final published version

Document License
CC BY

[Link to publication](#)

Please cite the original version:
Ahmadinia, H., Heinström, J., Eriksson-Backa, K., & Nikou, S. (2024). Health Susceptibility Perceptions among Iranian, Afghan, and Tajik minorities in three Nordic countries. *International Journal of Migration, Health and Social Care*. Advance online publication. <https://doi.org/10.1108/IJMHS-03-2023-0028>

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Health susceptibility perceptions among Iranian, Afghan and Tajik minorities in three Nordic countries

Hamed Ahmadinia, Jannica Heinström, Kristina Eriksson-Backa and Shahrokh Nikou

Abstract

Purpose – This research paper aims to delve into the perceptions of health susceptibility among Iranian, Afghan and Tajik individuals hailing from asylum-seeking or refused asylum-seeking backgrounds currently residing in Finland, Norway and Sweden.

Design/methodology/approach – Semi-structured interviews were conducted between May and October 2022 involving a sample size of 27 participants. An adapted framework based on the health belief model along with previous studies served as a guide for formulating interview questions.

Findings – Notably influenced by cultural background, religious beliefs, psychological states and past traumatic experiences during migration journeys – before arrival in these countries till settling down – subjects' perception of health concerns emerged significantly shaped. Additionally impacting perspectives were social standing, occupational status, personal/family medical history, lifestyle choices and dietary preferences nurtured over time, leading to varying degrees of influence upon individuals' interpretation about their own wellness or illness.

Practical implications – Insights garnered throughout the authors' analysis hold paramount significance when it comes to developing targeted strategies catering culturally sensitive health-care provisions, alongside framing policies better aligned with primary care services tailored explicitly around singular demands posed by these specific communities dwelling within respective territories.

Originality/value – This investigation represents one among few pioneering initiatives assessing perceptions regarding both physical and mental well-being within minority groups under examination across Nordic nations, unveiling complexities arising through intersecting factors like individual attributes mingling intricately with socio-cultural environments, thereby forming unique viewpoints towards health-care belief systems prevalent among such population segments.

Keywords Minority health, Health beliefs, Health disparities, Qualitative health research, Nordic countries, Health beliefs and perceptions

Paper type Research paper

(Information about the authors can be found at the end of this article.)

Received 21 March 2023
Revised 16 January 2024
Accepted 15 February 2024

1. Introduction and background

Globalisation has intensified mobility, resulting in over two million immigrants settling in Nordic countries such as Norway, Finland and Sweden, and facing unique health-care challenges (Nissanke and Thorbecke, 2010; Nordic Statistics database, 2022; Haj-Younes *et al.*, 2022). Asylum-seekers originating from countries like Iran, Afghanistan and Tajikistan currently residing in aforementioned Nordic regions display varied conceptualisations of health that are moulded by sociodemographic factors intertwined with cultural convictions (Byrow *et al.*, 2020; Dumitrache *et al.*, 2022; Ryom *et al.*, 2022). Criticisms have been presented against conventional theories concerning health behaviours for their heavy reliance on logical decision-making processes. These arguments contend that the theories provide inadequate explanation towards understanding diverse health-related actions exhibited by asylum seekers (Glanz *et al.*, 2008; Resnicow and Page, 2008).

© Hamed Ahmadinia, Jannica Heinström, Kristina Eriksson-Backa and Shahrokh Nikou. Published by Emerald Publishing Limited. This article is published under the Creative Commons Attribution (CC BY 4.0) licence. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this licence may be seen at <http://creativecommons.org/licenses/by/4.0/legalcode>

The notion of perceived susceptibility plays a pivotal role in theories surrounding health behaviour, often used to predict and interpret health-care-seeking actions (Glanz *et al.*, 2008; Greene, 2018). However, its application and homogeneity among diverse minority groups remain insufficiently examined. The focus is particularly scarce on specific communities such as Iranians, Afghans or Tajiks with either granted or denied asylum seeker status (Glanz *et al.*, 2008). Additionally, there is a gap in understanding how evolving meanings of health concepts and the influence of unique social settings, such as migration-related difficulties and social networks, affect health behaviours (Glanz *et al.*, 2008; Greene, 2018; Lim *et al.*, 2022).

This research is grounded in the social context conceptual framework, which encompasses the sociocultural components that shape the daily experiences of individuals with asylum-seeking or refused asylum-seeking backgrounds and directly or indirectly impact their physical or mental health and health-seeking behaviour (Burke *et al.*, 2009; Elliott *et al.*, 2018; Savic *et al.*, 2016).

Factors influencing the health-seeking behaviour of asylum-seekers in Nordic countries include migration-related challenges, psychological trauma and individual beliefs (Berthold *et al.*, 2019; Bryant *et al.*, 2018; Mullins and White, 2019; Ye *et al.*, 2021). As such, it is suggested that health-care and medical professionals must adjust their treatments to meet the cultural norms and unique health needs of these individuals (Mölsä *et al.*, 2019). Despite its recognised importance, there is limited research on the variations in perceived susceptibility to health issues and the specific health information or service needs among asylum-seekers and refused asylum-seekers from Iran, Afghanistan and Tajikistan residing in Nordic countries.

This study aims to explore these perceptions and fill the existing research gap. Specifically, the study focuses on understanding the beliefs and perceptions related to perceived susceptibility to health issues, the reasons behind these perceptions and the health-related information or services deemed necessary by these groups. The primary research question addressed is: "What are the perceptions of asylum seekers and refused asylum seekers from Iran, Afghanistan and Tajikistan regarding their susceptibility to health problems and their health-related information and service needs in Nordic countries?". The study seeks to provide insights into the specific health beliefs and needs of this distinct population, contributing to a more tailored approach to health-care provision. The need for research into the health-care-seeking behaviour of asylum seekers is well-recognised, particularly considering the influence of cultural norms, segregation and religious beliefs on their health (Hassan and Wolfram, 2020; Knipscheer *et al.*, 2015; Mulé, 2021). In this group of people, religious beliefs and religious actors shape their beliefs about health, what constitutes health and ways to overcome an illness (Al Laham *et al.*, 2020; Ballard-Kang *et al.*, 2018; Fox *et al.*, 2020). Glanz *et al.* (2008) suggested that studying perceived susceptibility can lead to potential solutions to improve health and change health behaviours among these people. To understand their perceived susceptibility to illness or health conditions, qualitative approaches such as interviews and observations are often used (Elliott *et al.*, 2018; Kennedy and Rogers, 2009; Saadi *et al.*, 2015; Savic *et al.*, 2016). These observations have led to the proposal of several theories, such as the theory that individuals take extra precautions due to their perception of their own susceptibility (McQueen *et al.*, 2010).

Theoretically, the health belief model (HBM) is used to describe perceived susceptibility, and it refers to beliefs about the possibility of getting a disease or health alerting condition (Glanz *et al.*, 2008). For instance, a woman may consider undergoing a mammogram if she believes she has a risk of developing breast cancer. This model considers various factors, including demographic attributes, perceptions about illness, perceived benefits and barriers and self-efficacy [1], in shaping health-seeking behaviour (Becker, 1974; Glanz *et al.*, 2008; Joseph *et al.*, 2019). As mentioned, health beliefs and health-related

information are the two main key terms in this study. Health beliefs, encompassing individual and culturally determined views on health, illness causation and remedies, play a crucial role in shaping health behaviour (Misra and Kaster, 2012). Health-related information refers to any personal information about health or illness and any information related to health care that is organised for a particular reason. Health information can range from information about local health centres to the monitoring of individual health status (OAIC, 2022). Researchers have also found many reasons for why people feel more likely susceptible to have physical or mental health problems (Lim *et al.*, 2022; Mikkola *et al.*, 2019; Mullins and White, 2019; Vollrath *et al.*, 1999; Ye *et al.*, 2021). Some of these reasons are individual beliefs, potentially detrimental habits, living conditions, work conditions, weather conditions, own medical history and family medical history. Lack of information about health problems and associated risk factors, supernatural origins for illness and depression as a white man's disease were also commonly cited as individual beliefs about perceived susceptibility among asylum seekers and refugees (Dean *et al.*, 2017; Kennedy and Rogers, 2009; Papadopoulos *et al.*, 2003; Piran, 2004; Ward *et al.*, 1997).

In addition, smoking and increased susceptibility to lung cancer, alcohol overdose or risky sexual practices have been widely recognised as potentially detrimental habits that increase perceived susceptibility to connected health risks among students and patients in Switzerland and the United States, respectively (Strecher *et al.*, 1995; Vollrath *et al.*, 1999).

Finally, depression, mental illness, post-traumatic stress disorder (PTSD) and poorer quality of life were the themes of this scientific research. Working conditions such as having physically heavy work were found to be an indication of susceptibility to cardiovascular mortality among persons born at Helsinki University Central Hospital or Helsinki City Maternity Hospital in Finland between 1934 and 1944 (Mikkola *et al.*, 2019). Changes in weather conditions or temperatures were identified as weather conditions that increased perceived susceptibility among rheumatic patients and those with mental health problems (Guedj and Weinberger, 1990; Mullins and White, 2019). Changes in the weather may raise the incidence of arthritis symptoms, and cooler temperatures lower negative mental health outcomes while hotter ones increase them. Similarly, a study on patients aged 35–65 years in primary care practices, showed that their own or their family's medical history may increase their perceived susceptibility to chronic diseases such as breast cancer, ovarian cancer, colon cancer, diabetes, coronary heart disease and stroke (Acheson *et al.*, 2010).

In summary, while there is extensive literature on perceived susceptibility, less attention has been paid to the unique experiences of asylum seekers and refused asylum seekers from specific regions like Iran, Afghanistan and Tajikistan. This study aims to address this research gap by specifically exploring the health perceptions and susceptibility among asylum seekers and refused asylum seekers from Iran, Afghanistan and Tajikistan residing in Finland, Norway and Sweden.

2. Research methodology

Three sets of semi-structured interviews were conducted with a total of 27 participants with asylum-seeking or failed asylum-seeking backgrounds in Norway ($N = 9$), Finland ($N = 7$) and Sweden ($N = 11$). The interview guide focused on participants' beliefs about disease susceptibility and health concerns since their arrival in their current country of residence. The interview protocol and questions were devised from the HBM (Janz and Becker, 1984), incorporating insights from Glanz *et al.* (2008), Greene (2018) and Misra and Kaster (2012) regarding perceived health susceptibility. The interviews primarily aimed to understand participants' key perceptions of susceptibility to physical and mental health conditions post-arrival in the studied countries. For example, participants were asked to provide examples of their current concerns regarding their health or a general health problem they or anyone in their family have had in the past since they arrived in the studied countries. The consent form and semi-structured interview guide were developed in English, and a native Persian

speaker translated them from English into Persian, while another native speaker double-checked the accuracy and validity of the translations. To ensure comprehensibility and ethical standards, participants received study information and consent forms in both English and Persian.

2.1 Data collection

Convenience sampling was used to recruit the potential participants. The criteria used to include participants were being over 18 years old; currently residing in Finland, Norway or Sweden; individuals of the first generation of non-native minorities; and willing to volunteer for this study. Participants were recruited through three channels:

1. the lead author's social media network among Iranian, Afghan and Tajik communities in the Nordic countries;
2. postings on websites, social media and local community centres; and
3. a snowball sampling method where existing participants referred others.

The rationale for targeting Iranians, Afghans and Tajiks was based on their common linguistic and cultural behaviours, which allowed for a more thorough comprehension of their health perspectives (Mills and Rahmoni, 2015).

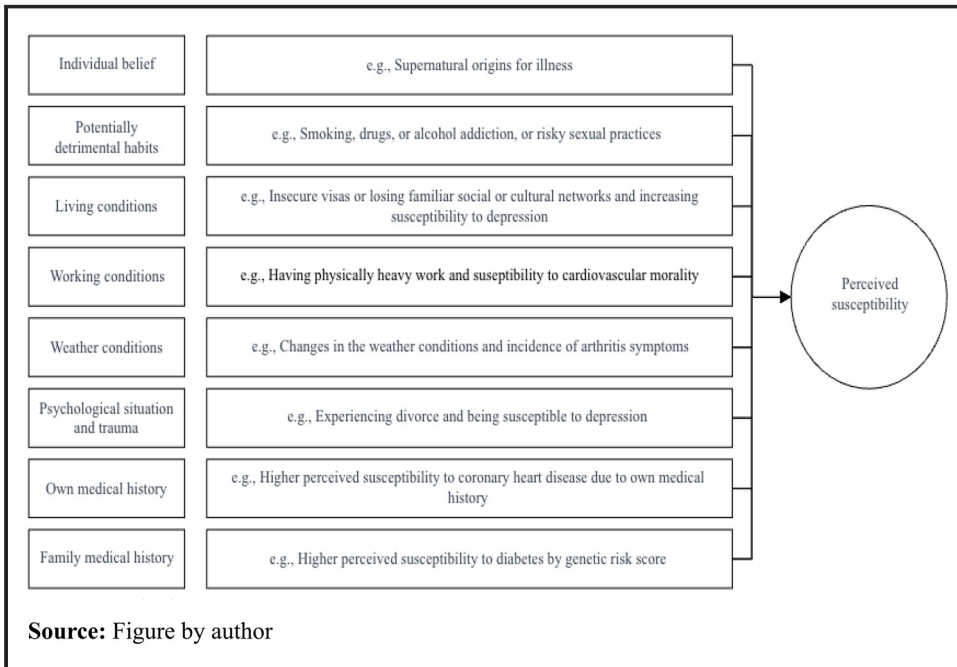
Over the course of six months, from May 2022 to October 2022, interviews were conducted in three languages, including English, Persian and Kurdish, either in person or via an internet communication channel. Because of slight variations in Persian dialects among Iranian, Afghan and Tajik, the interviewer used English to elaborate on some interview questions. The inclusion of a bilingual Kurdish speaker catered to participants who spoke Persian as a second language, ensuring clarity and accuracy in communication. The semi-structured interview guide was used and executed in all interviews; participants were also given the chance to share extra comments on each answer. Each interview, lasting between 30 and 60 min (average 45 min), was voice-recorded, supplemented by filed notetaking. Key comments of interviews were returned to participants for comment and/or corrections after each interview.

3. Data analysis

All interviews, recorded and transcribed in Persian or Kurdish, were translated into English using NVIVO 1.7 for qualitative analysis. For conducting a rigorous content analysis, the HBM was used as the theoretical framework (Glanz *et al.*, 2008). The content analysis was carried out in the following manner:

- Defining codes: We developed 22 codes to extract topics and participant information: 16 derived directly from the interview guide and six emerging from additional dialogues during the interviews (see Figure 1). The lead researcher initially coded the data, with subsequent verification by other team members for accuracy and consistency.
- Interview and memo coding: all interviews were coded using two simultaneous strategies: sticker notes on handwritten transcriptions of each new aspect originating from the interviews, and NVivo 1.7 for coding transcribed transcripts. The memos are organised by the codes from which they emerged so that all aspects arising from the interviews and originating from the code "perceived susceptibility" could be identified together.
- Creating a link between codes and memos: interview responses were linked to all similarly coded text fragments. Memos for a certain code were linked to the relevant interview content.

Figure 1 Perceived susceptibility among Iranians, Afghans and Tajiks with asylum-seeking and refused asylum-seeking backgrounds living in Finland, Norway and Sweden



When interview quotes were assessed, the respondents' speech patterns have slightly been modified, such as [I mean [. . .], It was [. . .]. In addition, grammatical mistakes have been corrected, sentence repetitions have been eliminated, and omitted content is denoted by dots.

4. Findings

4.1 Participants' demographic

The average age of the participants ($n = 27$) was 43 years old. Sixteen participants were female and eleven were male. Sixteen participants were married and living with their families, while six were divorced, four were single and one was widowed. Participants rated their current health status on a five-point scale ranging from five being excellent to one being very poor. Twelve respondents perceived their health status as being poor or very poor. Concerning religion, ten participants mentioned that they do not practice any religion, and most of the participants were currently working in the studied countries. Finally, 11 participants had lived in the studied countries for more than 10 years, and a few of them had refused asylum-seeking backgrounds.

4.2 Perceived susceptibility

Our analysis uniquely identified that, in addition to the known factors like individual beliefs and potentially harmful habits, participants' perceived susceptibility to health issues was significantly influenced by their psychological situations and trauma before, during or after migration, a finding that adds new depth to our understanding of this population's health perceptions. All of these beliefs interact in a complex manner as it is the combination of them that determines whether a person with an asylum-seeking or refused asylum-seeking

background residing in the studied countries is more likely to experience physical or mental health problems.

It is also important to note that changing living circumstances, relocation, encountering new cultures and languages, different health-care systems in a host country and other changes were found to influence beliefs about disease susceptibility for both asylum seekers and refused asylum seekers. Almost all the respondents who had previously sought asylum in Norway, Finland or Sweden cited one or more perceived susceptibility to different physical or mental health issues. In the following, the findings based on different reasons for perceived susceptibility to different physical or mental health problems among our studied population will be presented and discussed.

4.3 Individual belief

Several participants who took part in this study expressed individual beliefs that stem from their own life experiences, cultural or religious beliefs and thoughts about how susceptible they are to developing physical or mental health problems while living in the studied countries.

4.3.1 Differential treatment perceptions. A prevalent theme emerged around the belief in differential treatment by health-care providers, influenced by the participants' ethnic backgrounds. Participants felt more vulnerable to health issues due to perceived biases. One respondent explained, "I believe doctors here treat people from [name of a Middle Eastern country] differently than locals or people from other European countries [...]" (Female, Norway).

4.3.2 Concerns about health-care providers' expertise. Additionally, participants expressed concerns about the perceived inexperience of local health-care providers in treating conditions common in their home countries. A participant expressed:

I believe the healthcare providers here do not have enough experience with the treatment of different diseases [...]. In particular, I believe they lack sufficient experience to treat people from [name of a Middle Eastern country] when they are suffering from [name of a common health problem in a Middle Eastern country] [...]. (Male, Sweden).

4.3.3 Religious and cultural practices and health. The influence of religious and cultural practices on perceived health susceptibility was also a significant aspect highlighted by participants. A female participant in Finland, involved in social services, noted:

I believe many asylum seekers from [name of a Middle Eastern country] who are living in Finland are practising their cultural and religious beliefs [...]. According to their religious beliefs, women would highly prefer to be treated by a female physician or a female nurse [...] when a female physician or a female nurse is not available in a hospital or a health centre, they would prefer to postpone treatment of their health problems [...].

This interviewee also told another story about religious or cultural practises and susceptibility to physical health problems:

[...] [name of a form of an operation] is a common operation in many [name of many Middle Eastern countries] [...]. However, many people from [name of a Middle Eastern country] must travel to [name of a Middle Eastern country] to perform this operation [...] because there is no physician here who can perform this operation [...]. (Female, Finland).

4.3.4 Gender-based health concerns. Further, cultural and religious beliefs influence women's health-seeking behaviour, as stated by a participant:

Many women from [name of a Middle Eastern country] believe physical examination by a male physician is against their religious beliefs [...]. When physicians or nurses are men, they would rather avoid treating their health problems or even going for a health check-up [...]. (Female, Sweden).

4.4 Potentially detrimental habits

The interview results revealed that participants were concerned about several potentially unhealthy habits, such as smoking, alcohol consumption or eating junk food as their perceptions of their own susceptibility to a variety of health problems.

4.4.1 Smoking and health perception. A notable concern among participants was smoking, which they linked directly to their health problems. Participants reported lifestyle changes post-migration, such as increased work hours leading to physical discomfort and consequent unhealthy habits like smoking, which they linked to their deteriorating health.

4.4.2 Diet and lifestyle changes. Dietary changes following migration emerged as another significant concern affecting health perceptions. A participant shared their experience of gaining weight due to changes in eating habits:

I have gained so much weight since relocating to Norway [...] I have not 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 [...] (Male, Norway).

4.5 Living conditions

The living conditions in the host countries significantly impacted participants' health perceptions. Many reported how challenges like securing legal residency, dealing with housing and financial issues, adapting to cultural differences and experiencing social isolation influenced their health susceptibility.

4.5.1 Impact on mental health and well-being. Single parents, especially those with refused asylum applications, narrated hardships like financial constraints, housing challenges and job search difficulties, significantly impacting their mental and physical well-being.

4.5.2 Social isolation and cultural adaptation. The challenge of social isolation was echoed by another participant who moved to Norway:

In my country, I had almost daily contact with my extended family, but here I do not have any friends to socialise with. I lost my family's support, and I feel socially isolated (Female, Norway).

Additionally, a participant working with newly arrived refugees and asylum seekers in Finland observed:

Many asylum seekers and refugees in Finland are struggling with cultural shocks and language barriers, which are increasing their susceptibilities to different types of mental health issues such as depression and anxiety (Female, Finland).

4.6 Working conditions

The working conditions in the Nordic countries significantly influenced the perceived health susceptibility of the participants. Challenges in adapting to new work environments and the struggles of finding suitable employment emerged as key concerns.

4.6.1 Adapting to new work roles. A participant with over a decade of experience in marketing and sales shared her experience:

I arrived in Sweden four years ago as an asylum seeker with my family, I faced many challenges in seeking a job related to my education and experience from my country [name of a foreign country]. Now, I am working at [name of a company] and this job is physically demanding [...] and I do not believe that I am fit for it, neither physically nor mentally [...] (Female, Sweden).

4.6.2 Challenges in professional continuity. Echoing a similar sentiment, a participant with a background in accounting and finance elaborated on his difficulties in continuing his profession:

I have a bachelor's degree in [name of a field of study] from a reputable university in my country [name of a foreign country], and I worked for many years in a [name of a public company] with different roles in my country. Since I moved to Sweden, I was not able to carry on my profession here, and there is a long process for recognising my educational certifications, and I have to take so many language and professional courses for several years [...] (Male, Sweden).

4.7 Weather conditions

The environmental differences between the participants' home countries and their host countries in the Nordic region notably influenced their perceived health susceptibility, particularly concerning mental health and rheumatic conditions.

4.7.1 Impact of cold and dark winters. Participants commonly reported increased susceptibility to mental health issues during the long, dark winters typical in these Nordic countries. For instance, a participant stated:

I am suffering from [name of a health problem], and I am much more sensitive to pain, particularly because I am very susceptible to sleep problems, fatigue, and emotional and mental distress due to having long and cold winters in Norway (Female, Norway).

4.7.2 Experiences of depression and anxiety. Another participant recounted the psychological impact of relocating during winter:

I suppose many asylum seekers and refugees who arrive in Finland during the dark and cold wintertime are suffering from different symptoms of depression and mental health problems. For example, I myself, during the wintertime, while I was in a refugee reception centre in [name of a city in southern Finland], felt depressed and used to cry (Female, Finland).

4.8 Psychological situation and emotional trauma

The study participants' accounts brought to light the significant impact of psychological stressors and traumatic experiences on their susceptibility to both physical and mental health issues. This includes a wide range of emotional states such as depression, anxiety and particularly, PTSD.

4.8.1 Impact of family separation and loss. Traumatic family separations and losses emerged as common themes affecting mental well-being. Participants shared emotional narratives of family breakups during their asylum-seeking journey, highlighting the associated stress and mental health challenges.

4.8.2 Grief and ongoing trauma. Similarly, experiences of grief and ongoing trauma were notably prevalent. Another participant shared his experience of loss during migration:

I lost my wife while fleeing the war in my country [name of a foreign country], it was a very tragic situation for me [...] since then I have been very depressed and have nightmares [...] (Male, Norway).

4.9 Own medical history

Participants' personal medical histories emerged as a significant factor influencing their perceived susceptibility to health issues. This perception was often shaped by previous medical conditions and the fear of recurrence or worsening of these conditions.

4.9.1 Recurrent health concerns. Participants expressed concern about reoccurring health problems. For example, a participant stated that:

In my early forties, I experienced [name of health problem], which made me more susceptible to the recurrence of [name of a health problem] (Male, Sweden).

4.9.2 Compound health and emotional challenges. The intersection of physical health problems and emotional distress was also a recurring theme. Similarly, a participant stated:

Since my childhood, I have been diagnosed with many different health problems [names of different health problems], [...] I recently lost my husband, and I am suffering from loneliness and depression, [...] I suppose I am highly susceptible to many different physical or mental health problems (Female, Norway).

4.10 Family medical history

The role of family medical history in shaping participants' perception of health susceptibility was prominent. Many acknowledged that a history of certain chronic or hereditary conditions in their families heightened their sense of vulnerability to similar health issues.

4.10.1 Inherited health concerns. Participants frequently cited concerns about inheriting diseases prevalent in their families. Family medical history, especially of chronic diseases like cardiovascular conditions, emerged as a source of concern and heightened health anxiety among participants.

4.10.2 Anticipating health risks. The anticipation of health risks based on family medical history was a recurring concern. Participants were acutely aware of the potential for inheriting diseases like high blood pressure, stroke or cancer. "Knowing that several family members have battled breast cancer makes me more concern about my health [...]" (Female, Sweden), another participant shared.

4.11 Health information and health service needs

The respondents across Norway, Finland and Sweden unanimously expressed an urgent need for accessible and relevant health information and services, with particular emphasis on mental health support and specialist care for chronic health conditions.

4.11.1 Specialised health services: gender-specific needs. Female participants notably stressed the importance of child and women's health services. Their comments reflect a desire for health-care systems that are sensitive to gender-specific needs. "Access to women-focused health services is crucial for us [...]" (Female, Sweden) one participant mentioned, indicating the need for more personalised care.

4.11.2 Male health concerns and general health awareness. Male participants often expressed concerns about diseases prevalent among men, such as respiratory and cardiovascular issues. "I need more information on managing heart diseases and respiratory problems common in men", (Male, Norway) shared a male respondent, highlighting the gender-specific health information needs.

4.11.3 Newcomers' navigational challenges. New arrivals, particularly those who had been in the host countries for less than five years, expressed a significant need for guidance on navigating the local health-care system. "Understanding the health-care system here is a challenge for many newcomers [...]" (Male, Norway) a participant noted, pointing to the need for better orientation and health system literacy programmes for asylum seekers.

5. Discussion

To the best of our knowledge, this study is the first of its kind to specifically explore the perceived susceptibility to physical and mental health problems among individuals with asylum-seeking or refused asylum-seeking backgrounds originally from Iran, Afghanistan and Tajikistan residing in Finland, Norway and Sweden. The study primarily investigated individual beliefs regarding the likelihood of developing medical or mental health issues. The findings reveal that perceived susceptibility among the studied group stems from three key sources:

1. beliefs and habits;
2. beliefs as asylum seekers living in studied countries; and
3. beliefs based on their own or their family's medical histories, adding a new dimension to our understanding of health perceptions in this population.

The study's significant findings echo previous research (e.g. [Dean *et al.*, 2017](#); [Kennedy and Rogers, 2009](#)) by highlighting similar beliefs among participants, such as differential treatment by local doctors, a lack of expertise among health-care providers in treating certain conditions and religious constraints in medical examinations. These beliefs, influenced by participants' life experiences, cultural or religious beliefs and thoughts about susceptibility, underscore the need for culturally sensitive health-care practices in these countries.

Another critical finding was the impact of lifestyle factors like unhealthy eating, smoking and alcohol consumption on perceived health risks, aligning with previous studies ([Mahmudiono *et al.*, 2022](#); [Pribadi and Devy, 2020](#)). Furthermore, the study identified living, working and environmental conditions as significant contributors to health susceptibility beliefs. The emphasis on specific needs for health-related information and health-care services, such as women's health and updated information about the health-care system, resonates with prior research ([Byrow *et al.*, 2019](#); [Guedj and Weinberger, 1990](#); [Lim *et al.*, 2022](#); [Mikkola *et al.*, 2019](#); [Mullins and White, 2019](#)).

Notably, the study uncovered the complexities surrounding beliefs initiated by migration, personal medical history and family medical history. The interviewees highlighted various concerns, ranging from uncertainties about future living conditions to language barriers impeding professional continuation. These findings echo the broader literature on the subject and highlight the unique challenges faced by this population (e.g. [Byrow *et al.*, 2019](#); [Mikkola *et al.*, 2019](#); [Strecher *et al.*, 1995](#); [Ye *et al.*, 2021](#)).

Regarding the study's methodology, its strengths lie in its in-depth qualitative approach, which provides rich insights into a relatively understudied population. However, it also presents limitations, such as the potential influence of the interviewer's background and the use of multiple languages, which might have affected participants' responses. The validity of the study is supported by the diverse backgrounds of the participants, but reflexivity regarding the researchers' backgrounds and perspectives is crucial to acknowledge. Overall, the study's approach enabled a comprehensive understanding of the health beliefs and perceptions among asylum seekers and refused asylum seekers in Finland, Norway and Sweden, contributing valuable insights to the existing body of knowledge.

6. Conclusion

This study offers new insights into the distinct health perspectives and susceptibility concerns of Iranian, Afghan and Tajik individuals with asylum-seeking or refused asylum-seeking applications residing in Finland, Norway and Sweden. The findings of this research highlighted the complex nature of health beliefs that are affected by individual, cultural and

environmental factors within these specific populations in the Nordic region. The results indicated an urgent need for implementing health-care strategies that are culturally adjusted and providing specialised health information services that address the particular challenges encountered by these populations. This study elaborates on the health beliefs of a particular subgroup within the broader and varied population of asylum seekers, acknowledging the diversity within this particular demographic. It emphasises the significance of comprehending unique cultural and individual characteristics while addressing health-care needs among diverse groups of asylum seekers.

The study's limitations, such as its concentration on a small number of participants from particular nations, highlight the necessity for more comprehensive research that encompasses a wider variety of asylum-seeking experiences. Future research could further investigate these findings and examine comparative perspectives by including native populations or second-generation individuals with asylum-seeking histories. Finally, this research enhances our comprehension of the vulnerability to health problems within a particular cohort of asylum seekers and refused asylum seekers, offering useful insights for customised medical services and regulations.

Acknowledgement

This research was supported by the grants from Finnish cultural foundation, Karl-Erik Henriksson Foundation, and Åbo Akademis Jubileumsfond.

Participants' informed consent: All participants of this study gave written informed consent prior to participation; however, the authors need to clarify that this study's participants were not patients but volunteers.

Conflict of interest: None of the authors have any conflicts of interest.

Authors' contribution: *Hamed Ahmadinia*, Conceptualisation, Method, Conducting interviews, Transcribing and translating the interviews, Formal analysis, Investigation, Writing – Original draft, Writing – Review and editing.

Jannica Heinström, Conceptualisation, Method, Investigation, Writing – Review and editing.

Kristina Eriksson-Backa, Conceptualisation, Method, Investigation, Writing – Original draft, Writing – Review and editing.

Shahrokh Nikou, Conceptualisation, Method, Translating the interviews, Formal analysis, Investigation, Writing – Original draft, Writing – Review and editing.

Note

1. Within the framework of the HBM, self-efficacy pertains to a psychological construct denoting an individual's conviction in their own capacity to successfully execute certain health-related tasks or behaviours ([Glanz et al., 2008](#)).

References

Acheson, L.S., Wang, C., Zyzanski, S.J., Lynn, A., Ruffin, M.T., Gramling, R., Rubinstein, W.S., O'Neill, S.M. and Nease, D.E. (2010), "Family history and perceptions about risk and prevention for chronic diseases in primary care: a report from the family Healthware™ impact trial", *Genetics in Medicine*, Vol. 12 No. 4, pp. 212-218.

Al Laham, D., Ali, E., Mousally, K., Nahas, N., Alameddine, A. and 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*, Vol. 56 No. 5, pp. 875-884.

- Ballard-Kang, J.L., Lawson, T.R. and 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*, Vol. 20 No. 2, pp. 345-350.
- Becker, M.H. (1974), "The health belief model and sick role behavior", *Health Education Monographs*, Vol. 2 No. 4, pp. 409-419.
- Berthold, S.M., Mollica, R.F., Silove, D., Tay, A.K., Lavelle, J. and Lindert, J. (2019), "The HTQ-5: revision of the Harvard trauma questionnaire for measuring torture, trauma, and DSM-5 PTSD symptoms in refugee populations", *European Journal of Public Health*, Vol. 29 No. 3, pp. 468-474.
- Bryant, R.A., Edwards, B., Creamer, M., O'Donnell, M., Forbes, D., Felmingham, K.L., Silove, D., Steel, Z., Nickerson, A., McFarlane, A.C., Van Hooff, M. and Hadzi-Pavlovic, D. (2018), "The effect of post-traumatic stress disorder on refugees' parenting and their children's mental health: a cohort study", *The Lancet Public Health*, Vol. 3 No. 5, pp. e249-e258.
- Burke, N.J., Joseph, G., Pasick, R.J. and Barker, J.C. (2009), "Theorizing social context: rethinking behavioural theory", *Health Education & Behavior*, Vol. 36 No. 5_suppl, pp. 55S-70S.
- Byrow, Y., Pajak, R., McMahon, T., Rajouria, A. and Nickerson, A. (2019), "Barriers to mental health Help-Seeking amongst refugee men", *International Journal of Environmental Research and Public Health*, Vol. 16 No. 15, p. 2634.
- Byrow, Y., Pajak, R., Specker, P. and Nickerson, A. (2020), "Perceptions of mental health and perceived barriers to mental health help-seeking amongst refugees: a systematic review", *Clinical Psychology Review*, Vol. 75, p. 101812.
- Dean, J., Mitchell, M., Stewart, D. and Debattista, J. (2017), "Intergenerational variation in sexual health attitudes and beliefs among Sudanese refugee communities in Australia", *Culture Health and Sexuality*, Vol. 19 No. 1, pp. 17-31.
- Dumitrache, L., Nae, M., Mareci, A., Tudoricu, A., Cioclu, A. and Velicu, A. (2022), "Experiences and perceived barriers of asylum seekers and people with refugee backgrounds in accessing healthcare services in Romania", *Healthcare*, Vol. 10 No. 11, p. 11.
- Elliott, J.A., Das, D., Cavailler, P., Schneider, F., Shah, M., Ravaud, A., Lightowler, M. and 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*, Vol. 12 No. 1, p. 40.
- Fox, S.D., Griffin, R.H. and Pachankis, J.E. (2020), "Minority stress, social integration, and the mental health needs of LGBTQ asylum seekers in North America", *Social Science & Medicine*, Vol. 246, p. 112727.
- Glanz, K., Rimer, B.K. and Viswanath, K. (Eds) (2008), *Health Behavior and Health Education: Theory, Research, and Practice*, 4th ed., Jossey-Bass, San Francisco.
- Greene, J.A. (2018), "Assessing readiness to seek formal mental health services: development and initial validation of the mental health belief model assessment (MHBMA)", University of South Florida, available at: www.proquest.com/openview/ee9b6292a7c33bac675efa95a8f212c2/1?pq-origsite=gscholarandcbl=18750
- Guedj, D. and Weinberger, A. (1990), "Effect of weather conditions on rheumatic patients", *Annals of the Rheumatic Diseases*, Vol. 49 No. 3, pp. 158-159.
- Haj-Younes, J., Abildsnes, E., Kumar, B. and Diaz, E. (2022), "The road to equitable healthcare: a conceptual model developed from a qualitative study of Syrian refugees in Norway", *Social Science & Medicine*, Vol. 292, p. 114540.
- Hassan, M.D. and 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*, Vol. 72 No. 6, pp. 869-885.
- Janz, N.K. and Becker, M.H. (1984), "The health belief model: a decade later", *Health Education Quarterly*, Vol. 11 No. 1, pp. 1-47.
- Joseph, R., Fernandes, S., Derstine, S. and McSpadden, M. (2019), "Complementary medicine and spirituality: health-seeking behaviors of Indian immigrants in the United States", *Journal of Christian Nursing*, Vol. 36 No. 3, pp. 190-195.
- Kennedy, A.P. and 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*, Vol. 18 No. 2, pp. 145-158.

- Knipscheer, J.W., Sleijpen, M., Mooren, T., ter Heide, F.J.J. and van der Aa, N. (2015), "Trauma exposure and refugee status as predictors of mental health outcomes in treatment-seeking refugees", *BJPsych Bulletin*, Vol. 39 No. 4, pp. 178-182.
- Lim, M., Van Hulst, A., Pisanu, S. and Merry, L. (2022), "Social isolation, loneliness and health: a descriptive study of the experiences of migrant mothers with young children (0-5 years old) at La Maison Bleue", *Frontiers in Global Women's Health*, Vol. 3, p. 823632, available at: www.frontiersin.org/articles/10.3389/fgwh.2022.823632
- McQueen, A., Vernon, S.W., Rothman, A.J., Norman, G.J., Myers, R.E. and Tilley, B.C. (2010), "Examining the role of perceived susceptibility on colorectal cancer screening intention and behaviour", *Annals of Behavioral Medicine*, Vol. 40 No. 2, pp. 205-217.
- Mahmudiono, T., Rachmah, Q., Indriani, D., Permatasari, E.A., Hera, N.A. and Chen, H.-L. (2022), "Food and beverage consumption habits through the perception of health belief model (grab food or go food) in Surabaya and Pasuruan", *Nutrients*, Vol. 14 No. 21, p. 21.
- Mikkola, T.M., von Bonsdorff, M.B., Salonen, M.K., Kautiainen, H., Ala-Mursula, L., Solovieva, S., Viikari-Juntura, E. and Eriksson, J.G. (2019), "Physical heaviness of work and sitting at work as predictors of mortality: a 26-year follow-up of the Helsinki birth cohort study", *BMJ Open*, Vol. 9 No. 5, p. e026280.
- Mills, M. and Rahmoni, R. (2015), "13 Gashtak: oral/literary intertextuality, performance and identity in contemporary Tajikistan", *In Orality and Textuality in the Iranian World*, Brill, pp. 316-341, doi: [10.1163/9789004291973_015](https://doi.org/10.1163/9789004291973_015).
- Misra, R. and Kaster, E.C. (2012), "Health beliefs", in Loue, S. and Sajatovic, M. (Eds), *Encyclopedia of Immigrant Health*, Springer, doi: [10.1007/978-1-4419-5659-0_332](https://doi.org/10.1007/978-1-4419-5659-0_332).
- Mölsä, M., Tiilikainen, M. and Punamäki, R.-L. (2019), "Usage of healthcare services and preference for mental healthcare among older Somali immigrants in Finland", *Ethnicity & Health*, Vol. 24 No. 6, pp. 607-622.
- Mulé, N.J. (2021), "Mental health issues and needs of LGBTQ+ asylum seekers, refugee claimants and refugees in Toronto, Canada", *Psychology & Sexuality*, Vol. 13 No. 5, pp. 1-11.
- Mullins, J.T. and White, C. (2019), "Temperature and mental health: evidence from the spectrum of mental health outcomes", *Journal of Health Economics*, Vol. 68, p. 102240.
- Nissanke, M. and Thorbecke, E. (2010), "Globalization, poverty, and inequality in Latin America: findings from case studies", *World Development*, Vol. 38 No. 6, pp. 797-802, doi: [10.1016/j.worlddev.2010.02.003](https://doi.org/10.1016/j.worlddev.2010.02.003).
- Nordic Statistics database (2022), "Integration and migration. Nordic statistics database", available at: www.nordicstatistics.org/areas/integration-and-migration/#2220
- OAIC (2022), "What is health information? Home", available at: www.oaic.gov.au/privacy/health-information/what-is-health-information
- Papadopoulos, I., Lay, M., Lees, S. and Gebrehiwot, A. (2003), "The impact of migration on health beliefs and behaviours: the case of Ethiopian refugees in the UK", *Contemporary Nurse*, Vol. 15 No. 3, pp. 210-221.
- Piran, P. (2004), "Effects of social interaction between Afghan refugees and Iranians on reproductive health attitudes", *Disasters*, Vol. 28 No. 3, pp. 283-293.
- Pribadi, E.T. and Devy, S.R. (2020), "Application of the health belief model on the intention to stop smoking behavior among young adult women", *Journal of Public Health Research*, Vol. 9 No. 2, p. 1817.
- Resnicow, K. and Page, S.E. (2008), "Embracing chaos and complexity: a quantum change for public health", *American Journal of Public Health*, Vol. 98 No. 8, pp. 1382-1389.
- Ryom, K., Simonsen, C.B., Rau, S.R., Maindal, H.T. and Agergaard, S. (2022), "Newly arrived refugees' perception of health and physical activity in Denmark", *Journal of Migration and Health*, Vol. 6, p. 100111.
- Saadi, A., Bond, B.E. and 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*, Vol. 25 No. 5, pp. 501-508.
- Savic, M., Chur-Hansen, A., Mahmood, M.A. and 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", *International Journal of Social Psychiatry*, Vol. 62 No. 1, pp. 76-83.

Strecher, V.J., Kreuter, M.W. and Kobrin, S.C. (1995), "Do cigarette smokers have unrealistic perceptions of their heart attack, cancer, and stroke risks?", *Journal of Behavioral Medicine*, Vol. 18 No. 1, pp. 45-54.

Vollrath, M., Knoch, D. and Cassano, L. (1999), "Personality, risky health behaviour, and perceived susceptibility to health risks", *European Journal of Personality*, Vol. 13 No. 1, pp. 39-50.

Ward, H., Mertens, T.E. and Thomas, C. (1997), "Health seeking behaviour and the control of sexually transmitted disease", *Health Policy and Planning*, Vol. 12 No. 1, pp. 19-28.

Ye, C., Niu, J., Zhao, Z., Li, M., Xu, Y., Lu, J., Chen, Y., Wang, W., Ning, G., Bi, Y., Xu, M. and Wang, T. (2021), "Genetic susceptibility, family history of diabetes and healthy lifestyle factors in relation to diabetes: a gene-environment interaction analysis in Chinese adults", *Journal of Diabetes Investigation*, Vol. 12 No. 11, pp. 2089-2098.

Further reading

Sherif, B., Awaisu, A. and Kheir, N. (2022), "Refugee healthcare needs and barriers to accessing healthcare services in New Zealand: a qualitative phenomenological approach", *BMC Health Services Research*, Vol. 22 No. 1, p. 1310.

Author affiliations

Hamed Ahmadinia is based at the Faculty of Social Sciences, Business and Economics, and Law, Åbo Akademi University, Turku, Finland.

Jannica Heinström is based at the Department of Archivistcs, Library and Information Science, Oslo Metropolitan University, Oslo, Norway.

Kristina Eriksson-Backa is based at the Faculty of Social Sciences, Business and Economics, and Law, Åbo Akademi University, Turku, Finland.

Shahrokh Nikou is based at the Faculty of Social Sciences, Business and Economics, and Law, Åbo Akademi University, Turku, Finland and Department of Computer and Systems Sciences (DSV), Stockholm University, Stockholm, Sweden.

About the authors

Hamed Ahmadinia, a doctoral candidate in Information Studies and a researcher in the Mobile Futures project at Åbo Akademi University and the Migration Institute of Finland, focuses on trust in immigration-related information and integration, with an emphasis on cultural and social influences on health. His multidisciplinary research spans from finance to information studies, contributing to policy development and integration strategies. Ahmadinia's publications appear in peer-reviewed journals such as the *Journal of Documentation*, *Library & Information Science Research* and the *Finnish Journal of eHealth and eWelfare*. Hamed Ahmadinia is the corresponding author and can be contacted at: hamed.ahmadinia@abo.fi

Jannica Heinström is a professor at the Department of Archivistcs, Library and Information Science, Oslo Metropolitan University, Norway. Her research focuses on psychological aspects of information interaction, particularly the role of personality and individual differences. Recent work includes studies on information avoidance, stigma, serendipity, and everyday information mastering. Heinström's research has been published in journals such as *Journal of the Association for Information Science and Technology*, *Journal of Documentation*, *Journal of Information Science and Information Research*.

Kristina Eriksson-Backa is professor and head of subject in Information Studies at Åbo Akademi University in Turku, Finland. Her research interests include health information behaviour and literacy, health communication, e-health and trust in information in relation to integration. She leads the work package named Trust in Information in the project Diversity, Trust, and Two-Way Integration (Mobile Futures), funded by the Strategic Research Council at the Research Council of Finland 2021–2027. Eriksson-Backa has published in a wide

range of peer-reviewed journals, of which those focusing information and health include *International Journal of Medical Informatics*, *Health Informatics Journal*, *Informatics for Health and Social Care*, *International Journal of Telemedicine and Clinical Practice* and *Finnish Journal of eHealth and eWelfare*.

Shahrokh Nikou is an assistant professor of Design for Organisation Innovation at Delft University of Technology, Faculty of Industrial Design Engineering, and earned his Ph.D. in Information Systems and Business Administration in 2012. Shahrokh is a Docent in Information Systems from 2014; his research delves into digitalisation, organisation transformation towards sufficiency orientation, organisational design, entrepreneurship and sustainable business. With more than 120 publications across business, information systems, organisation, entrepreneurship and education, his work is distinguished by sophisticated methodologies and advanced data analysis techniques. Dr. Nikou has been involved in several national and international research projects and collaborates with several international universities. Dr. Nikou also serves as an associate editor for several international journals.

For instructions on how to order reprints of this article, please visit our website:
www.emeraldgroupublishing.com/licensing/reprints.htm
Or contact us for further details: permissions@emeraldinsight.com