BMC Public Health

RESEARCH Open Access

Migrant women's perception toward cervical and breast cancer screening in Türkiye: a qualitative analysis

Zeynep Meva Altaş[1,2*] and Mehmet Akif Sezerol[3,4,5]

Abstract

Introduction This study aims to investigate the knowledge, attitudes, and behaviors of Syrian migrant women regarding breast and cervical cancer screenings in the Sultanbeyli district of Istanbul.

Methods The women were recruited from Extended Migrant Health Centre, which is a primary health care institution in Istanbul. In August 2024, face-to-face interviews were conducted using an open-ended, semi-structured question form administered by a nurse experienced in qualitative research. Sociodemographic information, their thoughts on cancer, information on the types of cancers screened and sources of information, their participation in cancer screenings, and their perspectives on cancer screenings were asked.

Results In depth interviews were conducted with 40 migrant women. Four main themes and thirteen sub-themes were identified. These themes include "Opinions about the cancers and information about the cancer screenings" "Attitudes about the cancer screening program""Perspectives on preventive measures against cancers" and "Problems in access to health services". Women mostly described cancer as a serious, incurable, and fatal disease. Despite this perception, almost half of the participants had not attended cancer screening programs. The majority said they did not undergo screening because they had no symptoms. The other main barriers for participation included lack of knowledge, fear of receiving a negative result, or fear of the procedures involved.

Conclusions Based on this study, migrant women have low level of attendance to breast and cervical cancer screening programs. Besides, they lack adequate information about breast cancer and cervical cancer, the screening protocols and preventive measuremets.

Keywords Migrants, Women, Cancer screening, Barriers

*Correspondence:
Zeynep Meva Altaş
zeynep.meva@hotmail.com
[1]Maltepe District Health Directorate, Maltepe, Istanbul, Türkiye
[2]Department of Public Health, International School of Medicine, Istanbul Medipol University, Istanbul, Türkiye
[3]Epidemiology Program, Institute of Health Sciences, Istanbul Medipol University, Istanbul, Türkiye
[4]Department of Public Health, School of Medicine, Istanbul Medipol University, Istanbul, Türkiye
[5]Sultanbeyli District Health Directorate, Sultanbeyli, Istanbul, Türkiye

Introduction

The global cancer burden is steadily increasing, placing significant physical, emotional, and financial stress on individuals, families, communities, and healthcare systems [1]. According to data from the World Health Organization's (WHO) International Agency for Research on Cancer (IARC), there were 20 million new cancer cases and 9.7 million deaths worldwide in 2022 [2]. Similarly, the Centers for Disease Control and Prevention (CDC) reported 1,777,566 new cancer cases in the United States in 2021 [3]. The rise in cancer cases and the associated burden underscores its significance as a major public health issue.

The most common cancers globally include breast, lung, colorectal, and prostate cancer [4]. In 2020, breast cancer was the most frequently diagnosed, while lung cancer accounted for the highest number of cancer-related deaths worldwide [5]. Despite the increasing burden, early diagnosis and detection are critical for reducing cancer morbidity and mortality [6]. Effective screening programs must address the entire process, from inviting the target population to ensuring access to treatment for those diagnosed.

In Türkiye, cancer screening is carried out for three types of cancer, as recommended by the WHO. The breast cancer screening program for women includes providing counseling on performing monthly breast self-examinations, conducting annual clinical breast examinations, and performing mammography every two years for women aged 40–69 years. For cervical cancer, the screening protocol involves a smear test and HPV-DNA testing every five years for women aged 30–65 years. Colorectal cancer screening includes biennial fecal occult blood testing for men and women aged 50–70 years, along with a colonoscopy every ten years for individuals within the same age range [7].

Türkiye hosts a large population of Syrian refugees. According to the latest data from the Directorate of Migration Management (dated October 10, 2024), there are 3,088,863 registered Syrians living in the country [8]. To improve access to preventive and primary healthcare services for Syrian refugees, Migrant Health Centers (MHCs) have been established in regions with significant refugee populations, functioning within the framework of primary healthcare institutions. A key feature of these centers is the employment of Syrian healthcare professionals to help overcome language barriers faced by immigrants. Syrian refugees in Türkiye receive free healthcare services, including cancer screenings, through MHCs, family health centers, or hospitals [9]. Extended MHC's are staffed with a multidisciplinary team, comprising specialist physicians, general practitioners, dentists, assistant health personnel, psychologists, and social workers [10, 11].

Migrants in host countries are often considered a disadvantaged group due to factors such as low socioeconomic status, unemployment, and language barriers, which can lead to delays or limitations in accessing healthcare services [12, 13]. In a study conducted among Syrian immigrant women in Canada, only a minority had ever undergone breast self-examination (32%), clinical breast examination (12%), or mammography (6.7%) at any point in their lives [14]. According to the 2020 report on the Surveys for Health Care Needs Analysis of Syrian Population under Temporary Protection, 78.1% of the women aged 15–49 years stated that they did not know how to perform a breast self-exam. The percentage of those who reported not having an annual gynecological examination was 73.4%. Additionally, 92.4% of the women indicated that they had not undergone a breast cancer screening test in Türkiye, and 86.6% reported that they had not had a cervical cancer screening test in Türkiye [15]. For screening programs to achieve better results, a high level of coverage is crucial [16]. Consequently, data on the utilization of cancer screening services among the Syrian migrant population are of critical importance. Understanding the barriers to participation in screening programs and developing public health interventions to address these challenges is more effectively achieved through qualitative research. Within this framework, this study aims to investigate the knowledge, attitudes, and behaviors of Syrian migrant women regarding breast and cervical cancer screenings in the Sultanbeyli district of Istanbul.

Methods

Study type, design and participants

The study population for this qualitative research consisted of women aged 30–70 years who visited the Extended MHC in the Sultanbeyli district of Istanbul. The Extended MHC is a primary healthcare institution operating under the District Health Directorate. In-depth, semi-structured interviews were conducted with women who received health services (including medical examinations, wound care, blood tests, immunizations, and other related healthcare services) from the Extended MHC and volunteered to participate in the study. Purposive sampling was used to select participants based on specific criteria: aged 30–70 years, female, Arabic-speaking, and prior use of healthcare services. Participants were recruited from individuals referred by healthcare personnel. These criteria were designed to ensure a balanced sample of women who had and had not previously undergone screenings, aligning with the study's objectives.

Data collection and the interviews

Data collection was concluded once the researchers determined that data saturation had been reached. In-depth interviews were conducted in August 2024. Prior to the interviews, participants were informed about the study's aim, topic, and the researchers involved, and their consent was obtained. All interviews were conducted face-to-face. An open-ended, semi-structured interview guide was used during the interviews by the interviewer, with the assistance of a translator who spoke Arabic, the participants' mother tongue. The interviews took place in a pregnancy follow-up room within theMHC, which provided a quiet, clean, and interference-free environment. The study adhered to the COREQ guidelines [17].

The interview guide and interviewer

The interview guide was developed for this study to address the specific research objectives and context. The guide was informed by the research team's expertise and a review of similar qualitative studies. Sociodemographic information, thoughts on cancer, knowledge about the types of cancers screened and sources of information, participation in cancer screenings, and perspectives on cancer screenings were explored during the interviews. The interviewer adhered to a standardized protocol with the assistance of a translator. The translator's role was limited to addressing the language barrier during the interviews and did not influence or guide the participants' responses. The interviewer was a 37-year-old female nurse who had been working as a coordinator nurse at the MHC for 2.5 years. She had experience in qualitative research and was briefed about the study objectives by the authors prior to the interviews. The interviewer nurse also provides coordination services at the MHC, including pregnancy and maternity follow-ups, infant and child health monitoring, and vaccinations.

Data evaluation

In the evaluation of the data, the stages of access to healthcare by Levesque et al. (2013) were followed [18]. Levesque et al. define access to healthcare as the opportunity for individuals to identify their health needs, seek care, reach healthcare services, utilize them, and receive care that truly meets their needs. This model addresses both individual and structural factors that influence access to healthcare [18].

A thematic analysis was conducted using a framework approach comprising seven steps to systematically analyze qualitative data [19]:

1. Transcription: All interviews were audio recorded and subsequently transcribed. The Turkish version of the interview guide was available to the interviewer during the in-depth interviews. The translation between the interviewer and the participants during the sessions was performed by the translator. As a result, the audio recordings contained the translator's Turkish translations of both the questions and the responses. The transcripts were manually prepared in Turkish by the researchers based on the audio recordings. Subsequently, the transcripts were translated into English independently by both researchers and cross-checked for accuracy.
2. Familiarization: The English translations of the interviews were reviewed to identify primary topics and potential codes and themes for analysis.
3. Coding, Categorization, and Theme Development: While creating the code list, most of the items in Levesque et al.'s model were accepted as deductive codes or categories. Additionally, to cover situations not included in Levesque et al.'s model, new codes were created inductively by reading the content.
4. Analytic Framework Construction: Levesque et al.'s model stages were followed, assessing complementary individual and institutional dimensions at each stage.
5. Applying the Analytical Framework: Interviews were coded by two researchers. During the first stage (open coding), a total of 76 codes were generated. In the second stage (merging codes and transforming them into themes), minor disagreements arose between the two coders regarding 8 codes. However, these discrepancies were through discussion and consensus, incorporating necessary adjustments. As a result, no third stage or involvement of an external adjudicator was necessary.
6. Data Charting: Atlas.ti was used to generate a report detailing the content and codes for each interview to facilitate analysis.
7. Data Interpretation: Thematic analysis was conducted using the reports, with themes and subthemes independently identified by two researchers (ZMA, MAS).

Selected quotes from participants' responses are included in the results section to illustrate the findings.

Ethics

Ethics committee approval for the study was obtained from the Istanbul Medipol University Non-Interventional Clinical Research Ethics Committee under decision number 946 on 23/11/2023.

Results

In the study, face-to-face in-depth interviews were conducted with 40 migrant women. The median duration of the interviews was 18 min (min:15, max:26). Participants were between the ages of 30–70 years. The median age

Table 1 Sociodemographics of 40 migrant women who participated in an interview about cancer screening in August 2024

		n	%
Age (years)	30–40	16	40.0
	40–50	15	37.5
	50–60	5	12.5
	60–65	2	5.0
	65–70	2	5.0
Time in Türkiye (years)	< 10	12	30.0
	≥ 10	28	70.0
Education	Illiterate	2	5.0
	Primary school	24	60.0
	Secondary school	9	22.5
	High school	2	5.0
	University	3	7.5
History of chronic disease	No	25	62.5
	Yes	15	37.5
History of cancer diagnosis	No	39	97.5
	Yes	1	2.5
Previous cancer screening	No	18	45.0
	Yes	22	55.0
Family history of cancer	No	19	47.5
	Yes	21	52.5

Table 2 Themes and subthemes identified from interviews with 40 migrant women regarding Cancer Screening in August 2024

Themes	Subthemes
1. Opinions about the cancers and information about the cancer screenings	1. Perceptions of cancer and thoughts on its effects on the body
	2. Information about the cancer types screened
	3. Information sources about the cancers
	4. Information on the implementation protocol of cancer screening programs
2. Attitudes about the cancer screening program	1. Reasons for participation in cancer screenings
	2.Reasons for non-participation in cancer screenings
3. Perspectives on preventive measures against cancers	1. Breastfeeding and self-examination practices
	2. Importance of hygiene and cleanliness in cancer prevention
	3. Regular health check-ups and screening attendance
	4. Mental health and other preventive measures
4. Barriers in access to health services	1. Language barrier
	2. ID card and appointment problems
	3. Transportation problem and lack of time

was 43 years. Participants were grouped into the following age categories: 30–40 years ($n = 16$), 40–50 years ($n = 15$), 50–60 years ($n = 5$), 60–65 years ($n = 2$), and 65–70 years ($n = 2$). Median length of stay in Türkiye was 10 years (min:6, max:13). The majority of the participants were primary and secondary school graduates. Sociodemographic information about the participants is given in Table 1.

Four main themes and thirteen sub-themes were identified within the scope of this study. These themes include "Opinions about the cancers and information about the cancer screenings" "Attitudes about the cancer screening program" "Perspectives on preventive measures against cancers" and "Barriers in access to health services" The themes and sub-themes are presented in Table 2.

Theme 1. opinions about the cancers and information about the cancer screenings

Participants were asked about whether they had heard of the cancer, their information about the cancer screenings. The subthemes of this theme were "Perceptions of cancer and thoughts on its effects on the body", "Information about the cancer types screened", "Information sources about the cancers" and "Information on the implementation protocol of cancer screening programs".

Subtheme 1. perceptions of cancer and thoughts on its effects on the body

Nearly all participants who shared their thoughts on cancer described it as a serious, incurable, and fatal disease. The remaining few participants stated that they had no opinion about the cancers. The most frequently mentioned common cancers were breast, lung, cervical, and bone cancer. Some participants also mentioned that they had heard of blood, colon, and liver cancer. When asked about the effects of breast and cervical cancer on the body, the majority of participants stated that breast cancer could present with a lump, swelling, and pain in the breast. A few participants mentioned that fatigue and weight loss are seen in cancer patients. Nearly all participants mentioned that cervical cancer would lead to bleeding in the uterine area. Some of the participant views on cancer and its effects on the body are quoted below.

> *"It's a difficult disease that can lead to death, and people suffer a lot from it." P31.*
> *"Recovery is not possible. It's a difficult disease."P16.*
> *"There is pain and redness in the breasts, and when there is pain or discomfort, she goes for an examination, after which it is diagnosed." P32.*
> *"There may be bleeding. The uterus might be removed because of this disease." P26.*

Subtheme 2. information about the cancer types screened

Most of the participants stated that they had no knowledge about the types of cancer being screened. Some participants mentioned that screening could be done for breast and cervical cancer or both.

> *"Screenings are conducted for breast cancer and cervical cancer. I had both screenings done" P2.*

Subtheme 3. information sources about the cancers

Most participants stated that they learned about cancer from healthcare professionals and the internet. Some participants also mentioned that they obtained information about cancer from individuals in their social circles, such as friends, neighbors, and relatives who had experienced the disease, as well as from television.

> *"I learn from the television, the internet, and doctors. To be sure, the best thing is to go to the doctor." P1.*

Subtheme 4. information on the implementation protocol of cancer screening programs

Except for one (Participant 8), none of the participants knew how often the breast and cervical cancer screening programs should be conducted. Nearly all participants stated that the screening is conducted once a year. Most participants also did not know the age range for the screening program. However, some participants correctly knew the screening age protocol in the breast and cervical cancer screening programs.

Theme 2. attitudes about the cancer screening program

Almost half of the participants had not attended cancer screening programs. Some of the participants who had undergone screening had only completed either the breast or cervical cancer screening. The subthemes of this theme were "Reasons for participation in cancer screenings" and "Reasons for non-participation in cancer screenings".

Subtheme 1. reasons for participation in cancer screenings

The reasons women undergo breast and cervical cancer screenings are due to the importance of early detection, general health, doctor recommendations, and hearing about it from people around them.

> *"When tests are requested from health workers, we need to do what they say. They're working for us and requesting for our health." P26.*
> *"If it's at an early stage, you can be treated. Whether it has spread throughout the body or not…. It's done for the patients' health and for monitoring them. If they have a disease, they receive treatment. I know this from my spouse. When first diagnosed with this disease, they received immediate treatment. Later on, they recovered and are in good health."P6.*

Subtheme 2. reasons for non-participation in cancer screenings

The majority said they did not undergo screening because they had no symptoms. The other main reasons for non-participation to breast and cervical cancer screenings included lack of knowledge, fear of receiving a negative result, or fear of the procedures involved. Nearly all participants who said they did not undergo screenings due to lack of knowledge stated that if they had been informed and invited for screening, they would have attended.

> *"I'm afraid to have the cervical screening because I think it will be painful, so I don't want to do it." P7.*
> *"Let's leave such things to God; my elders lived without doing anything. If there are complaints, then you go." P12.*
> *"It's an exhausting disease, and several people in our family have had it….I fear the outcome due to a genetic predisposition to this disease within our family."P36.*

Theme 3. perspectives on preventive measures against cancers

Participants were asked about ways to prevent breast and cervical cancer. The subthemes of this theme were "The subthemes of this theme were "Breastfeeding and self-examination practices", "Importance of hygiene and cleanliness in cancer prevention", "Regular health check-ups and screening attendance", and "Mental health and other preventive measures."

Subtheme 1. breastfeeding and self-examination practices

To prevent breast cancer, some participants mentioned the importance of breastfeeding and self-breast exams.

> *"Breastfeeding is beneficial as it helps to cleanse the breasts. I also breastfed all of my children" P22.*
> *"People can already self-examine and check themselves."P37.*

Subtheme 2. importance of hygiene and cleanliness in cancer prevention

For cervical cancer prevention, some participants highlighted the importance of hygiene and cleanliness. Below are some quotes regarding the importance of cleanliness and hygiene in preventing cervical cancer.

> *"Hygiene is important, and tests and imagings need to be done."P25.*
> *"It is necessary to pay attention to cleanliness to prevent cervical cancer." P28.*

Subtheme 3. regular health check-ups and screening attendance

The majority stated that to prevent breast and cervical cancers, one should go for regular check-ups and undergo the necessary tests. Below are participant quotes regarding regular check-ups and screening programs for the prevention of cervical and breast cancer.

"We need to go for check-ups every six months or once a year." P29.
"They need to have imaging tests (she means the mammography) done regularly."P38.

Subtheme 4. mental health and other preventive measures

To prevent cancer, a few participants mentioned the importance of psychological well-being, one participant suggested avoiding chemicals, and two participants also said that praying is important for protection from cancer.

"People need to stay away from chemicals, especially since they are heavily exposed to them during wars. They also shouldn't be emotionally distressed or exposed to trauma."P36.

Theme 4. barriers in access to health services

Approximately half of the participants reported experiencing difficulties in accessing healthcare services. The most common problem encountered in accessing healthcare services was language barriers. In addition, issues related to scheduling appointments, identification problems, and transportation difficulties were also among the other challenges mentioned by the participants.

Subtheme 1. language barrier

Many participants reported experiencing language barriers in accessing healthcare services, so they would bring along someone who speaks Turkish (such as a friend, neighbor, or family member) when going to the hospital.

"I can understand, but I have difficulty speaking. When doctors speak quickly, I struggle to understand. Some doctors tend to speak fast."P1.
"We have trouble with the language because we don't fully understand. When we go to the hospital, we understand about 50% of what they say but don't get the rest. The hospital interpreter sometimes comes, sometimes doesn't. When there's no interpreter, we try to understand through the phone (she means a translation application)." P27.

Subtheme 2. ID card and appointment problems

Some participants mentioned that they were unable to receive free medical examinations because their ID cards were registered in a different province. Others reported difficulties in finding outpatient clinic appointments at hospitals, or that available appointments were scheduled too far in advance.

"The hospital provides appointments with a 15-day wait. By then, if I am unwell, I may have already recovered." P6.

Subtheme 3. transportation problems and lack of time

Some participants noted that hospitals are located far from their homes. One participant mentioned that they did not have enough time due to daily responsibilities, such as childcare.

"I experience difficulties with transportation, as my residence is located at a considerable distance." P34.

"I have no time because of the children; I have four." P24.

Discussion

In this study, migrant women's views on cancer, their participation in breast and cervical cancer screenings, their knowledge about cancer screenings, and the difficulties they face in accessing healthcare services were evaluated through in-depth interviews. Nearly all participants who shared their thoughts on cancer described it as a serious, incurable, and fatal disease. In the literature, a study conducted with individuals aged 23–73 years who had never been diagnosed with cancer found that their initial responses to cancer were associated with fear, trauma, and death [20]. Similarly, a study conducted in Türkiye with individuals without a cancer diagnosis reported a general perception of cancer as a fatal, frightening, and challenging disease. In the same study, approximately 12% of participants did not believe that cancer is a treatable illness [21]. This study, in line with the literature, demonstrates a prevalent societal perception of cancer as a highly dangerous disease. It is essential to ensure that this perception encourages individuals to take necessary preventive measures against cancer without escalating into fear. Increasing public awareness that cancer is a treatable disease, and emphasizing the importance of early detection and screenings, is imperative in this context.

The primary sources of cancer information for most participants were healthcare professionals and the internet, while other sources included their social circles and television. Healthcare providers and the internet were the most frequently cited sources of information about breast and cervical cancer in a similar study conducted among migrants [22]. Another study on breast cancer screenings among vulnerable groups observed significant positive changes in cases where individuals participated in health education sessions, received information about cancer screening programs, or sought medical attention [23]. In this context, to increase screening rates among migrants, frequent educational sessions and informative campaigns should be organized by healthcare professionals, who are commonly cited as information sources. Additionally, to prevent misinformation on platforms such as the internet and television, health policies should be developed.

Participants were asked about methods to prevent breast and cervical cancer. Most responded that regular check-ups and necessary tests are essential for prevention. For breast cancer, some emphasized the importance of breastfeeding and performing self-breast exams, while for cervical cancer, hygiene and cleanliness were highlighted by some participants. A few also mentioned the role of psychological well-being in cancer prevention. In a qualitative study in the literature, approximately half of the migrant participants had no knowledge about mammograms [24]. In a cross-sectional study conducted in Cambodia, 35% of women were aware that cervical cancer is preventable by vaccination [25]. Even this rate is low, none of the participants in our study mentioned HPV vaccination for cervical cancer prevention. Information on cancer prevention methods including vaccination should be included in awareness programs provided migrants.

Most of the participants stated that they had no knowledge about the types of cancers being screened. Most participants also did not know the age range for the screening program. According to a study in the literature, individuals with a migration background have significantly less knowledge about age eligibility for accessing cancer preventive screening programs compared to those without a migration background [26]. If migrants do not understand when they are eligible for cancer screening programs, their likelihood of participating is likely to decrease [27].

A study in the literature reported that immigrant women in the United States [U.S.] have lower rates of undergoing mammography compared to U.S.-born women [28]. To improve the success of cancer screening programs, factors motivating immigrant women to participate, as well as reasons for non-participation, were examined in this study. Almost half of the participants had not attended cancer screening programs. Women undergo breast and cervical cancer screenings primarily due to the emphasis on early detection, concerns for overall health, physician recommendations, and exposure to the screening program through individuals in their social circles who have participated. According to these findings, emphasizing the effectiveness of early diagnosis in overcoming cancer while recommending cancer screenings to the target population by health professionals may increase the participation of migrant women in screenings. The most frequently mentioned reason among participants who did not participate in the cancer screening program was the absence of any symptoms. The other main reasons for non-participation to breast and cervical cancer screenings included lack of knowledge, fear of receiving a negative result, or fear of the procedures involved. According to a systematic review in the literature, lack of knowledge has been reported as one of the most common barriers to participation in cervical cancer screening programs among migrants. Lack of education, low income, preference for a female physician, lack of effective communication, and embarrassment were other barriers reported [29]. In a qualitative study, health and community workers reported that inadequate knowledge, low risk perception and low interest in preventive care were reported as reasons for low participation of migrant women in cervical cancer screening [30]. In another study, 25% of the migrant women reported fear of negative breast cancer screening results, which caused them to avoid screening. However, the same study suggested that increasing participants' knowledge could help reduce these fears [24]. In our study, nearly all participants who said they did not undergo screenings due to lack of knowledge stated that if they had been informed and invited for screening, they would have attended. This finding shows the hope that health education, counseling services and invitations by health professionals will be effective in increasing cancer screening in migrant women. In addition, the information should emphasize that participation in screening programs should be done even if there is no symptoms.

In our study, nearly half of the participants reported experiencing language-related barriers when accessing healthcare services. Other commonly cited challenges included issues with healthcare payments due to identity card requirements, difficulty securing timely appointments, and transportation obstacles. Similarly, the World Health Organization has highlighted that migrants and refugees frequently encounter barriers such as language difficulties, cultural differences, discrimination, and financial constraints in accessing healthcare services [31]. Addressing these socio-cultural and communication barriers, as well as the logistical challenges associated with accessing services, is essential to ensure the effectiveness of screening programs [31, 32]. Additionally, a study conducted in Türkiye found that providing health education to refugee women in their native language significantly improved breast and cervical cancer awareness. This improvement similarly emphasizes the importance of eliminating the language barrier for migrant individuals [33].

Limitations and strengths

This study has significant strengths. In-depth interviews conducted with 40 migrant women provides a wide range of insights into their knowledge and attitudes toward cancer screenings. The focus on migrants, who are one of the vulnerable groups, fills an important gap in understanding the challenges and motivations that influence their screening behaviors. Through questions about breast and cervical cancer, two of the most common cancers among women, and their screenings, this study

also served to increase participants' awareness. Despite its strengths, there are also some limitations. Although 40 participants make the findings comprehensive, these results may still be specific to this group recruited from one district. Although participants were informed about the study before the interviews, and questions were asked in a non-judgmental, non-leading manner during the interviews, they may still have provided socially more acceptable responses.

Conclusion

This study provides valuable insights into migrant women's knowledge, attitudes, and behaviors regarding cancer screenings. Nearly all participants who shared their thoughts on cancer described it as a serious, incurable, and fatal disease. Despite this perception, almost half of the participants had not attended cancer screening programs. The majority said they did not undergo screening because they had no symptoms. The other main reasons for non-participation included lack of knowledge, fear of receiving a negative result, or fear of the procedures involved. Based on this study, migrant women have low level of attendance to breast and cervical cancer screening programs. The findings of this study have some practical implications for promoting cancer screening among migrant women. Healthcare providers need to provide migrant women with up-to-date information on cancer screenings. Psychologists can also play an active role in these informational sessions to help alleviate women's concerns about cancer and screenings. Additionally, cancer awareness programs should be developed to educate individuals about the importance of early detection. Finally, cultural and linguistic barriers should be carefully considered when implementing cancer screening programs.

Supplementary Information

The online version contains supplementary material available at https://doi.org/10.1186/s12889-025-21425-z.

Supplementary Material 1

Author contributions

ZMA and MAS assisted in the conceptualization of the study, literature research, data analysis, writing of the manuscript and reviewed the manuscript for important intellectual content and approved the final version.

Funding

This research received no external funding.

Data availability

The data that support the findings of this study are not openly available due to reasons of sensitivity and are available from the corresponding author upon reasonable request.

Code availability

Not applicable.

Declarations

Ethics approval and consent to participate

The study was conducted in accordance with the Declaration of Helsinki, and approved by the Ethics Committee of Medipol University, Istanbul, Türkiye (protocol code 946 date of 23/11/2023.). Informed consent was obtained before the interviews.

Consent for publication

Not applicable.

Competing interests

The authors declare no competing interests.

Received: 9 November 2024 / Accepted: 13 January 2025
Published online: 16 January 2025

References

1. World Health Organization. Cancer. Available from: https://www.who.int/health-topics/cancer#tab=tab_1. (Accessed on 1 Oct 2024).
2. World Health Organization. Global cancer burden growing amidst mounting need for services. 2024 Feb 1. Available from: https://www.who.int/news/item/01-02-2024-global-cancer-burden-growing--amidst-mounting-need-for-services. (Accessed on 3 Oct 2024).
3. Centers for Disease Control and Prevention. Cancer data and statistics. Available from: https://www.cdc.gov/cancer/data/index.html. (Accessed on 4 Oct 2024).
4. World Health Organization Regional Office for the Eastern Mediterranean. World Cancer Day 2024. Available from: https://www.emro.who.int/media/news/world-cancer-day-2024.html. (Accessed on 4 Oct 2024).
5. International Agency for Research on Cancer. Estimated number of deaths in 2022, World, both sexes, all ages. Cancer Today. Available from: https://gco.iarc.fr/today. (Accessed on 30 Sep 2024).
6. Crosby D, Bhatia S, Brindle KM, Coussens LM, Dive C, Emberton M, et al. Early detection of cancer. Science. 2022;375(6586):eaay9040.
7. T.C. Sağlık Bakanlığı Halk Sağlığı Genel Müdürlüğü. Kanser Taramaları. Available from: https://hsgm.saglik.gov.tr/tr/kanser-taramalari. (Accessed on 1 Oct 2024).
8. T.C. Ministry of Interior Presidency of Migration Management. Statistics. Available from: https://www.goc.gov.tr/gecici-koruma5638. (Accessed on 21 Oct 2023).
9. Altaş ZM, Sezerol MA. Frequency of SARS-COV-2 infection and COVID-19 vaccine uptake and protection among Syrian refugees. BMC Infect Dis. 2024;24:570.
10. Atak M, Sezerol MA, Değer MS, Kurubal H. Factors associated with the prevalence of postpartum anxiety disorder and depression in Syrian migrant women living in Turkey: a cross-sectional study. Healthcare. 2023;11(18):2517.
11. Altaş ZM, Sezerol MA. Prevalence and associated factors of dental caries in Syrian immigrant children aged 6–12 years. Children. 2023;10(6):1000.
12. Kohlenberger J, Buber-Ennser I, Rengs B, Leitner S, Landesmann M. Barriers to health care access and service utilization of refugees in Austria: evidence from a cross-sectional survey. Health Policy. 2019;123(9):833–9.
13. Bayram T, Sakarya S. İsviçre'de yaşayan Türkiye kökenli göçmen kadınların kronik hastalık deneyimi: Niteliksel Bir çalışma. ESTÜDAM Halk Sağlığı Dergisi. 2024;9(2):114–28.
14. Racine L, Andsoy I, Maposa S, Vatanparast H, Fowler-Kerry S. Examination of breast cancer screening knowledge, attitudes, and beliefs among Syrian refugee women in a western Canadian province. Can J Nurs Res. 2022;54(2):177–89.
15. Surveys for Health Care Needs Analysis of Syrian Population under Temporary Protection: Final Report 2020. Ankara: SIHHAT Project. 2020. Available from: http://www.sihhatproject.org/Belgeler/Final%20Report%20(ENG).pdf. (Accessed on 3 Oct 2024).
16. Campos NG, Tsu V, Jeronimo J, Mvundura M, Lee K, Kim JJ. To expand coverage, or increase frequency: quantifying the tradeoffs between equity and efficiency facing cervical cancer screening programs in low-resource settings. Int J Cancer. 2017;140(6):1293–305.
17. Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. Int J Qual Health Care. 2007;19(6):349–57.

18. Levesque JF, Harris MF, Russell G. Patient-centred access to health care: conceptualising access at the interface of health systems and populations. Int J Equity Health. 2013;12(1):18.
19. Gale NK, Heath G, Cameron E, Rashid S, Redwood S. Using the framework method for the analysis of qualitative data in multi-disciplinary health research. BMC Med Res Methodol. 2013;13(1):1–8.
20. Robb KA, Simon AE, Miles A, Wardle J. Public perceptions of cancer: a qualitative study of the balance of positive and negative beliefs. BMJ Open. 2014;4(7):e005434.
21. Şahan B, Erkek BE, Ak İ, Şen M, Çalışkan M, Öztürk RA. Perception of cancer disease in adults without a diagnosis over eighteen: a qualitative research. J Turk Fam Phys. 2019;10(3):140–9.
22. Thorburn S, Keon KL, Kue J. Sources of breast and cervical cancer information for Hmong women and men. Women Health. 2013;53(5):468–78.
23. Ponce-Chazarri L, Ponce-Blandón JA, Immordino P, Giordano A, Morales F. Barriers to breast cancer-screening adherence in vulnerable populations. Cancers. 2023;15:604.
24. Eldol D. Perceptions of breast cancer screening programs and breast health among immigrant women: qualitative study in Alberta. Can Fam Physician. 2024;70(7–8):491–6.
25. Touch S, Oh JK. Knowledge, attitudes, and practices toward cervical cancer prevention among women in Kampong Speu Province, Cambodia. BMC Cancer. 2018;18:294.
26. Arsenijevic J, Seibel V. Do immigrants know less than natives about cancer screening tests?–the case of Netherlands. J Migr Health. 2024;10:100258.
27. Hamdiui N, Marchena E, Stein ML, van Steenbergen JE, Crutzen R, van Keulen HM, et al. Decision-making, barriers, and facilitators regarding cervical cancer screening participation among Turkish and Moroccan women in the Netherlands: a focus group study. Ethn Health. 2022;27(5):1147–65.
28. Walker PF, Settgast A, DeSilva MB. Cancer screening in refugees and immigrants: a global perspective. Am J Trop Med Hyg. 2022;106(6):1593–600.
29. Ferdous M, Lee S, Goopy S, et al. Barriers to cervical cancer screening faced by immigrant women in Canada: a systematic scoping review. BMC Womens Health. 2018;18:165.
30. Marques P, Gama A, Santos M, Heleno B, Vermandere H, Dias S. Understanding cervical cancer screening barriers among migrant women: a qualitative study with healthcare and community workers in Portugal. Int J Environ Res Public Health. 2021;18:7248.
31. World Health Organization. Refugee and migrant health: Barriers to access to health services. Available from: https://www.who.int/news-room/fact-sheets/detail/refugee-and-migrant-health#:~:text=Barriers%20to%20access%20to%20health%20services. (Accessed on 4 Oct 2024).
32. MacPherson DW, Gushulak BD. Health screening in immigrants, refugees, and international adoptees. In: The Travel and Tropical Medicine Manual. 2017;260–70.
33. Erenoğlu R, Yaman Sözbir Ş. The effect of health education given to Syrian refugee women in their own language on awareness of breast and cervical cancer in Turkey: a randomized controlled trial. J Cancer Educ. 2020;35:241–7.

Publisher's note