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RESEARCH

Support and care needs among Mexican women with metastatic breast cancer

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Abstract

Background Women with metastatic breast cancer (MBC) face unique challenges throughout their disease journey. Unfortunately, there is limited research on the specific needs of patients with MBC in low- and middle-income countries such as Mexico. Understanding the priorities of this population is crucial for improving their care.

Methods Women aged ≥ 18 years with a diagnosis of MBC receiving systemic therapy or best supportive care at a cancer referral center in Mexico City were invited to participate in semi-structured interviews focused on identifying their support and care needs.

Results A total of 13 participants were interviewed (median age 50 years, range of 26–63), of which 77% ($n=10$) were receiving active oncological therapy and 23% ($n=3$) were on best supportive care. Key needs emerged in three domains: (A) information: participants found medical explanations overly technical and desired clearer communication about prognosis while also limiting distressing details; (B) access to care and emotional support: patients reported limited medication access, insufficient psychological support at diagnosis of metastatic disease, and a need for peer interactions; (C) financial and social burdens: financial aid for treatment, transportation, and household assistance were highlighted as major concerns.

Conclusions This study is the first qualitative exploration of support needs among Mexican women with MBC. Our findings show that patients face multifaceted needs that can negatively impact their quality of life. Targeted interventions aimed at addressing gaps in clinical communication, emotional support, financial assistance, and supportive care access are urgently needed to alleviate distress in this vulnerable population.

Keywords Metastatic breast cancer · Mexico · Needs · Qualitative · Interview

Introduction

Globally, metastatic breast cancer (MBC) is the main driver of cancer-related mortality in women[1]. Approximately, 10% of all breast cancer (BC) cases present with de novo stage IV disease, and up to 30% of early-stage diagnoses will eventually evolve into metastatic disease[2]. MBC inevitably affects women's well-being due to the unfavorable prognosis of the disease and the associated physical and emotional burden[3, 4]. Studies have shown that patients with MBC have a higher proportion of unmet needs than patients with early-stage disease, which has been associated with a poorer perceived quality of life[5, 6]. This stems from multiple issues that are more pronounced in patients with MBC, including (a) physical suffering and disability as a consequence of their advanced disease and its treatment;

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(b) the constant threat of death and uncertainty about the future; (c) notable changes in personal relationships; (d) stigmatization and feelings of discrimination; (e) difficulty in finding or maintaining employment, along with the financial burden associated with managing the disease; (f) pressure to maneuver complex medical healthcare systems and logistical challenges associated with transportation to medical centers; (g) tension associated with making treatment decisions that have life-or-death implications; (h) issues related to sexual dysfunction; and (i) need for assistance with handling interpersonal relationships, including caring for their offspring[3, 7–9]. Despite this, the needs of patients with MBC have been inadequately addressed in research, primarily because the emphasis has been on extending survival rather than improving quality of life.

The importance of identifying and addressing the support needs of women with MBC is especially pressing in low- and middle-income countries (LMICs), where delays in BC diagnosis led to higher rates of metastatic disease[10]. In Mexico, the specific needs of women with MBC have not been thoroughly explored and likely differ from those in high-income nations due to variations in education level and cultural context. Semi-structured interviews have proven to be an invaluable methodology in this endeavor, offering depth and insight into the personal narratives of patients that often go unheard in quantitative analyses[11]. Therefore, by conducting semi-structured interviews in patients with MBC, our study aims to build a foundational knowledge base from which to advocate for and develop strategies that can meet the complex needs of patients with metastatic disease.

Materials and methods

Study setting and participants

The study was conducted at the Instituto Nacional de Cancerología (INCan) in Mexico City, one of the country's 13 publicly funded national health institutes. INCan serves as Mexico's main cancer referral center.

Participants were women aged 18 or older with a diagnosis of MBC. The study welcomed participants at any stage of treatment, from those undergoing active oncological therapy to those receiving best supportive care. Women with intellectual disabilities, severe psychological disorders, a poor functional status (Eastern Cooperative Oncology Group score > 2), or those who were not literate or fluent in Spanish were not eligible to participate.

Eligible participants were selected from INCan's patient lists based on their meeting the eligibility criteria and the convenience of their upcoming scheduled visits. For 2 weeks, medical personnel and a qualitative research expert waited on-site to invite identified patients, providing a brief overview of the study. All invitations were in person. Fourteen women were invited, of whom 13 accepted to participate and one declined for undisclosed reasons. Informed consent was obtained from all participants. Sociodemographic and treatment data were collected from the participants' medical records.

Design

A panel of experts comprised of medical oncologists, palliative care physicians, psychologists, and researchers with experience in qualitative health research designed a semi-structured question guide with four thematic axes: (1) physical and emotional effects of the diagnosis and its treatment; (2) perceived meaning of having MBC and its impact on personal relationships; (3) factors that influence treatment decision-making and preferences; and (4) satisfaction with medical care and information shared by providers. The main objective of the interview was to explore the perception of support needs in Mexican patients with metastatic breast cancer. The interview guide was piloted with two women who met the study's inclusion criteria, and the following dimensions were explored: thematic organization, formulation, understanding of questions, and effectiveness of the instrument. The piloting did not result in changes to the semi-structured question guide.

Thirteen semi-structured interviews were carried out from May to December 2023 on-site at the INCan. The interviews were conducted by a social anthropologist with expertise in qualitative research and critical gender studies. Participants met the interviewer in person only once during their interview. Each session lasted approximately 60 min and was audio-recorded for later analysis and interpretation. The results were not communicated to the participants.

Data analysis

Interview audios were transcribed verbatim. Each participant was assigned a personal code to preserve anonymity. Before data analysis, a trained research associate meticulously reviewed the full transcriptions. This review involved a careful comparison against the original audio recordings to verify their accuracy. Any inconsistencies found during this comparison were promptly rectified to maintain the integrity of the data.

The initial phase of the data analysis involved open coding, where data was systematically organized into conceptual categories. This process consisted of scrutinizing the data for similarities and differences within categorical contents and identifying primary and secondary components. Subsequently, we employed hierarchical organization to structure the thematic contents according to their interrelations and significance, continuing until theoretical saturation was achieved. This entire procedure was conducted using a Microsoft Excel file, which facilitated the creation of an analytical matrix. The principles of qualitative data analysis outlined by Gibbs[12], Ruiz[13], and Urbano[14] were followed, ensuring a rigorous and structured methodological approach to content analysis.

Descriptive statistics were employed to summarize participants' demographic and treatment characteristics.

Ethics statement

This study was conducted in accordance with the Declaration of Helsinki. Ethical approval was obtained from the Research and Ethics Committee of the INCan, and informed consent was obtained from all participants prior to their inclusion in the study.

Results

Participant characteristics

Table 1 summarizes participants' characteristics. The median age of participants was 50 years, with ages ranging from 26 to 63. Most patients had attained an educational level of at least high school ($n = 7$, 54%). The majority were employed ($n = 7$, 54%), resided outside of Mexico City ($n = 9$, 69%), were single ($n = 8$, 62%), and had one to two offspring ($n = 9$, 69%). Regarding treatment status, most participants were receiving active oncological therapy ($n = 10$, 77%), while the rest were on best supportive care ($n = 3$, 23%).

Table 1 Participants' sociodemographic data and systemic treatments

Characteristics	Patients (N = 13)
Age (years)	
Median (range)	50 (26–63)
Education level, *n* (%)	
< High school	6 (46)
≥ High school	7 (54)
Work status, *n* (%)	
Unemployed	6 (46)
Employed	7 (54)
Residency, *n* (%)	
Mexico City	4 (31)
Other state	9 (69)
Relationship, *n* (%)	
Without partner	8 (62)
With partner	5 (38)
Offspring, *n* (%)	
None	2 (15)
1–2	9 (69)
≥ 3	2 (15)
Current treatment status, *n* (%)	
Intravenous	6 (46)
Oral	4 (31)
Palliative care	3 (23)

Support needs

Data from the semi-structured interviews identified several needs across three distinct domains: information regarding diagnosis, prognosis, and treatment; medical and emotional effects of the disease and its therapy; and challenges in daily life navigation.

Information regarding diagnosis, prognosis, and treatment

While all participants identified themselves as living with cancer, there was a general lack of understanding about the metastatic aspect of their condition. As a result, participants experienced anxiety and moments of uncertainty, longing to find answers to validate and explain their situation.

> Two years ago, the doctor told me: You're doing very well, your PET scan shows you don't have cancer, I'm going to order another one and if it's the same, then your visits will just be every now and then. And now, I come in, and he says: It has spread to your brain. I say, how? I mean, if I was doing so well, what happened? I do not know; maybe I did not do things right.

In addition, some questioned how long they would need to receive treatment to heal, indicating confusion regarding the incurability of their disease. In this context, they emphasized the importance of receiving precise, clear, and straightforward explanations from medical personnel to alleviate concerns and ensure a more complete and accurate view of their overall condition. Specifically, they showed curiosity in understanding how metastases occur and learning more about the location and extent of the disease in their bodies.

> My doctor just tells me that my tumors are metastatic, but I have so many questions. Why did this happen? How did it spread? Are the metastases confined to one area, or have they spread throughout my body? What does this mean for my treatment and the possibility of a cure?

However, contradictorily to the need of receiving more information about their overall condition, some stated that they avoided asking questions during medical appointments for fear of receiving bad news.

> About the metastases, well, honestly, I prefer not to know much. Because I already have enough with everything I am going through, I do not want to receive more bad news.

Overall, participants showed a preference for medical personnel being their main source of information. However, there were some who occasionally sought information on the Internet, turning to YouTube videos or pages like Wikipedia, and to a lesser extent, social media. Their searches had mostly been about the medications they are prescribed or some physical aspects, such as the outbreak of tumors in different parts of their bodies.

> I am also very curious because, well, sometimes I also search on the Internet. [Where do you search?] Well, like on Google or Facebook, and it just shows up. I type in: brain metastases, or something like that. Sometimes I take it seriously and sometimes I do not. But, well, as they say, neither to take it seriously nor to ignore it, right? But sometimes, it kind of reassures you because you see that you do not have the same symptoms as people with brain metastases, so that must mean you do not have them.

All participants indicated that their way of getting involved in the choice of their treatment was by following medical instructions, as most did not see themselves as having the capacity to propose therapeutic alternatives. Although some acknowledged that they had considered other treatment options suggested by friends, family, or the Internet, they were reluctant to try them because of the possibility of negative interactions between treatments. While most showed interest in alternative treatment options, they emphasized that the final decision is dependent on the medical personnel.

> For example, you see that there are so many. What are they called? Supplements or other types of plants that they tell you to take: take this, take that. But honestly, no. They are alternatives, which supposedly are for cancer. Because our body is complex, it might be that one treatment cures me, and another harms me. So I avoid them unless my doctor tells me to take them.
> I, for one, believe that the person who knows best about my condition is the doctor. And yes, I ask questions, and he answers, of course, and I trust what he tells me.

Most participants expressed satisfaction with the medical care received. They described positive experiences during appointments, highlighting the respectful demeanor and knowledge of the medical and nursing staff. They affirmed their gratitude for having the opportunity to receive medical care despite not having social security; many assured that thanks to this, they were still alive. Although mostly satisfied, some participants noted that the clinical interactions often felt rushed and too administrative, which limited their opportunity to voice concerns or clarify doubts. This was attributed to the brief consultation times and high patient volumes.

> Sometimes things have to be fast. I don't know how many minutes they have to see you. I mean, it's chaos. You end up sidelining the disease; the disease does not matter anymore because your main concern is getting the appointment and getting the prescription filled. What are you sick with? Who knows? I just want the prescription!

Most participants appreciated the medical staff's readiness to address their inquiries. However, they also expressed concerns that the information provided was often unnecessarily technical and dictated by what the medical staff deemed important, rather than what was necessary or beneficial for the patient.

> Do I have enough information? No, I actually lack information. [What would you need?] Well, I need to know more about the disease. However, since I rely on the explanations that the doctors give me, I sometimes find them too scientific. I want clearer information.

Negative experiences in emergency services were also reported, especially regarding long waiting times to receive treatment or news about their condition. To address these issues, participants put forward some solutions. For instance, extending consultation periods could grant them additional time to address their doubts. Moreover, they proposed the implementation of a remote communication system (e.g., telephone messaging or interactive chat) so that they do not have to wait between appointments to ask their doubts, especially regarding pain management.

> If I didn't have to come in, if I didn't have to spend time here, if everything could be done remotely and they could say: " I will send you an email, I will contact you by chat, take this medicine if you have pain. " That could work.

Limitations in access to care and social support

For patients undergoing treatment, one of the most critical concerns was the consistent availability and access to medications. While most understood that a complete cure is unlikely, they emphasized the importance of uninterrupted treatment to manage their disease effectively. Moreover, patients also wished for equitable access to medications, regardless of their geographical location or socio-economic status.

> [Is it common for you to have to buy your chemo?] Throughout this journey, it has only happened to me about 2 or 3 times. I am now on the fifth cycle. [And if your chemo is not available?] Well, if they do not have it, I have to reschedule for another day, and that can affect my disease. I wish they could secure our access to these medicines, regardless of where we are from or our social security.

On the emotional front, participants have sought psychological, spiritual, and emotional support to adapt to changes in their life perspective, drawing significant emotional relief from their close social circles. This support network has provided an escape from the intensity of pain, fostering mental well-being and a renewed positive outlook. Many participants also expressed a strong desire for immediate psychological support from healthcare personnel upon receiving a diagnosis of metastatic disease. To cope with their condition, some reported maintaining hope that medical advancements will continue, engaging in occupational therapies such as meditating and knitting, and strengthening or discovering religious faith. Emotional processing through both tears and laughter was also reported as essential for handling their feelings. Interaction with other women facing similar challenges was also proposed as a powerful stimulus to maintain strength and a positive attitude.

> “It would be nice if there were a special place for women, where they could come and rest, maybe talk among themselves, like a library, perhaps. An intimate space among us would be interesting; it would be relaxing. Like a recreational place where we could do a bit of art. There could be workshops, right? That way, women who have the disease could get to know each other better and share more about what they're going through. A place where we can talk among ourselves, among women, about what's happening to us, what we feel. I believe that sharing these experiences is crucial.”

For patients in best supportive care, talking about quality of life was difficult; in fact, it was hard for them to describe its elements because they considered it almost impossible to find comfort when it seemed they had no more life-extending options. However, some needs were mentioned, such as (1) continuing treatment, recognizing that, although it may not work one hundred percent, it might offer some protection (physical and emotional) and control over the spread of cancer; (2) seeking improvements despite the perception that the disease may be endless; and (3) extending life as much as possible.

> Well, that it doesn't keep metastasizing, I mean, I say, if it's not working, at least it's stopping it. That's why I didn't want to stop the treatment, because, the pills, well, if they give them to you, it's for a reason, I mean, maybe it's not covering me a hundred percent, but in my mind, I thought: It's protecting me somehow, it's taking care of me there. So, that's why I do not want to stop.

Financial and social burdens of living with MBC

Living with MBC profoundly impacts women, influencing both their daily routines and overall life philosophy. Participants have had to make significant adjustments, such as leaving jobs, shutting down businesses, relocating, and reducing physical activities due to the demands of their medical care and the physical limitations imposed by their illness. This adaptation process often leads to a philosophy centered on accepting change, managing resentment towards their diagnosis, and adopting a more relaxed approach to life, especially as many face the reality of approaching the end of life. For these patients, maintaining a sense of normalcy and active participation in social events becomes a crucial strategy to foster psychological well-being and sustain a positive social identity. They strive to integrate into social settings without highlighting their illness to avoid pity from others, aiming to live as normally as possible. This integration helps them preserve their dignity and avoid the stigma associated with being seen as “sick.”

> I had a business with a lawyer. This lawyer had been with me since 2003, knew about my cancer, and all that, and I think it was too much for him, so he asked that we part ways. For me, it was: COVID, cancer, the breakup, the dissolution of my business [...] Now I don't tell anyone I have cancer. For me, the focus is all about feeling useful, that is, work, live a normal life. I mean, you have cancer, well, yes, it doesn't go beyond anything else, it is like having diabetes.

Quality of life for women with MBC was defined by several key elements: the absence of pain, economic and medical security, a positive life outlook, and sustained faith in both spiritual and scientific remedies. However, for many patients with metastatic disease, it is difficult to think about quality and life in the same sentence. Participants highlighted several needs within healthcare settings to improve patient quality of life, such as respecting appointment hours and providing access to the Internet during waiting times. Furthermore, participants discussed the need for comprehensive support that addresses the physical, emotional, and financial aspects of living with MBC. This includes ensuring access to necessary medications and nutritional support, enhancing support for caregivers who play a critical role in their care, financial assistance for medical expenses, transportation to and from medical appointments, and fostering assistance with household chores and childcare.

> It's honestly a disaster. Since the day I was told I had cancer, I knew it would be very complicated because no one wants to employ someone with cancer due to the numerous appointments, tests, and hospital visits. It's very difficult. It's always: "I have a check-up, I won't be on time, "or" I was at the hospital all morning. "It's appointments one day, tests another, picking up results, and collecting medication. It's endless. It's not just about needing financial assistance for buying medicines, but also for living expenses because we can't find employment.
> If my mom comes with me to my appointments, we spend about 1200 or 1300 pesos per visit (US equivalent: 70–76 dollars). [How often do you come each month?] Lately, I've been coming every week. It's hard because sometimes I can work, and sometimes I can't. I also have to manage my daughter's needs, like school and milk. It's even more complicated now with daily radiotherapy. I am worried that I will not have enough money to pay for my trip back to my town. I know it is difficult but maybe the hospital could help by providing transport to and from my appointments.
> I work primarily for my daughter and myself. About a year ago, I started working in a house where the lady would also welcome my daughter. I felt comfortable there; I did the cooking and other chores, and we got meals included. However, eventually, I had to tell the lady that I couldn't lift heavy things or exert myself too much and had to stop working. Now, I need help with taking care of my daughter and household chores. It's difficult because my husband and children are used to me doing the cleaning and cooking, but I can't anymore even though I want to do it for them.

For participants referred to palliative care, this was considered the last stop in preparation for death. Among their main concerns were: (1) interrupting their treatment and being left unprotected; (2) dying painfully and having their relatives see them suffer; (3) leaving their offspring in someone else's care; and (4) living with too many physical limitations, such as blindness, or with intense pain impossible to alleviate with medication.

> For me, palliative care really feels like they're preparing you for death, isn't it? And now the doctor mentioned palliative care to me, well, she asked me if I wanted to continue with my treatment or go to palliative care. I say: Oh, that sounds like it's already the end. And then I tell the doctor: I'm afraid of the pain. I'm scared and I also don't want my children to see me suffer. (Crying) No, because they say that... when one is dying, that one suffers a lot of pain, right? A very strong pain. And I would like to keep trying, right? (Crying) I know it's very painful and tiring and I would like to keep trying. But I wish it would work. Why doesn't it work? Why didn't it work for me? Why did it work for other women? Or is it that they didn't give me the same importance?

Discussion

Our study identified three key areas of need among women with MBC: information, access to care and social support, and financial/social burdens. Many patients reported challenges in understanding their diagnosis, prognosis, and treatment options, indicating a gap in effective physician–patient communication. Access to care was another major concern, as transportation barriers and medication availability limited treatment adherence and hindered quality of life. Additionally, financial strain due to medical costs, job loss, and caregiving responsibilities further exacerbated distress. These findings highlight the need for comprehensive care models that address not only medical treatment but also effective communication, accessible support services, and financial assistance to improve both survival and quality of life for this vulnerable population.

The limited literature on the unmet information needs of patients with MBC underscores significant gaps in both the availability and quality of information provided to patients. For instance, a study of over 1000 women in different countries (of which 10% resided in Mexico) reported that 42% of patients found it difficult to find information on MBC, and 50% felt that the available information did not fulfill their needs[15]. Another study reported that physicians predominantly provide information on symptom management, clinical trials, and quality of life, whereas sharing information about prognosis was much less frequent[16]. The latter is especially significant in our context, as a study on Mexican patients with MBC revealed that only 52% were aware that their disease was incurable, while 31% were unsure and 17%

believed they could be cured[17]. This highlights the urgent need to improve patient education and communication strategies to ensure that those with MBC understand their prognosis. However, this communication should be tailored to each patient, as there are some who prefer to limit the receipt of bad news. Gradually providing prognosis details over multiple consultations can be effective in this context, starting with the most critical information and adding more based on the patient's readiness.

Several studies have reported on the need for improved communication between patients with MBC and physicians, as well as deeper patient involvement in treatment decisions[18, 19]. Evidence suggests that shared decision-making improves the quality of life of patients in high literacy and high-resource settings[20]. While our interviewees generally expressed a desire for improved communication with their physicians, this was primarily to learn more about their prognosis and manage symptoms such as pain, rather than to be more actively involved in therapeutic decisions. A common theme among our patients was the belief that the "doctor knows best," which reflects the paternalistic culture prevalent in Mexico[21]. This highlights the importance of fostering an environment where patients are encouraged to ask questions and express concerns, and where physicians use friendly and less technical language to improve patient understanding. By doing this, patients can become more empowered and confident in shared decision-making, potentially leading to better treatment outcomes and quality of life. Additionally, ensuring that patients have access to comprehensive, disease-specific educational resources, particularly those that discuss the metastatic situation, can further support informed decision-making and patient empowerment.

Data on the medical needs of patients with MBC varies between regions. For example, a European study reported that a substantial number of patients with MBC perceive that their treatment options are inadequate and express a strong desire for detailed information about future medical treatments and research[18]. There are also some Australian studies that indicate that women with MBC often worry about the effectiveness of their treatments and the availability of other treatment options[22]. In our study, the main concern was not the adequacy of treatments but rather their accessibility. Although Mexico's healthcare system has been lauded for offering universal coverage, challenges in guaranteeing access to medicines, including chemotherapies, persist[23, 24]. Consequently, it is not uncommon for patients to pay out of pocket or have to wait an uncertain amount of time for medicines to become available[25]. This can significantly impact a patient's quality of life due to the stress associated with uncertainty and financial toxicity. Therefore, treatment accessibility represents a critical unmet need for Mexican women with MBC, and addressing this issue should be a priority to improve their quality of life. This involves not only increasing the budget and improving the infrastructure and policies within the healthcare system but also enhancing awareness and support for patients.

The social burdens and emotional distress experienced by patients with MBC are a more universal theme across regions and cultures. Overall, patients with MBC have expressed the need for reduced appointment waiting times, care coordinators, and better access to psychological support services, which are often lacking[19, 26]. Flexibility in work schedules to attend medical appointments is also a common request[19]. Additionally, patients have mentioned issues such as the absence of exclusive support groups for those with MBC, changes in physical appearance automatically resulting in strangers categorizing them as cancer patients, financial problems, and uncertainty about the future[27, 28]. The emotional narratives shared by our participants point to a critical need for healthcare settings to foster environments where patients can find not only medical relief but also psychological and spiritual comfort. Our interviewees frequently suggested activities such as art workshops and non-medical gatherings with other affected women, which could offer a therapeutic benefit by providing patients with opportunities to engage in normal life activities, thereby enhancing their overall well-being.

The economic burden of MBC is exacerbated in settings like Mexico, where many patients face significant financial challenges due to loss of employment and the high costs associated with ongoing medical care[29]. Some of our interviewees shared how their businesses or employment opportunities dissolved due to their condition, as others were reluctant to economically engage with someone unable to fully focus on work or perform adequately due to the symptoms associated with MBC. To address this problem, policies promoting flexible work arrangements, employer education on MBC, and workplace accommodations for affected individuals should be implemented. In addition, the findings of our study advocate for the implementation of policies that would help alleviate the financial strain on patients, such as transportation allowances, support for non-medical expenses that arise due to treatment schedules, and assistance with household chores and childcare.

Lastly, our study confirms that patients with MBC in Mexico often misconstrue palliative care as synonymous with end-of-life care, which can lead to delayed referrals and missed opportunities for symptom management and psychosocial support. This perception aligns with previous findings that patients in Mexico lack awareness of palliative care benefits and primarily associate it with terminal illness[30]. Furthermore, healthcare providers report challenges in discussing palliative care due to discomfort, limited training, and systemic barriers[30]. The stigma surrounding palliative care can deter patients and families from seeking interventions that could greatly enhance their quality of life, reinforcing the need for destigmatization efforts[31]. Resource limitations, including insufficient personnel and infrastructure, further restrict access to this service[32]. Prior studies emphasize that education campaigns, provider training, and early integration into standard oncology care are essential to shifting this narrative. Addressing these barriers requires in Mexico a multi-level approach, involving policy reforms, provider education, and patient-centered communication strategies to promote timely, equitable access to palliative care as an essential component of comprehensive cancer treatment.

Conclusion

This study is the first qualitative exploration of unmet needs among Mexican women with MBC. Our findings provide critical insights into the multifaceted needs of this population, highlighting areas for policy improvement, clinical practice, and patient support systems. By focusing on these detailed personal experiences, healthcare providers and policymakers can develop more effective strategies that truly address the complex needs of these patients, ultimately leading to improved survival and better quality of life outcomes.

Author contributions CV-G, AA-G, and ASFG contributed to the formal analysis of the data and were responsible for writing the manuscript. CV-G, AP, AP, and PC-G led the conceptualization of the study and the selection of the methodology employed, and also contributed to data collection, formal analysis, and review/editing of the manuscript. SA-P, IC-B, AP-N, JREF, and AV-M contributed to data collection and reviewed/edited the manuscript. All authors read and approved the final manuscript.

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Data Availability No datasets were generated or analysed during the current study.

Declarations

Ethics approval This study was conducted in accordance with the Declaration of Helsinki. Ethical approval was obtained from the Research and Ethics Committee of the INCan, and informed consent was obtained from all participants prior to their inclusion in the study.

Competing interests This work was supported by Gilead Sciences Mexico.

References

1. Sung H et al (2021) Global cancer statistics 2020: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. CA Cancer J Clin 71(3):209–249. https://doi.org/10.3322/caac.21660
2. Wang R et al (2019) The clinicopathological features and survival outcomes of patients with different metastatic sites in stage IV breast cancer. BMC Cancer 19:1091. https://doi.org/10.1186/s12885-019-6311-z
3. Cardoso F et al (2018) Global analysis of advanced/metastatic breast cancer: decade report (2005–2015). Breast 39:131–138. https://doi.org/10.1016/j.breast.2018.03.002
4. Villarreal-Garza C et al (2020) Gaps in knowledge and understanding of patients with metastatic breast cancer in Mexico. Cancer Control 27(1):1073274820920637. https://doi.org/10.1177/1073274820920637
5. Aranda S et al (2005) Mapping the quality of life and unmet needs of urban women with metastatic breast cancer. Eur J Cancer Care (Engl) 14(3):211–222. https://doi.org/10.1111/j.1365-2354.2005.00541.x
6. Park BW, Hwang SY (2012) Unmet needs and their relationship with quality of life among women with recurrent breast cancer. J Breast Cancer 15(4):454–461. https://doi.org/10.4048/jbc.2012.15.4.454
7. Li M, Fitzgerald P, Rodin G (2012) Evidence-based treatment of depression in patients with cancer. J Clin Oncol 30(11):1187–1196. https://doi.org/10.1200/JCO.2011.39.7372
8. Rodin G et al (2009) Pathways to distress: the multiple determinants of depression, hopelessness, and the desire for hastened death in metastatic cancer patients. Soc Sci Med 68(3):562–569. https://doi.org/10.1016/j.socscimed.2008.10.037
9. Willis K, Lewis S, Ng F, Wilson L (2015) The experience of living with metastatic breast cancer—a review of the literature. Health Care Women Int 36(5):514–542. https://doi.org/10.1080/07399332.2014.896364
10. Unger-Saldaña K, Ventosa-Santaulària D, Miranda A, Verduzco-Bustos G (2018) Barriers and explanatory mechanisms of delays in the patient and diagnosis intervals of care for breast cancer in Mexico. Oncologist 23(4):440–453. https://doi.org/10.1634/theoncologist.2017-0431
11. Ginter AC (2020) The day you lose your hope is the day you start to die: quality of life measured by young women with metastatic breast cancer. J Psychosoc Oncol 38(4):418–434. https://doi.org/10.1080/07347332.2020.1715523
12. Graham, G. Analysis of qualitative data in Qualitative Research. (Morata, 2012)
13. Ruiz Olabuénaga, J. I. *Qualitative research methodology*. (Deusto, 2012).
14. Urbano Gómez, P. A. *Qualitative data analysis*. (Fedumar, 2016).
15. Mayer M et al (2009) Importance of providing tailored resources to patients with metastatic breast cancer: results of the global

BRIDGE survey. Cancer Res 69:24–3085. https://doi.org/10.1158/0008-5472.SABCS-09-3085

16. Danesh M, Belkora J, Volz S, Rugo HS (2014) Informational needs of patients with metastatic breast cancer: what questions do they ask, and are physicians answering them? J Cancer Educ 29(1):175–180. https://doi.org/10.1007/s13187-013-0566-x
17. Villarreal-Garza C et al (2020) Gaps in knowledge and understanding of patients with metastatic breast cancer in Mexico. Cancer Control 27(1):1073274820920637. https://doi.org/10.1177/1073274820920637
18. Harding V et al (2013) Being there' for women with metastatic breast cancer: a pan-European patient survey. Br J Cancer 109(6):1543–1548. https://doi.org/10.1038/bjc.2013.492
19. Alfieri S et al (2022) A qualitative study on the needs of women with metastatic breast cancer. J Cancer Educ 37(5):1322–1331. https://doi.org/10.1007/s13187-020-01954-4
20. Lee PY et al (2022) Barriers of and strategies for shared decision-making implementation in the care of metastatic breast cancer: a qualitative study among patients and healthcare professionals in an Asian country. Health Expect 25(6):2837–2850. https://doi.org/10.1111/hex.13590
21. Thompson GA, Segura J, Cruz D, Arnita C, Whiffen LH (2022) Cultural differences in patients' preferences for paternalism: comparing Mexican and American patients' preferences for and experiences with physician paternalism and patient autonomy. Int J Environ Res Public Health 19(17):10663. https://doi.org/10.3390/ijerph191710663
22. Lyons-Rahilly T et al (2024) Exploring the experiences of women living with metastatic breast cancer [MBC]: a systematic review of qualitative evidence. PLoS ONE 19(1). https://doi.org/10.1371/journal.pone.0296384
23. Gómez-Dantés O, Dreser A, Wirtz VJ, Reich MR (2022) Challenges of guaranteeing access to medicines in Mexico: lessons from recent changes in pharmaceuticals procurement. Health Syst Reform 8. https://doi.org/10.1080/23288604.2022.2084221
24. Villarreal-Garza C et al (2021) The challenges of breast cancer care in Mexico during health-care reforms and COVID-19. Lancet Oncol 22(2):170–171
25. Serván-Mori E et al (2023) Increase of catastrophic and impoverishing health expenditures in Mexico associated to policy changes and the COVID-19 pandemic. J Glob Health 13:06044. https://doi.org/10.7189/jogh.1306044
26. Lee Mortensen G, Madsen IB, Krogsgaard R, Ejlertsen B (2018) Quality of life and care needs in women with estrogen positive metastatic breast cancer: a qualitative study. Acta Oncol (Madr) 57(1):146–151. https://doi.org/10.1080/0284186X.2017.1406141
27. Krigel S, Myers J, Befort C, Krebill H, Klemp J (2014) Cancer changes everything! Exploring the lived experiences of women with, metastatic breast cancer. Int J Palliat Nurs 20(7):334-342. https://doi.org/10.12968/ijpn.2014.20.7.334
28. Rosenzweig MQ, Wiehagen T, Brufsky A, Arnold R (2009) Challenges of illness in metastatic breast cancer: a low-income African American perspective. Palliat Support Care 7(2):143–152. https://doi.org/10.1017/S1478951509000194
29. González-Robledo MC, Wong R, Ornelas HA, Knaul FM (2015) Costs of breast cancer care in Mexico: analysis of two insurance coverage scenarios. Ecancermedicalscience 9:587. https://doi.org/10.3332/ecancer.2015.587
30. Doubova SV et al (2023) Dimensions of suffering and the need for palliative care: experiences and expectations of patients living with cancer and diabetes and their caregivers in Mexico - a qualitative study. BMJ Open 13(12). https://doi.org/10.1136/bmjopen-2023-075691
31. Shen MJ, Wellman JD (2019) Evidence of palliative care stigma: the role of negative stereotypes in preventing willingness to use palliative care. Palliat Support Care 17(4):374–380. https://doi.org/10.1017/S1478951518000834
32. Zertuche-Maldonado T et al (2018) Palliative care needs in an acute internal medicine ward in Mexico. J Palliat Med 21(2):163–168. https://doi.org/10.1089/jpm.2017.0043