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Sociocultural Barriers Related to Late-Stage Presentation of Breast Cancer in Morocco

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Abstract
Breast cancer is the most prevalent cancer affecting women globally and in Morocco, where more than one fourth of patients are diagnosed at advanced stages. This study aimed to investigate sociocultural barriers that contribute to delayed presentation and diagnosis of breast cancer among women in Marrakesh, Morocco. Qualitative interviews were conducted with 25 breast cancer patients who received care at the CHU Mohammed VI Hospital in Marrakesh to elicit barriers to diagnosis and treatment and ease of access to care. Interviews with breast cancer patients revealed several themes regarding structural and sociocultural barriers to initial diagnosis and treatment. Structural barriers included high treatment-associated costs for patients and their families, burden of transportation to central treatment centers, and limited access to appropriate health care resources. Sociocultural barriers included perceived attack on one's identity associated with breast cancer diagnosis and treatment, influence of the local community, and ideas of faith, spirituality, and conception of death. Findings from this study can help identify areas for improved access and education of patients in order to improve breast cancer diagnostic and treatment efforts and enhance opportunities for early detection.

Keywords Breast cancer · Morocco · Qualitative · Barriers

Introduction

Breast cancer is the leading cancer affecting women worldwide and the most common cancer among women in Morocco [1]. Cancer registries in Casablanca and Rabat report the highest incidence among women between the ages of 45–59 and more than one fourth of cases diagnosed at AJCC stage III or IV [1]. Because cancer stage is an important prognostic factor for disease outcomes, the social contributors to advanced stage at diagnosis are particularly relevant [2, 3].

Previous studies on breast cancer in the region have focused on breast cancer epidemiology, but evidence is lacking regarding qualitative assessment of cultural barriers [4–6]. Others have suggested reasons for advanced stage at diagnosis in developing countries—including stigma and societal implications of treatment, and availability of health care services—but there is little qualitative data exploring first-hand patient narratives about barriers to treatment in Morocco [7, 8]. Connecting sociocultural obstacles to the biological and epidemiological impact of disease can provide a more complete picture for early diagnosis, effective management, and possibly prevention of the disease [9]. Qualitative, ethnographic work is uniquely positioned to contribute to this knowledge base by pursuing an in-depth understanding of patient knowledge and attitudes [10].

The past decade has seen major changes in the Moroccan national health insurance policies; new health plans were instituted in 2005 and modified in 2011. Le Régime d'Assistance Médicale (RAMED) applies to socioeconomically disadvantaged populations [11]. Public hospitals and health institutions are the only system of health care covered for individuals under the RAMED plan, but resources and services available within these centers are not sufficient to handle demonstrated need. The Moroccan Ministry of Health reported a rate of 5 doctors per 10,000 residents from 2002 to 2006 and a significantly further distance to a basic health care center for rural compared to urban residents [12].

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Additionally, limited opportunities are available for continuous medical education of Moroccan physicians [13].

The aim of this study was to identify structural barriers to diagnosis and treatment of breast cancer in Marrakesh, Morocco through qualitative interviews with breast cancer patients about their personal experiences and perspectives.

Methods

Semi-structured interviews were conducted with 25 breast cancer patients at the Centre Hospitalier Universitaire (CHU) Mohammed VI Hospital in Marrakesh in June and July 2014. This government hospital provided care to patients from middle and low socioeconomic levels who reside in Marrakesh free of charge. Although patients were at different phases in their treatment, all of them had been diagnosed with advanced stages of breast cancer (stage III or IV) according to the clinical classification of the American Joint Committee on Cancer (AJCC), with the exception of two patients who were diagnosed at stage II. Women attending the hospital for routine breast cancer treatments were recruited via convenience sampling. Convenience sampling has been used in other studies of cancer patients seeking routine, long-term care in hospitals [14, 15]. The patients included in this study represented approximately 75% of all advanced cancer patients seen at the study hospital during the 2-month period of recruitment who were in good general condition allowing them to complete the interview.

Participants were interviewed individually in a private examination room in the hospital oncology inpatient ward after their consent by the primary investigator (AAS) with a trained Moroccan nurse. Patients were initially told about the study by the treating physician and assured that their participation would not influence their treatment. Willing participants were given a more detailed explanation of the study and informed consent was obtained from all individual participants included in the study by the interviewing nurse. One patient refused to participate in the interview process. The interview questions were divided into three parts: patient background, knowledge about breast diseases and symptoms, and personal or anecdotal experiences of the woman in her community [16]. The interviews took an average of 30 min to complete and were primarily conducted in Moroccan Arabic by a Moroccan nurse who was similar to the interview participants in age, socioeconomic status, and cultural background; the involvement of an interviewer with similar social identities is important to encouraging patients' comfort and openness [17]. All interviews were audio-recorded, and body language and nonverbal cues were noted.

Data Analysis

Interview data were transcribed by a Moroccan nurse into Moroccan Arabic and later translated to English by another Moroccan physician to ensure accurate translation of cultural idioms and Moroccan vernacular. Transcripts were subsequently coded inductively using the grounded theory approach, through which transcripts and fieldnotes were reviewed and categorized into themes [18, 19]. The authors identified themes from interview transcripts, participant observation, and fieldnotes about the hospital culture based on in vivo coding and other topics identified from the literature. Patient narratives were coded and analyzed comparing data within categories and drawing relationships between distinct categories using NVivo Software (NVivo qualitative data analysis Software; QSR International Pty Ltd. Version 10, 2012).

Results

Structural Barriers

Treatment-Associated Costs

Cost is often a significant barrier to patients seeking breast cancer treatment. Among patients who were actively receiving treatment, only one woman in this study openly stated that she was covered by the RAMED national insurance plan (although patients were not directly asked about their insurance coverage). Even with this plan, there were a host of non-hospital charges that the patient (and her family) must manage and which weighed heavily on their decisions. One woman, 47 years old and married, who did not have national insurance coverage, longed for it: "At times, I decided to stop the treatment because I couldn't afford all the expenses. I also had to pay the loan of my house, the electricity bill, and I am in charge of my daughter's school expenses. I wish I could have the RAMED card" (P22). The high costs associated with treatment affected care-seeking decisions as well as choices involved in the continuation of the therapy.

Most patients in this study shouldered the brunt of treatment-related costs with the support of their close relatives. Demonstrating the contradiction between the celebrity-filled media campaigns and the real financial struggles that patients face, one interviewee told us, "Many women advised me to consult one of those doctors who appear regularly on TV, but I didn't because I did not have enough money to afford the very high cost of treatment they prescribe, which may reach about ten thousand dirhams" (P2). While the advertisements promoted awareness within communities that saw them, these campaigns may have contributed to a mentality that adequate preventive care and treatment are reserved only for those who could afford extravagant prices of treatment with a famous label.

As all of these patients were either temporarily or permanently unemployed, they were entirely dependent on their families to pay for treatment-related costs. High cost of treatment contributed to hesitation in searching for a doctor when

some women first noticed symptoms and suggested a need to get the permission and support of a patient's family. "I used to have a breast lump for more than 14 years, but it never hurt me. I couldn't afford [treatment] so I didn't consult a doctor for a long time" (P13). Treatment-associated costs compounded with socioeconomic vulnerability are integral to the larger question of factors contributing to late-stage cancer diagnosis. Despite the range of major changes that a woman undergoes during the disease progression and treatment, one woman said that in order to cope with breast cancer, "the *most important* thing is that the patient must have the money because treatment costs a lot" (P5, emphasis added).

Burden of Transportation and Distance

Cost of treatment is intricately tied to challenges related to transportation to and from the cancer center in Marrakesh. Distance from a treatment center has been shown to be an important determining factor in the stage of diagnosis of breast cancer. Wang et al. [20] commented that "geographical access to primary care physicians is strongly related to late-stage risk, indicating that the risk of late-stage breast cancer is higher in places with few available primary care physicians." In addition to being dependent on family members to help cover the costs of treatment, women are frequently forced to rely on others when they live far from the cancer center.

Several patients endured significant commutes during chemotherapy treatments in order to continue living at home, but found this practice impossible to sustain during daily radiotherapy treatments. Consequently, most women chose to live with a relative in/near Marrakesh, further hindering her sense of independence. When simply describing their process of arriving at the hospital, patients used terminology that is typically applied to the experience of a difficult illness itself: traveling to the cancer center "negatively impacts patients' health" (P1) and patients "*suffer* from the far distances" (P2, emphasis added). Many of the aforementioned costs associated with treatment had little to do with actual medication or hospital fees, but rather with frequent trips to and from the hospital (when patients themselves had no income). Distant commutes were a regular part of treatment for many patients, which was not only costly but also physically difficult after a draining treatment session.

Choice of Medical Arena

The CHU Mohammed VI Hospital is one of very few public sector institutions for cancer care in the entire country. The high volume of cancer patients, combined with the relatively low proportion of doctors—the national average is 3.3 doctors per 10,000 residents [13]—meant that patients frequently had difficulty receiving timely care in public hospitals. One woman, originally from Marrakesh, said "I wished the dates of the appointments would be close to each other [at Mohammed VI Hospital] but this wasn't the case due to the large number of breast cancer patients" (P8). Patients recognized that the benefits of treatment in the public sector—namely, insurance coverage and cheaper care—made it their preferred treatment location, but at the price of crowded waiting rooms and lower appointment availability than they might find in a private hospital.

Most patients were initially seen by a primary care doctor at a local clinic who diagnosed the patient's cancer and referred her to a more specialized health care centers. The first step after breast cancer diagnosis was often a recommendation that the patient undergo mastectomy or lumpectomy surgery immediately. Several patients had surgery in a private facility rather than wait for a public facility because of the urgency of excising the lump before the cancer advanced. One patient described being forced to wait as long as 13 months before an appointment to have a mammogram done (P3).

All patients interviewed said that they had never used traditional healers for cancer treatment. Many women mentioned their personal distaste for traditional medicine and preference for the biomedical treatment, although it is important to consider that interviews were conducted within the hospital by a member of the hospital staff. More reliably, patients described the reactions of other community members to their own treatment decisions. One patient explained that "I personally refuse [to accept] the idea of visiting a traditional healer and I instead decided to consult a specialist. Many people do consult traditional healers though" (P11). Traditional healers are often seen as having a closer connection to their patients than local physicians: they are more accessible and are the ones who do things such as "coming to the home of my neighbor to treat her with herbs and [Quranic] supplications" (P8).

Most patients—especially those who lived far from Marrakesh—first turned to basic health centers in their own towns or villages. Patients explained several instances of initial misdiagnosis which subsequently led them to wait to seek care from the cancer center. "I went to the local dispensary but he told me that I had nothing to fear. After that, I went to a doctor in [my home town of] Chichaoua who sent me to [the CHU Mohammed VI Hospital in] Marrakesh to do some imaging tests" (P5). Local and general medicine physicians have been described as being more concerned with patient overall trust and comfort, even at the risk of omitting important disease information [21]. In this example, however, the health care professional telling the patient that she "had nothing to fear" reassured the patient in the moment, but may have also contributed to her delay in seeking treatment. This phenomenon shows the importance of the physician-patient relationship and also highlights gaps in medical knowledge and the ways in which the first lines of defense may be inadequate to recognize and be able to diagnose cancer. Most patients were eventually referred to the specialized CHU Mohammed VI Hospital by their local health practitioners. Yet, some came

of their own volition if they felt that they had not received complete health information, and, in some cases, local health expertise was sufficient to prompt cancer treatment-seeking.

Sociocultural Barriers

Identity and Femininity

Although the breasts are body parts usually discussed in private and cloaked in modesty, influenced by religious and cultural ideas, there are certain aspects of knowledge about breast cancer that are widely known by different groups of people. Chavez et al. [22] explains that "being able to see and feel breasts provides physical reinforcement for discussions of breast cancer risks… [contributing to] an integrated cultural model of risk factors that is articulated among females even from an early age." Community beliefs regarding disease etiology also influence patient experiences; one woman said that "16 months ago, I fell down and was injured. A woman who came to visit me told me about her friend who fell down and a lump appeared in her breast. These words made me anxious so I decided to consult a local doctor" (P18). Looking for cancer only or especially after some sort of breast trauma may cause women to not be diligent about their own breast health in what is perceived to be atraumatic, normal conditions.

None of the patients interviewed were employed outside of the home during treatment. Most of them had never worked outside the home, while some of them had left their jobs after diagnosis. In addition to the concern about financing treatment when the patient herself had no income, the role of a woman (especially of a mother) strongly influenced the cancer treatment plan. One patient described her thought process after diagnosis, describing how "I was very worried for my 6-year-old and 8-year-old daughters who need my care and attention. I felt very weak when faced with this situation. My relationship with my husband has also changed greatly" (P25). Several women tried to hide the realities from their children, who often felt it anyway "from the atmosphere that dominated the house" (P2). Decisions surrounding how and when to seek medical care often hinged on women's concerns over how it would affect their children and husbands, and how their role as mother would be affected by the illness. Treatment-related decisions required women to balance the knowledge that they needed treatment with cultural expectations of women outside the home. Very few women came without a relative to the hospital, even when it was inconvenient for their family. This emphasis on a family taking particular care of its women underlies the importance of community influence and the conflict within that situation. In this society, women must balance different moral values—simultaneously taking care of and protecting themselves. Breast cancer is a gendered disease, affecting mostly women, and it therefore interacts with larger cultural ideas such as motherhood, female individuality, and femininity.

Patients were not asked directly about whether or not they had had their breast(s) removed surgically, but many of them did share stories about this part of their treatment. Procedures such as a mastectomy or lumpectomy directly remove one of the outward representations of femininity and therefore can be perceived as an attack on one's identity [23]. Although one patient said that she did not hesitate to have the surgery because it meant removing power from the cancer (P5), the surgery was mostly regarded with apprehension. One woman spoke of her mother's offer to make a home remedy for her in order to prevent her from having to undergo surgical breast removal at the hospital (P4). Another patient spoke of the opposite situation: her family knew about her illness and advised her to have a physician remove her breast but she refused (P2). A study of breast cancer perceptions among young Jordanian women showed similar feelings of shame associated with the disease [24]. As a result of a patient's cancer experience, especially breast removal, "the concern for her health and any pain or discomfort is accompanied by a public display of markedness, which creates a new, unfamiliar, and self-conscious way of experiencing one's body/self" [25]. In a society in which reconstructive surgery is frequently not covered by insurance [13], fear of an isolationist post-operative social reception has a significant impact on when, how, and from whom women seek treatment.

Early breast cancer symptoms are typified by a lump forming in the breast tissue or other textural changes such as thickening or puckering of the skin, not pain [26]. This trait makes the first symptoms relatively easy to ignore, or to brush away as a residual experience due to natural processes such as breastfeeding. Many patients sought treatment only after symptoms had become painful in the breasts and thus unable to ignore. "The hard lump appeared in my breast one year before I first consulted a doctor, but I didn't go to the hospital because I was afraid of the operation. Five months later, the lump started to be painful" (P21). In this case, the operation was the first mental hurdle that had to be overcome; fear from the aftermath of surgery took precedence over a painless symptom but became harder to ignore when the cancer progressed to a painful stage. Additionally, swelling or shrinkage of the breast was easily brushed aside by nursing mothers, like one who said that "the lump appeared on my breast after weaning my young son. At first, I thought the nodule appeared because of the milk I still had in my breast" (P2).

Community Influence

The role of the community in influencing one's decisions extends beyond overt advice-giving; even *potential* threats to one's status affects treatment-seeking behavior. One study conducted among cancer patients in Ghana found that patients

may neglect to continue the full course of treatment if they are concerned about the neighbors' perceptions of their behavior [27]. In Moroccan society, women's concerns for modesty (either personal or at the encouragement of her family) may lead her to want to keep her illness experiences private. One woman told us, "I was shocked at the beginning and tried to hide it from my family and neighbors, because I did not like them to feel pity for me" (P3). Others said simply that they did not tell anyone about the disease until it was pragmatically necessary. If a patient wished to keep matters related to her illness private, she may have been hesitant to seek treatment from the cancer center in Marrakesh. The amount of time necessary for treatment at the hospital could easily draw attention to a patient in a way that seeing a local health professional within one's village or town would not.

Maren Klawiter [28] writes about the importance of relationships insofar as they affect experience of disease and the culture in which diseased patients are situated, especially through societal expectations of non-disclosure surrounding breast cancer. During treatment, the hospital *becomes* one's cultural context as normal day-to-day actions are replaced by arrangements of regular outpatient therapy sessions. Daily interactions shuffling around the systematic hospital halls do not often give women a chance to reflect on their journeys, and the interview process offered some psychological benefit to patients. Others have described an element of catharsis from patients being able to speak directly to a medical professional (the interviewing nurse) about their experiences [29].

Spirituality and Conception of Death

Morocco is a predominantly Muslim country. All women interviewed in this study were Muslim and wore a *hijab*, a scarf to cover the hair in accordance with Muslim tradition. Harandy et al. [30] studied the use of Islam as a factor in breast cancer survivor spirituality and commented on the use of Islam with respect to illness: "negative influences of spirituality and religiosity, however, also can produce a sense of fatalism—a belief that the outcome of their health is controlled by fate or by a god or gods." Because the women with whom we spoke were those who had already sought treatment for this cancer, the present study does not allow for understanding of the perspectives of women who leave their illness recovery exclusively to God, without medical treatment. At the same time, trust in God was a very influential theme in the lives of most of these women and heavily influenced the ways in which they were able to process and cope with their cancer.

Cancer generally tends to be associated with fears of death, and breast cancer—as the leading cancer affecting Moroccan women—can be particularly frightening. In many interviews, women revealed their embedded associations of cancer with death. One patient commented that before diagnosis, "I used to get afraid whenever I heard about cancer, because I knew it is incurable. My grandfather also died from cancer" (P5). Most of the patients had very little knowledge of the clinical signs of breast cancer, but were told by their relatives that it was a fatal disease. This mentality makes them more concerned for themselves and their families. "The idea of being sick and maybe dying soon was harder to deal with than the disease itself, especially because I am responsible for my family" (P14). These examples further highlight the fact that even when not directly offering input, a woman's family and community is a significant determinant in her overall perceptions of the disease.

It can be very difficult for patients to come to terms with the reality of living with cancer, both before and after an official diagnosis, and faith clearly has an important role in this process. Others have written about "the importance of spirituality as a component of deriving meaning from cancer" [31]. Regardless of initial level of piety, cancer patients tend to increase their religious thoughts, acts, and supplication after diagnosis. Errihani et al. [5] elaborate on the reasoning for these actions, declaring that patients "redouble their religious practices as much as possible, thereby seeking a cure and forgiveness. If religion cannot help them to recover, at least it will help them to go to paradise after death." Powe and Finnie [32] described an association between a higher reliance on fatalism and lower levels of income, less formal education, and increased age of patients. In certain situations, this focus on the divine may outweigh the benefit and urgency of seeking professional medical care. Faith in God—especially during times of hardship—is an important Muslim value, so it is reasonable to believe that the importance of prayer is known to all patients, not just those at a socioeconomic disadvantage. Several studies among American and European cancer patients described the use of prayer as one method of cancer treatment and support the belief that God can work through doctors to cure cancer [33, 34].

The curative power of prayers and religious belief are frequently integrated into practices of traditional healers in their treatment of illness. Traditional healers are an integral part of Moroccan society—even women who denied ever visiting a traditional healer recognized their presence in their communities. In addition to their capacity for treatment of illness, traditional healers often serve to reinforce local communal ties, respect for elders and lineage, and a sense of collectivity [35]. "I knew from my friends that there are herbalists who treat this disease, but I have never visited any of them. Yet, I think of doing so especially when I heard about women who used these recipes and were cured from the disease" (P25). If patients have a high degree of confidence in the healing potential they can obtain from traditional medicine, it is often preferred because of the way it cares holistically for the patient better than some services found in public hospitals.

The choice of a traditional healer over a medical doctor for treatment does not necessarily reflect a permanent belief in the

superiority of one over the other. They often fill different roles and can be used if the patient feels one system was inefficient or did not work quickly enough [35]. In our interviews, patients explained that they would visit a traditional healer if they did not recover after receiving chemotherapy or radiation, a reality that becomes a more realistic possibility as cancer is diagnosed at a late stage.

Discussion

Qualitative interviews with breast cancer patients in this study revealed several themes regarding structural and sociocultural barriers to initial diagnosis and treatment. Structural barriers included high treatment-associated costs for a patient and her family, the burden of transportation and distance to central treatment centers, and limited access to certain health settings. Sociocultural barriers included perceived attack on one's identity and femininity with breast cancer diagnosis and treatment, influence from one's local community, and ideas of faith, spirituality, and conception of death. These perspectives represent views of 25 Moroccan women; the small sample size and semi-structured interviews allow for deeper understanding but are not intended to be representative of all female Moroccan cancer patients.

In addressing structural barriers to cancer diagnosis and treatment, there are clear areas of improvement needed in the current health infrastructure. Although there were other health care systems available in or near patients' hometowns (including traditional healers and basic local health care centers), for many patients, it was an ordeal to commute to one of the few cancer centers in the country. Acknowledging the shortage of physicians, especially cancer specialists, in Morocco, it is clear that addressing this problem by constructing more cancer centers will alleviate the burden on patients. Increased accessibility to specialized care would be helpful, even if not through the construction of novel cancer centers. Patients would benefit from a rotation of specialists through underserved areas or the establishment of cheaper and simpler transportation to medical facilities. The arrangement of frequent mobile clinics, particularly in low- and middle-income countries, may be a useful option to disseminate adequate medical care to less accessible areas [36].

Others have described the importance of developing culturally relevant cancer education programs [37]. In the present study, individual qualitative interviews demonstrated specific needs with regard to cancer prevention education and areas for development of effective cancer prevention education programs in Morocco. Education should be focused around both patients and wider community members, as our findings showed that patients' cancer experiences were influenced by communal and cultural beliefs. Studies have shown that when cancer preventative services are available, women with higher levels of education are more likely to utilize them and benefit from messages concerning breast cancer knowledge and prevention [38].

The issue of cost came up in nearly every interview. While some patients were supported by their wealthier relatives or those who lived abroad, most women described the significant financial burden faced by themselves or their families. Further analysis of the recent health insurance reforms and their on-the-ground impact on individual patients would assist in determining specific areas of improvement in the health insurance structure. Simultaneously, many of the costs associated with treatment do not come from the cancer center itself, but rather, from transportation to and from appointments, and from being forced to provide for a family when a woman is absent from the home for a period of time. Therefore, this issue of cost will be mitigated by increasing locations of treatment centers, developing the possibility of remote, videoconference-consultations, and making cancer diagnosis and treatment services more accessible to Moroccans [39].

Not all women delayed treatment-seeking until the moment of their diagnosis at the CHU Mohammed VI Hospital; some had had their concerns dismissed by a local health practitioner closer to their home. In a few instances, even those who sought care at regular intervals from their local basic health care facility were told not to worry. Improved training of local health care professionals would ultimately help patients make the determination of when to seek more specialized treatment. There are potential areas of improvement in health professional training, including revising the general practitioner medical training curriculum and adapting the training modules to recent and developing community needs [13, 40]. Specifically, basic health care staff should be better equipped to recognize initial cancer symptoms in order to refer patients to larger centers when necessary in order to obtain timely diagnoses.

The process of implementing screening programs must be tailored to the existing infrastructure and current beliefs around breast cancer. A one-size-fits-all approach rarely works when translating between developed countries and low- and middle-income countries (LMICs), which each have different health promotion structures that therefore pose unique challenges. For example, trying to implement a widespread mammography screening program requires a large multidisciplinary investment that is outside the reach of many LMICs [41]. Further epidemiological studies are needed within Morocco to be able to tailor an appropriate screening program; some recent studies of breast cancer screening in LMICs have shown promising preliminary results for the expansion of Clinical Breast Examination initiatives within current health systems.

Conclusions

The ideas highlighted in this study can be used to develop recommendations for areas of improved cancer education as well as potential prevention and screening programs. Patient- and community-level education is an imperative part of

improved breast cancer diagnosis. Our findings showed that patients were heavily influenced by the advice of people in their communities as well as by the experiences other breast cancer patients that they had known or heard about. Relying on community-based knowledge dissemination will therefore be useful, especially among women with first-hand cancer experience. As Amartya Sen [42] wrote, "The people have to be seen…as actively involved—given the opportunity—in shaping their own destiny, and not just as passive recipients of the fruits of cunning development programs." Involving community leaders and religious leaders in the effort to emphasize the importance of caring for one's body and the benefit of seeking treatment early would improve disease downstaging and overall psychological well-being.

Further research should be conducted in remote areas that are not close to a cancer center. Although many of the patients in this study faced issues with several-hour-long commutes to the cancer center, others in more remote areas have an even more difficult journey in seeking biomedical treatment. Interviewing those patients can, therefore, help gain insights from the perspectives of women who received cancer treatment from sources other than the cancer center. Additionally, further studies that include interviews with relatives/friends of cancer patients may be useful in understanding cultural characterizations of illness and the ways in which a community supports ill members. These patient narratives highlight some of the complex factors that influence cancer diagnosis and treatment and will help identify areas for improved cancer education for early detection and better management in Morocco and other similar low- and middle-income countries.

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Compliance with Ethical Standards

Ethical Approval All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

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