

FACTORS INFLUENCING DELAY IN SEEKING MEDICAL CARE AMONG CANCER BREAST PATIENTS IN BALUCHISTAN: EXPLORE REASONS BEHIND DELAYED PRESENTATION AND HOW PATIENT EDUCATION OR COMMUNITY PROGRAMS MIGHT IMPROVE EARLY ACCESS TO CARE

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Abstract: Breast cancer is one of the most prevalent and deadly forms of cancer affecting women globally, and Pakistan is no exception. **Objective:** The main objective of the study is to find the factors influencing delay in seeking medical care among cancer breast patients and explore reasons behind the delayed presentation and how patient education or community programs might improve early access to care. **Methods:** This cross-sectional study was conducted at Bolan Medical College Quetta Pakistan from January 2024 to June 2024. Data were collected from 125 breast cancer patients who had been diagnosed with the disease at various stages. **Results:** Data were collected from 125 patients, majority of participants (70%) were aged between 40-60 years, with a mean age of 50.01 ± 7.61 years. Most were married (60%) and had attained a high school education (65%). Employment status indicated that 55% of participants were unemployed, while 35% were engaged in low-paying jobs. Regarding healthcare access, 75% of urban participants had timely access to healthcare facilities, compared to only 40% of rural participants, highlighting disparities in healthcare availability. The highest delays were observed in unemployed participants (65%) and those in low-paying jobs (60%), reflecting the impact of economic constraints. Married participants (60%) also reported substantial delays, potentially linked to family dynamics and caregiving responsibilities. **Conclusion:** It is concluded that the delayed presentation of breast cancer in Pakistan is primarily influenced by socio-cultural stigma, financial constraints, limited healthcare access, and psychological barriers.

Keywords: Breast Neoplasms, Delayed Diagnosis, Health Services Accessibility, Patient Acceptance of Health Care, Socioeconomic Factors.

Introduction

Breast cancer is one of the most prevalent and deadly forms of cancer affecting women globally, and Pakistan is no exception. Despite advancements in medical care, the majority of breast cancer cases in Pakistan are diagnosed at advanced stages, leading to higher morbidity and mortality rates. One of the most avoidable causes of this poor prognosis is delayed presentation to health care facilities (1). The reasons involving breast cancer patients in Pakistan to seek medical help later are therefore not only various and diverse but can also be attributed to socio-cultural, economic and psychological factors, lack of health care awareness and access to health care (2). This is the case in Pakistan where cultural beliefs, culture, financial barriers, negative perceptions as well as poor knowledge of the actual nature of breast cancer-related illnesses might prevent women from seeking timely medical help. Failure to get early information about the symptoms and risks of breast cancer makes many women especially those in rural and underprivileged areas have little or no knowledge of the disease (3). Patients may choose to 'dismiss' the symptoms as lumps, changes in breast shape, or skin irritation, or even think that the related lumps are not dangerous and could be due to other illnesses (4). Regarding breast cancer, there are still feelings of embarrassment and rejection, ultimately

leading to the refusal of treatment by sufferers. There are denials of necessary medical attention especially in these conservative cultures, making the time from symptom emergence to diagnosis quite staggeringly long (5). Lastly, lack of funds formed the biggest portion of why people delayed seeking medical attention. The price of consultations with physicians and other medical professionals, the cost of tests like mammography, and the affordability of the treatments offered may include surgery, chemotherapy and radiotherapy are very hiked, in this futile attempt it becomes extremely difficult for most of the families of Pakistan especially those living in poverty (6). This financial burden on the one hand and, the lack of adequate healthcare facilities in the rural area make it very difficult for patients to seek treatment (7). A lot of females succumb to these traditional practices due to the high cost of conventional medical facilities, and many will turn to other treatment methods hoping to avoid the high costs of accessing medical services; this will only make the situation worse due to delays in earlier diagnosis and treatment. These preventable delays are occasioned by psychological factors such as fear, denial, or ignorance of the magnitude of the disease (8). Owing to this, many women fail to access doctors for check-ups mainly because a cancer diagnosis is usually followed by a death sentence. This fear can lead to

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denial and this leads to the majority of the patients absent themselves from hospitals until the symptoms are unmanageable. Moreover, due to ignorance some women may not know where to access healthcare and this may make them wait until they have very advanced symptoms when they could access care services which are free or charged little or no fee at all (9).

The cause of the delay in diagnosis and treatment is not a secret to any one of us, many challenges face the healthcare system in Pakistan some are listed below. In modern cities for instance people are likely to be most exposed to varying diseases and may not be in a position to seek medical attention due to overcrowding long waiting times, or the lack of sufficient numbers of doctors (10). New professional health services are also unavailable in rural areas, and many women cannot receive adequate specialized care or perform diagnostics. In addition, little is known about the provision of healthcare services in remote areas and the rural doctors and nurses who work there either misdiagnose cases or refer clients too late for treatment of cancer (11). Thus the main objective of the study is to find the factors influencing delay in seeking medical care among cancer breast patients and explore reasons behind the delayed presentation and how patient education or community programs might improve early access to care.

Methodology

This cross-sectional study was conducted at Bolan Medical College Quetta Pakistan from January 2024 to June 2024. Data were collected from 125 breast cancer patients who had been diagnosed with the disease at various stages.

Inclusion Criteria

1. Female patients diagnosed with breast cancer at any stage.
2. Patients who sought medical care at healthcare facilities within the last 12 months.
3. Patients who were willing to provide informed consent and participate in the study.

Exclusion Criteria

1. Male patients (due to the study focusing specifically on female breast cancer).
2. Patients diagnosed with breast cancer in the last three months (to ensure the study focused on delays in seeking care rather than immediate treatment).
3. Patients who received treatment abroad or at international healthcare facilities.

Data Collection

Data were collected through a structured questionnaire. The questionnaire included both closed-ended and open-ended questions, allowing for quantitative and qualitative analysis of the data. The healthcare professionals questionnaire was structured to ask both closed-ended and open-ended questions categorized into demographics, knowledge and awareness of breast cancer, cultural and economic factors, healthcare practice, psychological factors, exposure to patient education, and community programs. To preserve the objectivity of the responses the questionnaire consisted of both closed and open questions, so quantitative and qualitative analysis was possible. The survey collected demographic data about participants’ age, marital status, education level, employment status and geographical location, as well as specific information concerning the knowledge about the symptoms, risk factors and the role of screening in breast cancer. On the other hand, some of the questions asked about the culture, stereotype, and fear that patients endured concerning breast cancer and also, the financial difficulties patients suffered in searching for treatment. Other questions of the survey were related to the accessibility of healthcare services, the availability of screening programs among the participants and their experiences with healthcare providers. Therefore, blunt factors like fear, denial, and feelings concerning symptoms were also explored regarding how these factors impacted the decision to seek medical advice.

Data were analyzed using SPSS v29. Quantitative data were analyzed using descriptive statistics, including frequency distributions, means, and percentages, to identify patterns in patient demographics, knowledge levels, and delays in seeking care. Chi-square tests or t-tests were used to examine relationships between categorical variables such as socio-economic status, geographic location, and delay in medical care.

Results

Data were collected from 125 patients, majority of participants (70%) were aged between 40-60 years, with a mean age of 50.01 ± 7.61 years. Most were married (60%) and had attained a high school education (65%). Employment status indicated that 55% of participants were unemployed, while 35% were engaged in low-paying jobs. Regarding healthcare access, 75% of urban participants had timely access to healthcare facilities, compared to only 40% of rural participants, highlighting disparities in healthcare availability.

Table 1: Demographics Table

Demographic Characteristic	Percentage (%)
Age (40-60)	70
Mean Age	50.01±7.61
Marital Status (Married)	60
Education Level (High School)	65
Employment Status (Unemployed)	55
Employment Status (Low-paying Jobs)	35
Healthcare Access (Urban)	75
Healthcare Access (Rural)	40

Knowledge gaps were prevalent, with 45% of participants unaware of symptoms and only 35% aware of the importance of early detection. Socio-cultural barriers were

notable, with 50% citing fear of stigma and 40% delaying care due to family concealment. Economic factors heavily influenced delays, as 70% reported cost as a barrier, with

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rural areas disproportionately affected (80% vs. 55% in urban areas). Healthcare access issues were prominent, with

only 40% of rural participants having timely access compared to 75% in urban areas.

Table 2: Awareness and symptoms

Factor	Percentage (%)
Unaware of Symptoms	45
Aware of Symptoms	55
Aware of Early Detection Importance	35
Fear of Stigma	50
Delay Due to Family Concealment	40
Traditional Remedies Used	30
Cancer Perceived as Death Sentence	60
Cost of Treatment as Barrier	70
Delayed Seeking Care Due to Cost	50
Financial Barriers in Rural Areas	80
Financial Barriers in Urban Areas	55
Access within 30 minutes (Urban)	75
Access within 30 minutes (Rural)	40
Dissatisfaction with Healthcare (Urban)	50
Dissatisfaction with Healthcare (Rural)	60
Denial of Possibility of Cancer	40
Fear of Diagnosis	55
Avoidance of Healthcare Due to Fear	60

The highest delays were observed in unemployed participants (65%) and those in low-paying jobs (60%), reflecting the impact of economic constraints. Married participants (60%) also reported substantial delays,

potentially linked to family dynamics and caregiving responsibilities. Education played a role, with 50% of high school-educated participants experiencing delays, suggesting a need for improved awareness.

Table 3: Association Between Demographics and Time of Presentation

Demographic Characteristics	Presentation Delay (More Than 6 Months) (%)
Age (40-60)	55
Marital Status (Married)	60
Education Level (High School)	50
Employment Status (Unemployed)	65
Employment Status (Low-paying Jobs)	60
Healthcare Access (Urban)	45
Healthcare Access (Rural)	70

Healthcare access issues (70%) and cultural beliefs (65%) were the most prominent factors, both with statistically significant p-values (0.03 and 0.01, respectively), highlighting systemic and societal barriers. Financial constraints (60%) and the use of traditional remedies (60%) also played substantial roles, with p-values of 0.02,

indicating economic and cultural influences. Fear-related factors, including fear of diagnosis (55%) and stigma (50%), further delayed care, demonstrating the psychological hurdles patients face. Lack of knowledge of symptoms (55%) and denial of symptoms (50%) emphasizes the critical need for awareness programs to mitigate delays.

Table 4: Association Between Time of Presentation and Reasons for Delay

Reason for Delay	Presentation Delay (More Than 6 Months) (%)	P-Value
Fear of Stigma	50	0.04
Financial Constraints	60	0.02
Lack of Knowledge of Symptoms	55	0.05
Cultural Beliefs	65	0.01
Healthcare Access Issues	70	0.03
Fear of Diagnosis	55	0.03
Use of Traditional Remedies	60	0.02
Denial of Symptoms	50	0.06

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Discussion

This study aimed to explore the factors influencing delayed presentation in breast cancer patients in Pakistan, emphasizing the role of socio-cultural, economic, psychological, and healthcare-related barriers. The findings show the interconnection of these factors, which has had a great influence on the subject regarding delays in seeking medical care. Some of these problems may be solved thus having positive effects on early diagnosis and survival of breast cancer patients in the country. Among the factors that have been noted in this study is a sociocultural factor in breast cancer (12). Women were afraid of being diagnosed with the condition or being shunned by society as soon as they knew they had the disease. In many societies known as conservative breast cancer, is considered a taboo and women are fearful of rejection or of being labeled terminal (13). According to the survey the majority of the participants (50%) mentioned they hid themselves from getting proper medical care for fear of stigma and 40% said they delayed getting a consultation with their doctors to avoid discussing the diagnosis with their families. This concurs with other studies showing that social and cultural factors delay presentation in many low- and middle-income countries (LMICs). To this end, public anticancer appeals and community practices require promotion to break the circulatory silence around the topic and breast cancer in particular, as well as encourage women to pursue mammography services when feasible (14). Many of the respondents cited reasons of financial barriers as a major hindrance to early consultation with a doctor this is because 70% of the respondents said that in as much as they had felt sick they could not afford the cost involved in seeking medical attention and diagnosis (15). This is in concordance with the literature that established that in most cases, financial constraints lead to massive delays of health care access, particularly among the citizens of low- and middle-income countries (LMICs), the reason being that the cost of healthcare hampers the financial capacity of individuals and families (16). Regarding the factors hindering hospital use, ES clientele respondents reported the following: 80% claimed that cost was a major factor that saw them delay making a hospital visit if they resided in rural settings. Policies are also in place on governments attempting to offer partial reimbursement to breast cancer procedures, and or offer some sort of financial support to help women undergo screening (17). Access to healthcare was identified in the study also as another important determinant that led to presentation at an advanced stage, especially in the rural setting. Of urban patients, 75% had healthcare facilities within 30 minutes of their place of residence compared to rural patients, 40% only (18). In addition, 60 per cent of rural participants complained about the quality of care and confirmed that most facilities lacked adequate human resources and proper equipment, lengthy waiting times for treatment, and limited doctors. This demonstrative research calls for better development of health facilities in rural areas, enhanced cancer healthcare facilities, and integration of travelling clinics and telemedicine services as a means of providing appropriate early diagnosis and treatment. Delay in presentation also seemed to be attributed to psychological factors such as fear, denial and emotional distress (2). Pregnancy with cancer, death, believing that the symptoms are not dangerous, allowed many women to postpone the

receipt of medical assistance. About half of the participants, 55%, said that they feared cancer while 40% flatly denied having breast cancer though symptomatic (19). These psychological factors are complemented by low consciousness about the symptoms and the essentiality of early diagnosis. There is a need to step up awareness campaigns and clinics and advocate for more support in terms of psychological counselling to reduce the emotional issues that may make women delay seeking the appropriate care. The participants were relatively uninformed concerning symptoms of breast cancer and measures of early diagnosis. Only 35% of participants said they knew when to check their breasts and how the ways included self-exams and mammograms. This lack of awareness, together with cultural and psychological factors, has caused the timely presentation of medical attention to be lacking. The overwhelming evidence documented in this review suggests that educational approaches, including mass informational campaigns and school- and community-based educational programs, could potentially fill this gap (20). Also, it is important that all healthcare workers should be equipped with knowledge of issues to do with early identification and the need to seek medical attention when one develops symptoms. To enhance the impact of educational campaigns, educational campaigns have to target a broader population and this should include targeting rural dwellers and have to adopt other forms of communication such as radio, television, and social media among others. Significant relationships were established between the reasons for the delay in presentation and the time of presentation concerning several factors (21). They found that perceived stigma, financial barriers, lack of knowledge of symptom onset, and barriers to accessing healthcare were all factors related to delayed presentation (all p-values < 0.05). These concerns indicate that perhaps if these factors are attended to, by appropriate interventions, this will facilitate enhanced ability to detect breast cancer early besides improving the survival rates of patients diagnosed with the condition.

Conclusion

It is concluded that delayed presentation of breast cancer in Pakistan is primarily influenced by socio-cultural stigma, financial constraints, limited healthcare access, and psychological barriers. Addressing these factors through targeted education, improved healthcare infrastructure and financial support can enhance early detection and improve survival outcomes. Efforts should focus on raising awareness, reducing stigma, and increasing accessibility to affordable care, particularly in rural areas.

Declarations

Data Availability statement

All data generated or analyzed during the study are included in the manuscript.

Ethics approval and consent to participate.

Approved by the department Concerned. (IRBEC-MCQP-923/23)

Consent for publication

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Not applicable

Conflict of interest

The authors declared an absence of conflict of interest.

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Concept & Design of Study

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