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Saudi Breast Cancer Women: Barriers Toward Pain Management

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Abstract

*In Saudi Arabia, cancer is a leading cause of both morbidity and mortality. A patient with advanced breast cancer must deal with the chronic nature of their illness, which presents structural, physiological, psychological, and social challenges. Regardless of the medical environment, appropriate pain assessment and management are critical markers of the quality of pain care and patient satisfaction. Barriers pertaining to medical personnel, patients, the healthcare system, medications, and societal factors can all be responsible for insufficient pain treatment. **Objective:** Identify barriers associated with pain manageme[1]nt among patients with advanced breast cancer. **Setting:** The study was conducted at the Makkah hospitals, Saudi Arabia. **Subjects:** A purposive sample of 115 female patients diagnosed with stageIII or stage IV Advanced Breast Cancer (ABC) from the outpatient clinic, was included in the study. **Tools**: Two tools were used for data collection; Advanced Breast Cancer Pain Management Barriers Structured Interview Schedule (ABCPMIS) and Visual analog scale (VAS). **Results:** The study implies that patient related barriers and sociocultural barriers are the most prevalent barriers to pain management in advanced breast cancer patients attending the study setting. There were significant statistical differences between levels of barriers experienced and patients' current status of disease, seeking of medical advice when in pain and their reported VAS levels. **Conclusion:** Due to societal norms, systemic obstacles in the healthcare systems, and patient characteristics, patients with metastatic breast cancer have a variety of challenges when trying to manage their pain. **Recommendation:** It is advised that patients with advanced breast cancer receive supportive and clinical pain management programs to lessen their pain.*

Keywords: *Breast Cancer; Pain; Barriers, Management.*

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Introduction

As a systemic illness, cancer induces the body's cells to alter and proliferate uncontrollably (1). Right now, breast cancer is the most frequent cancer among women (2). It is a malignant tumor that begins in the breast cells and spreads to any part of the body's tissue due to the cancerous cells. The lungs, liver, brain, bones, skin, and lymph nodes are the most frequently affected areas by metastases (3). According to the American Cancer Society's estimations, there will be 40,450 breast cancer-related fatalities in 2016, 61,000 cases of carcinoma in situ (CIS), and 246,660 new cases of invasive breast cancer (4). Breast cancer is considered the most commonly diagnosed type of cancer among women globally and in Saudi Arabia. increased breast cancer incidence in Saudi Arabia, concomitant with changes in routine habits and the adoption of a westernized lifestyle. With current data trends, it is expected that Saudi Arabia might display an increase in breast cancer incidence until it reaches a stable ASR—similar to or even more than that seen in many western countries. [(5)].

Most cases diagnosed in the developing countries are in more advanced stages of the disease, which complicates treatment and many barriers in its diagnosis and treatment remain rampant[(6)]. The prognosis of invasive breast cancer is strongly influenced by the stage of the disease which includes stage (0) non- invasive, stage (1) carcinoma in situ tumor < 2cm and no evidence of metastases, stage tumor still in the breast or extended only to nearby lymph nodes. Advanced breast cancer (ABC) is mainly, stages (3) and (4). Stage (3) is locally advanced breast cancer, which means the cancer has spread tolymph nodes and/or other tissue in the breast, but not to further sites in the body(5). Stage (4) is metastatic breast cancer; the cancer has spread to other sites of the body[(7)].

Chemotherapy, hormone therapy, and targeted therapy are the mainstays of treatment for advanced breast cancer (3). For symptomatic treatment, radiotherapy and surgery may be necessary to reduce discomfort, enhance quality of life, and boost treatment tolerance (1). Depending on the specifics of each patient, past treatment history, and tumor features, these different therapies may be administered singly, in combination, or sequentially (8,9). Since these treatment plans entail a full course of treatments, a team makes these decisions while taking the patient's perspective into account (7).

Pain is defined as an unpleasant sensory and emotional experience associated with actual or potential tissue injury. Management of pain is key in patient care, that it is referred to as "the fifth vital sign"[(10,11)]. American Pain Societystandards state that "pain is assessed in all patients" and that "patients have the right to appropriate assessment and management of pain"[(10)]. Patients' experiences with pain are influenced by a multitude of elements, such as expectations regarding pain alleviation, culture, age, gender, anxiety, and prior pain experiences. Opinion, tolerance, and responses to pain can all be affected by these variables (11). Viscosal blockage, metastasis into bone, direct tumor invasion of nearby tissues, compression or invasion of nerves, and primary therapy directed toward the illness, such as chemotherapy, radiation, or surgery, can all cause pain (8–12).

The high frequency of pain associated with advanced breast cancer and the frequently regrettable inability to alleviate it has led to increased awareness of the ongoing obstacles. Research by Meredith (2013), Shute (2013), and Jacobsen (2009)(6,13,14) has consistently shown that patients are essential to the management of pain. For a variety of reasons, such as fear of adverse drug reactions, pessimism regarding the likelihood of attaining pain relief, the attitudes of medical personnel, or the conviction that pain is a sign of a developing illness, some patients may be reluctant to disclose their pain(13, 14). Significant obstacles prevent medical professionals from providing appropriate pain treatment. Oftentimes, medical professionals, nurses, and other interdisciplinary team members fall short in properly evaluating the patient's

discomfort or staying up to date on patient obstacles (15).

On the other hand, insufficient payment for pain services and legislative and regulatory frameworks that obstruct the delivery of the best possible care are examples of system barriers (16, 17). Based on the evaluation of pain severity, pharmacological therapy is the cornerstone of pain management (18). When used appropriately, non-opioid, opioid, and adjuvant analgesics, in conjunction with a range of anticancer medicines, can significantly improve the management of pain associated with cancer (18). Sociocultural barriers also include the absence of family support, other emotional and medical issues, such as the burden of physical symptoms, disturbances in body image, and disruptions in daily activities, fear of diagnosis and treatment, feelings of powerlessness and pain, and taking care of a sick family member (19).

According to criteria released by the American Nurses Association, nurses are required to record their assessment of a patient's discomfort in the medical record(10). Determining the degree of pain alleviation required to preserve comfort, enhance function, or speed up recovery is part of the assessment of pain (20). Assessing and correcting the patient's expectations and misconceptions about pain is a crucial component of a comprehensive pain assessment. The nurse should be aware that treating patients with pain relievers not only makes them more comfortable, but also speeds up their recovery (21, 22).

Aim of the Study

This study aimed to identify barriers associated with pain management among advanced breast cancer patients.

Research Question:

What are the barriers associated with pain management among advanced breast cancer patients?

Materials and Method

Materials

Design: A descriptive research design wasutilized for this study.

Setting: The study was conducted at the Makkah hospital Saudi Arabia. The cancer outpatients clinics serves as an outpatient clinic for several diseases.

Subjects: A systematic random sample of 115 female based on Epi info 7 which was used to estimate the minimum sample size. The female patients were considered eligible to participate in the study if they met the following criteria:

- Adult female patients aged from 21 - 60 years and able to communicate verbally.
- Diagnosed with histologicallyproven clinical stage III and/stage IV or inflammatory breast cancer.
- Have been informed of their diagnosis of breast cancer.
- Have ongoing treatment for stage III/stage IV of breast cancer i.e. chemotherapy, radiation and post- surgical interventions.

Tools: Two tools were used for data collection:

Tool I: Advanced Breast Cancer Pain Management Barriers Structured Interview Schedule (ABCPMSIS)

This tool was developed by the researcher based on relevant literature review[23–25] to explore barriers associated with pain management among advancedbreast cancer patient. It includes two parts:

Part I: Socio demographic data:

a. **Socio-demographic characteristics:** Patient's residence,age, marital status, livingarrangements, level of education,religion, occupation, health insurance, and income.

b. **Patient's clinical history data** such as: stage of disease, current status of disease, onset of disease, previous and current treatment, characteristic of pain, date associated with symptoms occurrence/reason forseeking treatment, and pain rating.

Part II: Pain Management InterviewSchedule (PMIS):

The PMIS was developed by the researcher based on relevant literature review[23,24] to explore patient's responses on barriers to pain management, whichincluded 5 categories of barriers:

I. **Health Care Professional Related Barriers** included nine barriers: waiting list, pain assessment, management of pain, time taken to be reviewed by the medicalprofessionals, talking about pain, endurance of pain, and information on pain medication side effects, management of medication sideeffects, and consultation to supportive care by the medical professionals.

Patient Related Barriers included ten barriers: financial, transport,locating the referral facility,reporting of pain, worries about pain, personal beliefs, long term use of opioids, information about pain medication, shame of being on treatment regularly, refusing to take opioids and time off work or school.

II. **System barriers** included seven barriers: availability of morphine,issuance of drugs in the pharmacy, pain medication prescriptions,accessibility, review by different doctors, schedule visit and the nurse patient ratio.

III. **Medication barriers** included ninebarriers: effect of prescribed dose, side effects, reporting of side effects, and management of side effects, addiction, and tolerance, attitude about opioids, alternative medicine and severity of pain.

IV. **Sociocultural barriers** included ten barriers: role of family, taking care of a sick family member, attitude of friends and family members, negative public image of morphine, seeking medical advice is against religion, society influence, traditional herbal medicine, previous experiences of friends and cultural beliefs to talk about pain.

Scoring system: Each patients' responses for each item was scored on a 3 point Likert scale ranging from "Always (3 scores)", "sometimes (2 scores)" and "never (1 score)".

The total and subtotal scores were calculated and converted into percentage scores. A score of >65 % represent high barriers, scores of 65-45% represent moderate barriers and scores of < 45% represent low barriers[26].

Tool II: Visual analog scale (VAS)

This is a standardized pain assessment tool used to measure pain intensity among advanced breast cancer patients adapted from Klimek et al. (2017)[27]. It is a single-item scale and using a ruler, the score was determined by measuring the distance (mm) on the 10-cm line between the "no pain" anchor and the patient's mark, providing a range of scores from 0–10. Mild pain (1-3), moderate pain (4-7), and severe pain (8-10).

Method

- Official approval to conduct the study was obtained from the relevant authorities in Makkah.
- Two tools were used for data collection; Tool I: Advanced Breast Cancer Pain Management Barriers StructuredInterview Schedule (ABCPMBSIS) and Tool II: the Visual Analogue Scale (VAS).
- Tool I was tested for content validity by five experts in the field and also verified for its reliability using Cronbach's coefficient Alpha statistical test for internal consistency of the tool items. The data was analyzed; the correlation coefficient was (□= 0.8)
- Before embarking on the actual study, a pilot study was carried out to test the feasibility and applicability of thedeveloped tool of the study sample. It was applied on 10% (11) female patients who met the inclusion criteria at CCCDC in MTRH. Data obtained was excluded from the study.
- After securing administrative approval, data collection was started which covered a period of 4 months from May 2022 to August 2022. Data was collected four days per week from 9am to 4pm.
- The files of patients presenting to the Oncology clinic were screened for eligibility.
- Every patient who gave consent to participate in the study was assessed for presence of pain or not using Tool II.

  Every patient was interviewed on a face to face basis for 30 - 45 minutes in the outpatient clinic using Tool I. The interview was done in an allocated room by the department to collect the necessary data.

Ethical considerations:

Written informed consent was obtained from each female patient after explanation of the purpose of the study. Privacy and anonymity of the female patients was also ascertained.

Statistical Analysis

Statistical Package for Social Sciences (SPSS version 20.0) for windows was used for data analysis. The 0.05 level was used as the cut off value for statistical significance. Chi square (x^2) was used to test the associations between two qualitative variables or to detect difference between two or more proportions. Fisher's Exact test and Monte Carlo was used whenever the expected frequency in any of the cells of 2x2 tables falls below 5[(28)].

Results

Table (1) shows the distribution of the studied patients according to their bio socio demographic data. The study revealed that (56.6%) of the studied patients were 40-50 years old, 44.3% were married while 22.6 % were widowed. More than one third 44.3% had high school education, and majority 93.9% were Christians. Concerning employment status, most patients were unemployed 62.6%, majorityof them 97.9% had National Hospital Insurance Fund (NHIF) and more than half 57.4% had sufficient monthly income.

Bio Socio-demographic characteristics	No.	%
Age (years)		
20-<30	2	1.7
30-<40	20	17.4

40-<50	**65**	**56.6**
50-≤60	28	24.3
Marital status		
Single	23	20.1
Married	**51**	**44.3**
Divorced	15	13.0
Widow	26	22.6
Educational level		
Illiterate	12	10.4
Primary education	22	19.2
High school	51	**44.3**
College/ Graduate	30	26.1
Religion		
Muslim	2	1.7
Christian	108	**93.9**
Others	5	4.4
Employment status		
Employed	39	33.9
Not employed	76	66.0
Unemployed	72	**62.6**
Retired	4	3.5
Have health insurance		
Yes	98	**85.2**
No	17	14.8
Type of insurance [n=98]		
If Yes		
National Hospital Insurance Fund	96	**97.9**
Private insurance	2	2.1
Sufficiency of monthly income		
Insufficient	48	41.7
Sufficient	66	**57.4**
More than sufficient	1	0.9

Table (2) represents the clinical data of the studied patients. In relation to stage of disease, majority of the patients 67% presented with stage 4. Regarding current status of disease 45.2% of the patients were under treatment, while 42.6% of them had recurrent breast cancer after surgical intervention (mastectomy, breast conserving surgery), but were under treatment. In relation to previous treatment, more than half of patients 58.3%, had surgery previously while 22.6% had undergone chemotherapy, and 17.4% had taken herbal medication for example tree barks of local confetti and the pepper-wood trees, thelatter known as "Mkaa" in Kiswahili, least of them 1.7% having undergone radiotherapy. Regarding current status of disease majority of the patients 94.8% were on chemotherapy.

Concerning suffering from pain and seeking medical advice when in pain, majority of the patients 98.3% were in pain, 60% sought medical advice, 41.7% came immediately to the clinic when in pain, while 18.3% waited for the scheduled visit. According to the Visual Analogue Scale (VAS) more than one third of the patients 49.6% reported severe pain and 47.8% moderate pain while 2.6% had mild pain.

Clinical data	Number	Percentage score
Stage of disease		
Stage III	8	7.0
Stage IV	77	**67.0**
Inflammatory	30	26.0
Current status of disease		
Newly diagnosed	9	7.8
Under treatment	52	**45.2**
Recurrent under treatment	49	42.6
Others(Herbal medication	5	4.4
Previous treatment		
Surgery	67	**58.3**
Chemotherapy	26	22.6
Radiotherapy	2	1.7
Herbal medicine	20	17.4
Current treatment		
Chemotherapy	109	**94.8**
Radiotherapy	3	2.6
Both	3	2.6
Visual analogue scale		
Mild pain	3	2.6
Moderate pain	55	47.8
Severe pain	57	**49.6**
Suffering from pain		
No	3	**2.6**
Yes	113	**98.3**
Seek medical advice when in pain		
No	46	40.0
Yes	69	60.0
Immediately	48	**41.7**
Scheduled visit	21	18.3

Table (3a) shows health careprofessional and patient related barriers of the studied patients. As regards to health care professional barriers majority of the patients 70.4% reported that they always had to wait for a scheduled consultation. In relation to information on side effects of pain medication 80% of the patientsreported that sometimes information was given by

nurses or doctors and 94.8%, of the patients never had problems talking about pain while 96.5% never endured pain before resorting to a pain relief measure.

Concerning patient related barrier, the table revealed that 91.3% were always worried of pain being a sign that the illness has gotten worse and a similar percentage 91.3% were worried always of the long term use of pain medication. More than half of the patients 59.1% reported that "sometimes" they had difficultyunderstanding information on pain medication and 55.7% never believed that, enduring pain is better than losing the breast.

Barriers associated with pain management	**Always**		**Sometimes**		**Never**	
	No.	**%**	**No.**	**%**	**No.**	**%**
I. Heath Care Professional Related Barriers						
Waiting list for scheduling consultation is too long.	81	**70.4**	27	23.5	7	6.1
Pain is routinely assessed during visit by the nurse or doctor.	26	22.6	75	65.2	14	12.2
Pain is well managed by the doctor or nurse.	20	17.4	81	70.4	14	12.2
Patients are in pain and it takes time to be attended.	67	58.3	24	20.9	24	20.8
Talking about pain is hard because you are not understood by the medical professionals.	0	0.0	6	5.2	109	**94.8**
Patients are encouraged to endure as much pain as possible before resorting to a pain relief measure.	0	0.0	4	3.5	111	**96.5**
Given information by the nurse or doctor on side effects of pain medication.	13	11.3	92	**80.0**	10	8.7
The side effects of opioids (morphine) are managed by the doctor.	15	13.0	55	47.8	45	39.2
Consultation to supportive care by the medical professionals is done.	9	7.8	84	73	22	19.2
II. Patient related barriers						
Worried that pain medications cost too much.	61	53.0	11	9.6	43	37.4
Finding transportation means is difficult.	78	67.8	9	7.8	28	24.4
Locating the referral facility is difficult and hence takes long to get treatment.	30	26.1	5	4.3	80	69.6
Patients are afraid of reporting the pain.	1	0.9	5	4.3	109	94.8
Worried that having pain is a sign that the illness has gotten worse.	105	**91.3**	6	5.2	4	3.5
Patients believe that it is better to endure pain	45	39.1	6	5.2	64	**55.7**

than to lose the breast.						
Worried of the long term use of pain medications and being on treatment regularly.	105	**91.3**	6	5.2	4	3.5
Have difficulty understanding information about pain medication.	13	11.3	68	**59.1**	34	29.6
Ashamed of being on treatment regularly.	102	88.7	7	6.1	6	5.2
Patients do not just want to take opioids (morphine).	32	27.8	4	3.5	79	68.7
Busy with work or school to see a doctor.	0	0.0	9	7.8	106	92.2

Table (3b) reveals system and medication related barriers of the studied patients. The table demonstrates that the most prevalent system barriers as reported by majority of patients 94.8% was always being reviewed by different doctors during schedule clinic visit, while 31.3% of the patients reported that "sometimes" time allocated to their pain needs was not enough and all patients reported that they were never denied the prescribed medications. Regarding medication barriers the table conveyed that 90.4% were always worried of getting addicted to pain medicine and 89.6% reported that, always the side effects of the pain medications are difficult to control. Furthermore most patients 49.6% reported that sometimes when in pain they were relieved by the prescribed pain medication dose, while 99.1% reported that pain medication never blocked their ability to know if they had new pain.

Barriers associated with pain management	**Always**		**Sometimes**		**Never**	
	No.	**%**	**No.**	**%**	**No.**	**%**
III. System barriers						
Drugs especially morphine are not available.	1	0.9	31	27.0	83	72.1
Pharmacists do not issue the drug because the prescription is not complete.	0	0.0	12	10.4	103	89.6
Patients are denied the prescribed pain medications.	0	0.0	0	0.0	115	**100.0**
Travel long distance to get medication.	84	73.0	4	3.5	27	23.5
Reviewed by different doctors during visit hence no continuity of care.	109	**94.8**	6	5.2	0	0.0
Patients have to wait for the scheduled return visit to getyour drugs despite being in pain.	63	54.8	33	28.7	19	16.5
Time allocated to your pain needs by staff is enough.	37	32.2	36	**31.3**	42	36.5
IV. Medication Barriers						
Pain is relieved by the prescribed pain medication dose.	19	16.5	57	**49.6**	39	**33.9**
It is easier to put up with pain than with the	15	13.0	19	16.5	81	70.5

side effects that come from pain medicine.						
Patients report the side effects of the pain medications.	103	**89.6**	12	10.4	0	0.0
The side effects (nausea, constipation) of pain medicine aredifficult to control.	93	80.9	12	10.4	10	8.7
Worried of getting addicted to pain medicine.	104	**90.4**	7	6.1	4	3.5
Body has become used to the effects of pain medicine.	10	8.7	0	0.0	105	91.3
Using pain medicine blocks your ability to know if you have any new pain.	0	0.0	1	0.9	114	**99.1**
Patients believe that using alternative medicine is better than taking opioids (morphine).	57	49.6	4	3.4	54	47.0
Patients believe pain medicine should be taken only whenthe pain is severe.	14	12.2	5	4.3	96	83.5

Table (3c) sociocultural barriers associated with pain management of the studied patients. Regarding socio cultural barrier, the results showed that 96.6% of the patients always reported that people around them always believe if you have cancer, you should not go for treatment and also a similar percentage reported that their communities believed in traditional herbal medicine than seeking treatment. On the other hand, more than one third of the patients 38.3% reported that sometimes they had a sick family member to take care of preventing them from attending the clinic. The results also revealed that the majority of the patients 81.8% reported that family/friends never made fun of them when they complained about pain.

Barriers associated with pain management	**Always**		**Sometimes**		**Never**	
	No.	**%**	**No.**	**%**	**No.**	**%**
V. Sociocultural Barriers						
Family has a role in pain management.	70	60.9	5	4.3	40	34.8
Have a sick family member to take care of preventing you to attend the clinic.	1	0.9	44	**38.3**	70	60.8
Family/friends make fun of you when you complain about pain.	12	10.4	9	7.8	94	**81.8**
People around you have a negative image of morphine.	37	32.2	7	6.1	71	61.7
It is against your religion to seek medical treatment.	39	33.9	2	1.7	74	64.4
People around you believe if you have cancer you should not go for treatment	111	**96.6**	2	1.7	2	1.7
Your community believe in traditional herbal medicine than seeking treatment	111	**96.6**	2	1.7	2	1.7
Your friends advised you not to go for treatment because of	99	86.1	3	2.6	13	11.3

their previous experiences with pain medications.						
It is against your culture to talk about pain.	36	31.3	1	0.9	78	67.8

Table (4) shows Mean, standard deviation of barriers associated with pain management of the studied female patients. The results revealed that patient related barriers had the highest mean and standard deviation (67.1±10.9) and sociocultural barriers (67.1±9.7) respectively while medication barriers had the lowest mean and standard deviation (58.5±8.9). High scores were reported in patient related barriers (60.9%) medication barriers had moderate scores (72.2%), while sociocultural barriers (53.9%) also had high scores.

Barriers Associated with Pain Management	**Score of barriers (%)**							
	Min-Max	**Mean±SD**	**Low (<45%)**		**Moderate (45%-≤65%)**		**High (65%≤)**	
			No.	**%**	**No.**	**%**	**No.**	**%**
Heath Care Professional Related Barriers	33.3-88.9	64.1±9.7	8	7.0	48	41.7	59	51.3
Patient related barriers	33.3-90.9	67.1±10.9	4	3.4	41	**35.7**	70	**60.9**
System barriers	38.1-76.2	63.1±8.2	3	2.6	58	**50.4**	54	47.0
Medication Barriers	33.3-77.8	58.5±8.9	5	4.3	83	**72.2**	27	23.5
Sociocultural Barriers	40.7-92.6	67.1±9.7	2	1.7	51	44.4	62	**53.9**
Total score	**37.0-76.3**	**64.1±6.7**	**1**	**0.9**	**57**	**49.5**	**57**	**49.6**

Table (5) illustrates relation between Bio socio-demographic characteristics and the level of barriers experienced by the studied female patients. The table illustrated that there was statistical significant differences betweenlevel of barriers experienced andeducational level and monthly income where P=0.036, P=0.006 respectively.

Bio socio demographic characteristics	**Level of barriers**				**Significance**
	Low/moderate (n=58)		**High (n=57)**		
	No.	**%**	**No.**	**%**	
Age (years)					
<40	12	54.5	10	45.5	χ^2=5.610
40-	27	41.5	38	58.5	P=0.061
50-≤60	19	67.9	9	32.1	
Marital status					
Single	11	47.8	12	52.2	
Married	32	62.7	19	37.3	χ^2=6.400
Divorced	5	33.3	10	66.7	P=0.094
Widow	10	38.5	16	61.5	
Living arrangement					
Live with spouse/children	15	51.7	14	48.3	χ^2=2.580
Live alone	11	37.9	18	62.1	P=0.276
Live with spouse children	32	56.1	25	43.9	

Educational level					
Illiterate	9	75.0	3	25.0	
Primary education	7	31.8	15	68.2	χ^2**=8.525**
High school College/	23	45.1	28	54.9	**P=0.036***
Graduate	19	63.3	11	36.7	
Employment status					
Employed	23	59.0	16	41.0	χ^2=1.722
Not employed	35	46.1	41	53.9	P=0.189
Health insurance					
Yes	50	51.0	48	49.0	χ^2=0.091
No	8	47.1	9	52.9	P=0.763
Monthly income					
Insufficient	17	35.4	31	64.6	χ^2**=7.430**
Sufficient/more	41	61.2	26	38.8	**P=0.006***

Table (6) denotes the relation between level of barriers experienced and the clinical characteristics of the studied female patients. The table denoted that there was statistically significant differences betweenlevels of barriers experienced and stage of disease, patients current status of disease, seeking medical advice when in pain and VAS where P<0.0006, P<0.0001, P=0.006, P<0.0001 respectively.

Clinical characteristics	**Level of barriers**				**Significance**
	v/moderate (n=58)		**High (n=57)**		
	No.	**%**	**No.**	**%**	
Stage of disease					
Stage III	7	87.5	1	12.5	χ^2**=9.928**
Stage IV	42	54.5	35	45.5	**^{MC}P=0.006***
Inflammatory	9	30.0	21	70.0	
Current status of disease					
Newly diagnosed	2	22.2	7	77.8	χ^2**=21.246**
Under treatment	37	71.2	15	28.8	**^{MC}P<0.0001***
Recurrent under treatment	15	30.6	34	69.4	
Others	4	80.0	1	20.0	
Previous treatment					
Surgery	38	56.7	29	43.3	χ^2=4.400
Chemotherapy/radiotherapy	14	50.0	14	50.0	P=0.111
Herbal medicine	6	30.0	14	70.0	
Current treatment					
Chemotherapy	54	49.5	55	50.5	^{FE}P=0.679
Radiotherapy/both	4	66.7	2	33.3	
Seek medical advice when in pain	16	34.8	30	65.2	χ^2**=7.514**

No Yes	42	60.9	27	39.1	**P=0.006***
Timing of the seeking medical advice Immediate	(n=42) 31	64.6	(n=27) 17	35.4	χ^2=0.913
Scheduled	11	52.4	10	47.6	P=0.339
Visual analogue scale (VAS) Mild/moderate pain	41	70.7	17	29.3	χ^2=**19.200**
Severe pain	17	29.8	40	70.2	**P<0.0001***

Discussion

The prevalence of breast cancer is rising in Saudi Arabia. Women who have advanced breast cancer suffer a significant health risk that compromises both their productivity and safety (5, 29). Tumors often present late and are incurable due to limited access to healthcare services. This results in a burden of pain related to tumor progression that is uncommon in nations with more advanced medical systems (30). The majority of malignancies in Saudi Arabia are frequently discovered when the illness has progressed. A patient with advanced breast cancer must deal with the chronic nature of their illness, which includes psychological, physiological, and structural difficulties in addition to financial difficulties (5).

Results of the current study revealed that, more than half of the sample was aged between 40 to less than 50 years. Similar results were reported in a study done in Egypt by Ismail et al. (2013)[29] to assess factors that hinder early detection of breast cancer among females at Cairo UniversityHospital. Moreover in agreement with the research results of the American Cancer Society (2017)[31] which revealed that, the risk of developing breast cancer increases with advanced age. In relation to stage of disease, majority of the studied patients presented with stage (4) breast cancer.

This is in line with findings of Basudan and Ahmed 2020[5] Our analysis indicates increased breast cancer incidence in Saudi Arabia, concomitant with changes in routine habits and the adoption of a westernized lifestyle. With current data trends, it is expected that Saudi Arabia might display an increase in breast cancer incidence until it reaches a stable ASR—similar to or even more than that seen in many western countries. Therefore, long-term preventive measures and strategies should be applied to reduce breast cancer incidence and mortality. These include (but are not limited to) combating tobacco use, increasing awareness of body weight and physical activity, and implementing effective screening programs. In a study done in Malaysia, similar findings were reported, where majority of Malaysian women in Segamat Hospital were diagnosed with breast cancer at stage (3) and stage (4)[32].

Regarding results of the Visual Analogue Scale (VAS); most of the studied patients had severe pain and a few of them had moderate pain. Similar results were reported in a study done by Hughes et al. (2017)[30] which showed a high incidence of breast pain in patients with advanced cancer. Furthermore, a study conducted by Kwon (2014)(33) discovered that patients may be reluctant to disclose pain and take opioids if they have misunderstandings and concerns regarding pain drugs. Further potential obstacles from the patient's perspective have been documented in a number of studies. These include misunderstandings about pain medication

(fear of side effects, addiction, tolerance, and decreased immunity due to pain medication), fatalistic beliefs (inevitably, uncontrollability, and idea that increasing pain indicates disease progression), and miscommunication with physicians (under-reporting of symptoms to avoid distracting physician from providing cancer treatments)(33,26,34). These findings are consistent with the present study results, in which the most commonly reported patient related barrier, was “worries of pain being a sign that the illness has gotten worse andlong term use of pain medication”.

The most common system barrier during the scheduled clinic visit was "review by different doctors." In line with the findings of Jacobsen et al. (2009)(25), who discovered that issues arise with continuity of care when a patient sees multiple doctors in various healthcare settings and no one is willing or able to take charge of the patient's overall pain management. The current study's findings showed that the two most frequently mentioned medication barriers were doubts about the possibility of addiction and the inability to lessen the negative effects of painkillers. This is consistent with findings from other research conducted in poor nations. A meta-analysis conducted in Malaysia found that nearly all of the patients who were interviewed expressed worry over the procedure of surgery and side effects of chemotherapy (Norsa’adah et al., 2012) [(35)].

A breast cancer diagnosis has a wide range of effects on the patient and their family because it is associated with death, uncertainty, and a loss of control (14). "People believe if you have cancer you should not go for treatment," "community believe in traditional herbal medicine instead of seeking treatment," and "friends advised you not to go for treatment because of their previous experiences with pain medications and family had a role in pain management" were the most common sociocultural barriers mentioned by the patients under study. This is consistent with a Malaysian study on the obstacles faced by Malaysian women diagnosed with breast cancer when they try to access care. They found that, middle aged women in Malaysia, regardless of any ethnic, educational and social background were found lacking self-management and often required family member or friend for support regarding their treatment choice Norsa’adah et al. (2012) [(35)].

The results of the current study revealed that patient related barriers and sociocultural barriers had the highest means respectively while medication barriers had the lowest mean. These results are in stark contrast to a study conducted by Bourdeanu et al. (2013)(26), where a minority of patients were found to have patient-related barriers, with fear of receiving a cancer diagnosis being the most often mentioned reason why women delayed seeking medical assistance. For patients, these anxieties continue to provide significant obstacles. Furthermore, the results of this study indicate that there were less system barriers encountered by the patient group.

The socioeconomic status of breastcancer patients has a significant impact on prognosis through its associated influence on the cancer stage at diagnosis. Previousfindings suggest people with lower incomes have a late cancer stage at point of diagnosis and a worse overall prognosis[(36)]. According to a study by Wang et al. (2012)(37), socioeconomic class is also strongly correlated with occupation and education level, all of which have a major impact on how patients perceive their tumors and how early they are detected, diagnosed, and treated. This is consistent with the current findings, which showed a statistically significant difference between the degree of obstacles encountered and the educational attainment and monthly income sufficiency..

The prompt identification of patients who are more likely to have severe pain may enable the execution of a complete treatment plan aimed at reducing the most severe and persistent symptoms, as well as targeted assessments of pain and palliative care (22–23). There was a

statistically significant difference in the current study between the patients' VAS, current disease condition, and the degree of hurdles they had in seeking medical attention when in pain. Similar results were reported in a study by (Stuver, et al. 2016)[38] that pain is a prevalent symptom among ambulatory patients with advanced cancer. Severe pain was associated with younger age, minority race, and recent onset of advanced disease.

According to this study, advanced breast cancer discomfort is very common. Additionally, a large percentage of patients receive insufficient pain management. This study examines the management and obstacles associated with advanced breast cancer pain within the public health system, given the significance of Makkah hospitals in providing oncology services. These results imply that therapy hurdles arise from patients' views and attitudes about society, including remarks made by friends. These findings suggest that physician and system restrictions are not as common as previously observed in other investigations (26).

Furthermore, ignorance and treatment-related anxiety may be the reasons for the statistically significant correlation shown between the degree of obstacles encountered with schooling, the sufficiency of monthly income, and the stage of the disease. In order to help patients, families, and society overcome the fear of treatment, it is necessary to allocate more resources toward educating patients and the general public about the significance of proactively seeking early medical assessment as well as sharing information about the significant advancements yielding improved survival and quality of life outcomes (39). This is in addition to the ongoing need to address physician and system barriers. As a result, nurses may help patients and their families deal with pain-related concerns and create care plans and research agendas to help manage pain.

Conclusion

Due to societal norms, systemic obstacles in the healthcare systems, and patient characteristics, patients with advanced breast cancer have a variety of challenges when trying to manage their pain.

Recommendation

Implementing supportive and clinical pain management programs to patients with breast cancer to alleviate the pain andsuffering is recommended.

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