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PREVALENCE AND PATIENT-RELATED BARRIERS TO PAIN MANAGEMENT AMONG PATIENTS WITH ADVANCED BREAST CANCER ATTENDING A COUNTY REFERRAL HOSPITAL IN KENYA

[1*]Alice Kemunto Maranga-Ondieki; [2]Samuel Thuo Kimani; [2]James Mwaura & [2]Anna Karani

Institutional affiliation

1. Egerton University, Faculty of Health Sciences
2. University of Nairobi, College of Health Sciences

*Corresponding Author email: alice.ondieki@ymail.com

ABSTRACT

Background: Despite advances in cancer pain management, breast cancer pain remains inadequately managed due to barriers associated with patients' beliefs, attitudes, and communication challenges. The objective of the study was determine the proportion and barriers to pain management among patients with breast cancer at the Kisii County Teaching and Referral Hospital.

Methods: This was a descriptive cross-sectional study of 26 patients with locally advanced and metastatic breast cancer, ethical approval and a research permit were obtained, and data were collected using an interview schedule adapted from the *Barriers Questionnaire II and* the *Survey of Pain Attitudes-B.* Data were analysed using Statistical Package for Social Sciences version 23, and presented in tables and pie charts.

Results: About 49.9 % of patients reported moderate (38.4%) to severe pain (11.5%) while 26.9 % reported mild pain, 57.7 % of the patients felt unable to control their pain despite pain management interventions. About 30.8% of the patients believed that side effects of pain medications were inevitable and unmanageable while 30.7 % feared being labelled as complainers with 76.8% reporting pain related interference with daily activities

Conclusion: The proportion of patients with pain was notably high despite pain management strategies, Patient-related barriers included; not trusting pain medications, fear of being labelled as complainers, fatalistic beliefs and fear of side effects of pain medications.

Recommendation: The study recommends improved training of nurses about communication using highly effective methods to improve their communication with breast cancer patients about pain, patient education to dispel fatalistic beliefs and routine evaluation of patient satisfaction with prescribed interventions.

Key words: Prevalence; Patient barriers; Breast cancer; Pain

INTRODUCTION

Breast cancer remains a leading cause of morbidity globally, with a growing burden of disease and associated pain requiring effective management, yet persistent gaps in pain management continue to be reported (Giordaro, 2018). Pain is highly prevalent across the disease trajectory, often inadequately controlled, and significantly interfering with daily functioning among patients (Sigh et al., 2017; Tuem et al., 2020), tumor progression and

metastatic spread especially to bone is a key contributor to increased pain intensity and overall symptom burden (Sugimoto et al., 2021; Tahara et al., 2019), additionally, inflammatory mediators such as cytokines play a critical role in sustaining cancer-related pain (Panis & Pavanelli, 2015). Treatment-related complications are also major contributors to persistent and chronic pain, often affecting patients' quality of life and functional status (Guerreiro & Godoy et al., 2014; Harsimiat, 2016).

Pain associated with breast cancer is a prevalent issue, affecting 30%-50% of patients undergoing treatment and over 70% of those with advanced disease (Dalal & Bruera, 2019). A study conducted in India, found that 77% of patients experienced inadequate pain management with 29.6% reporting mild pain, 64.8% moderate pain, and 5.6% severe pain, none of the patients in the study had received strong opioids (Singh et al., 2017). Leysen et al. (2019) in their study in Turkey reported a mixed pain prevalence of 40.6%, neuropathic pain accounted for 25.3%, nociceptive (18.7%), and 15.4% central sensitization pain among breast cancer survivors. Neuropathic pain was the most frequently reported type, showing a strong association with hormone therapy (Odds Ratio = 25.95, 95% CI: 1.33–504.37, $p = 0.03$).

Studies have also shown that younger patients are more likely to present with advanced local disease and experience more pain due to aggressive treatments, altered pain perception, subjective reporting differences, and variations in physical activity as compared to older patients (Bao et al., 2018).A study by de Ligt (2019) in Netherlands reported musculoskeletal pain to be the most frequently reported symptom, affecting 71% of young female patients surgically treated for breast cancer, similarly, Wang et al. (2018) in their study reported a pain prevalence of 29.8% post-surgery, 27.3% after radiotherapy, and 21.8% following combination treatment.

Shamieh et al. (2022) in their study in Jordan among breast cancer patients reported that 68.7% of the patients had pain, with 42.5% reporting moderate pain while 23.1% had severe pain which interfered with their quality of life, 97.9% of the patients reported some form of discomfort.

A similar study by Tuem et al. (2020) at Ayder Comprehensive Specialized Hospital reported that 93.4% of patients experienced pain, 54.9% moderate pain, 35.2% severe pain, with 98.9% reporting interference with daily activities. Some researchers have reported that patients often avoid reporting pain due to discomfort in discussing symptoms and fear of diverting clinician attention from cancer treatment (Van Den Beuken-van Everdingen et al., 2018).

Additional patient related barriers reported included; fear that pain indicates disease progression or end-of-life, fear of judgment, fear of opioid use, and financial constraints limiting access to analgesics (Brady et al., 2016; Kwon, 2014).

Brown et al.(2020) in their study reported that regulatory controls on opioids in the MD Anderson Supportive Care Center in the United States had created unintended access barriers, with patients reporting prescription delays (26%), denials (35%), and partial dispensing (25%).

A survey among cancer patients on strong opioids in Malaysia found that 56% had no-to-mild pain, 34% moderate, and 10% severe pain, 40% of the patients had achieved full pain relief while 74% experienced moderate-to-severe functional interference. Fatalism was the strongest barrier (median=5), followed by concerns about harmful effects (2), physiological effects (1.3), and communication issues (0.7) (Kiu et al., 2021).

In Taiwan and Japan, 64.9% of patients experienced pain before their next dose of pain medications with 28.8% reporting sleep disturbances despite reports of 100% satisfaction; additionally, 70% had regimens not adjusted to their current pain levels, indicating suboptimal management (Rau et al., 2017). However a similar study in China reported that 59.6% of the patients achieved complete pain relief with opioids and 73.3% showed full adherence to treatment (Ma et al., 2020).

A survey of cancer patients at a tertiary urban centre and hospitals in the United States evaluated preferences for acupuncture versus pharmacological management, results showed that 31.4% preferred acupuncture, 23.3% preferred analgesics, and 45.4% had no preference. The most common attitudinal barriers were fear of addiction and concerns about constipation or nausea (Liou et al., 2021). A multicentre study in Italy found that 71% of the patients were satisfied with management of breakthrough cancer Pain Mazzotta et al. (2022).

Bao et al. (2018) in their cross-sectional survey of women with hormone receptor-positive breast cancer on aromatase inhibitors reported that 13% experienced chronic pain before diagnosis, 34% after non-hormonal treatment, and 78% experienced at least one treatment-related pain type within seven days, the most common was Aromatase-Inhibitor-induced musculoskeletal pain (49%) and surgical site pain (31%) with risk factors for

chronic pain perception being age under 56, Bone Mass Index (BMI) over 25, and pre-diagnosis pain perception.

Four(4) categories of barriers to pain management were reported in a qualitative study in Iran which included: Acceptance and endurance of pain, negative attitudes toward opioid effectiveness, limited patient knowledge, and reliance on self-management with neglect of formal pain care (Orujlu et al., 2022).

A study in Netherlands investigated reasons for lack of pain interventions in oncology outpatients; 30% of the patients reported that healthcare workers prioritized disease treatment over pain, 30% preferred no treatment, 20% were reluctant to take opioids, and 10% felt pain treatment was unnecessary due to short duration, about 20% were reluctant to report pain out of fear that further interventions were impossible, treatment might be stopped (10%), or they would be labelled as complainers (5%), other reasons included fear of side effects, dependency, harm to the body, and beliefs that pain was unrelated to cancer (Stoorvogel et al., 2022: Kwekkeboom et al., 2021) Fatalistic beliefs that pain was inevitable also contributed to underreporting (Shalev et al., 2021; Xu et al., 2018).

A study among cancer patients in Ghana reported that 58.6% had pain that interfered with sleep, 55% reported taking pain medications but with only 9.3% achieving complete pain relief. About 56.6% felt a need for stronger medication, 14.1% reported a lack of pain assessment prior to medication. About 35.8% believed they should tolerate pain without medication, and 27.6% worried about taking too much pain medication, however, 88% of the patients reported that they could afford their medications, and 96.6% had reliable access to prescribed pain medications (Agbeko, 2017; Bell et al., 2022).

METHODS

This was a descriptive cross-sectional survey that assessed the prevalence and patient-related barriers to cancer pain management. The study was conducted at the Kisii County Teaching and Referral Hospital, a major referral facility which served nine Sub-Counties with a catchment population of approximately 1,266,860 people (KNBS, 2019) at the time of the study. The hospital received about 200 new admissions daily at the time of the study and served approximately 400 outpatients per day. Monthly averages at the time of the study were 2,060 inpatients and 20,000 outpatients, 28 cancer inpatients and 55 cancer outpatients.

The facility operated at about 150% bed occupancy which indicated high service demand. It had 18 Medical consultants, 33 medical officers, and 244 nurses with no specialized cancer clinicians. One nurse was assigned to palliative care. The hospital served patients from Kisii County, neighboring Counties and Countries. The study population consisted of 26 breast cancer patients who were receiving care at the hospital, in both the inpatient and outpatient departments. The inclusion criteria were as follows: patients had to be aged 18 years and above, diagnosed with breast cancer by a qualified oncologist or pathologist, and actively receiving treatment or follow-up care at Kisii Teaching and Referral Hospital during the study period. Additionally, participants were required to be mentally stable and capable of providing informed consent to participate in the study. Patients who were willing to share their experiences regarding pain management and treatment outcomes were prioritized to ensure the richness of the qualitative data.

Exclusion criteria involved breast cancer patients who were critically ill or in severe respiratory distress, making it difficult for them to engage in an interview or complete the questionnaires. Patients with cognitive impairments or those who had not yet been formally notified of their diagnosis were also excluded to uphold ethical standards and prevent undue psychological distress. Furthermore, individuals seeking care for non-malignant breast conditions or those visiting the facility for reasons unrelated to their cancer diagnosis were not considered for this study.

Sample size determination was guided by the principle of data saturation, common in descriptive studies with a limited target population. Given the specific focus on patients currently accessing the oncology clinic or inpatient wards during the data collection window, a total of 26 participants was deemed sufficient to provide a comprehensive overview of the prevailing clinical challenges and pain management strategies. This sample size allowed for in-depth interaction while reflecting the actual patient load of the facility's specialized care services during the study period. To ensure the representativeness of the findings, a purposive sampling strategy was employed, targeting individuals who could articulate their experiences with diverse analgesic regimens.

A non-probability purposive sampling technique was utilized to recruit participants who met the specific clinical profile required for the study. The researchers collaborated

closely with the lead oncology nurses to identify patients who were scheduled for chemotherapy, radiotherapy, or palliative consults. This approach facilitated the inclusion of individuals at varying stages of their treatment trajectory, ensuring that the gathered perspectives encompassed both acute postoperative pain and chronic cancer-related discomfort. Prospective participants were approached individually in a private setting within the oncology department, where the objectives of the study were explained, and their voluntary participation was solicited.

Data were collected using an interview schedule adapted from the Barriers Questionnaire II which demonstrated strong reliability (α = 0.75–0.85 across subscales; overall α = 0.89) and validity (Gunnarsdottir et al., 2002). Patient attitudinal barriers were established using four items from *the Survey of Pain Attitudes B* by Jensen*, Karoly and Huger. (1987)* on a 5-point Likert's scale. Pain intensity was measured using the 0–10 Numerical Rating Scale.

Validity was ensured through expert review to confirm clarity, relevance, and appropriateness of the instruments. A pilot study was conducted at Nakuru County Referral Hospital using 10 % (3) of the intended sample which helped identify unclear items, which were revised before the main study.

Nurse research assistants collected data after training on study procedures and ethical considerations. Eligible patients were identified through purposive sampling, and those who consented were interviewed using a structured interview schedule. Interviews were conducted in a private setting to ensure confidentiality, the process was supervised by the principal investigator with daily checks for completeness until the required sample size was reached.

Data were checked for completeness, coded, and entered into SPSS version 23 for analysis. Descriptive statistics summarized demographic data. Logistic regression was used to examine relationships between variables, while Chi-square test assessed associations between independent and dependent variables. Findings were presented in tables, and pie charts. Measures of central tendency were used to show the mean and mode.

A research permit was obtained from the National Commission for Science, Technology and Innovation (NACOSTI/P/18/86900/22659), Ethical approval was obtained from the Kenyatta

National Hospital-University of Nairobi Ethics and Review Committee (P446/08/2017). Approval was also granted by the Kisii County Department of Health (D.1/55/2018/vol.11/210). Permission to access the wards and outpatient departments was provided by the hospital administration and the respective ward in-charges. Participants were informed about the purpose and procedures of the study. Written informed consent was obtained prior to participation which was voluntary, respondents were free to withdraw at any time without consequences. Confidentiality was strictly maintained by using codes instead of names and removing personal identifiers from data records.

All data were securely stored. Electronic files were password-protected, and backups were kept on an external hard drive stored securely by the researcher.

RESULTS

Patients Socio-demographic Characteristics

The demographic analysis revealed a diverse age distribution among patients. Specifically, 11.5% were aged between 21 and 30 years, 15.4% were in the 31-40 age bracket, and a significant portion, 34.6%, fell into the 41-50 years category. The largest group, comprising 38.5% of patients, was above 50 years of age. Regarding gender, there was a notable predominance of female patients, accounting for 96.1% of the total, while male patients constituted a smaller proportion at 3.8%.

On the level of education, 38.5% had attained primary education, 34.6% secondary education, and 26.9% tertiary education. With regard to occupation, 50% were self-employed, 23.1% unemployed, 7.7% civil servants, and 19.2% employed in the private sector (see Table 1).

Table 1: Patients' socio-demographic characteristics

	Attribute	Frequency	Percent
Sex	Male	1	3.8
	Female	25	96.1
	Total	26	100
Age group	21 - 30 years	3	11.5
	31 - 40 years	4	15.4
	41 - 50 years	9	34.6
	51 years and above	10	38.5
	Total	26	100
Marital status	Married	20	76.9
	Single	4	15.4
	Divorced	2	7.7
	Total	26	100
Highest level of education	Primary	10	38.5
	Secondary	9	34.6
	Tertiary	7	26.9
	Total	26	100
Occupation	Civil servant	2	7.7
	Private sector	5	19.2
	Self Employed	13	50
	Unemployed	6	23.1
	Total	26	100

Stage of Breast Cancer

Approximately 32% of the patients were in Stage II, 46.1% in Stage III, and 19.2% in Stage IV as shown in **Table 2**

Table 2: Respondents' breast cancer stage (N=25)

Stage	Frequency	Percent (%)
Stage II	8	32%
Stage III	12	46.1%
Stage IV	5	19.2%

Current Type of Treatment

The respondents were asked to indicate the treatment received. Fourteen (14) patients (54%) reported being on chemotherapy, while 12 patients (46%) were undergoing combination therapy. See Figure 1

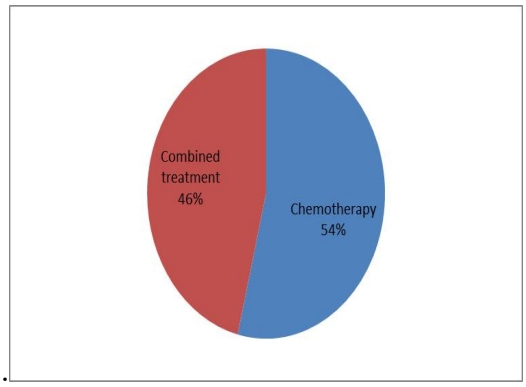

Figure 1: Current type of treatment (n=26)

Daily Pain Experience

The respondents were asked to rate their daily pain intensity using the 0–10 Numerical Rating Scale. The results showed that 23% of the patients had no pain (0), 26.9% reported mild pain (1–3), 38.4% reported moderate pain (4–6), and 11.5% reported severe pain (7–10) (See Table 3)

Table 3: Daily pain experience (n=26)

Level	Frequency	Percent (%)
0 (No pain)	6	23
1-3 (Mild pain)	7	26.9
4-6 (mod. Pain)	10	38.4
7-10 (Severe pain)	3	11.5

Patients' Experiences, Communication Behaviours and Satisfaction with Pain Management

The cancer patients shared their experiences and communication behaviours by responding to statements read to them during the study. Responses were scored on a five-point scale ranging from 1 = strongly agree to 5 = strongly disagree.

The findings showed that 88.4% of the patients routinely reported pain to healthcare providers (Mean = 1.85). In addition, 73.1% stated that

healthcare providers always informed them, *"This is pain medication,"* when administering analgesics (Mean = 1.96). Similarly, 73.1% reported that they always took pain medication when given by healthcare workers (Mean = 2.00). About 69.2% indicated that they were routinely asked about the intensity of their pain before receiving medication (Mean = 2.04). Furthermore, 61.5% agreed that they were given pain medication whenever they experienced pain, while 38.5% disagreed with this statement (Mean = 2.00) (See Table 4).

Table 4: Patients' experiences, communication behaviours and satisfaction.

Attribute (n=26)	Mean	Std. Deviation	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly disagree (%)	Total (%)
Do you routinely report to your healthcare provider whenever you have pain?	1.85	.613	26.9	61.5	11.5	0	0	100
Do the healthcare providers always tell you that "this is pain medication" when giving?	1.96	.999	38.5	34.6	23.1	0	3.8	100
Do you always take the pain medication when given by the healthcare worker?	2.00	1.095	42.3	30.8	11.5	15.4	0	100
Do the Health care providers routinely ask you how much pain you have before giving pain medicine?	2.04	.958	34.6	34.6	23.1	7.7	0	100
Do the health care workers always give you medication whenever you have pain?	2.19	.939	26.9	34.6	30.8	7.7	0	100

As part of the patient satisfaction outcomes assessment among nursing departmental leaders, participants expressed concern that primary health facilities were not permitted to manage cancer pain at the time of the study. Patients were referred to Kisii County Teaching and Referral Hospital, some aspects of severe pain management were still lacking, despite patients' high expectations of relief. This gap contributed to low satisfaction and suboptimal outcomes in pain relief.

"Patients' *expectations are quite high; we cannot give other forms of pain management like palliative chemotherapy because it is not available here and so far,*

we have no donors to support the program' this negatively impacts on patient and service outcomes' (PT 08 FG 1; PT 16FG2).

Patients' attitudes and beliefs towards pain control.

The cancer patients also shared their concerns regarding pain control, pain-related disability, and their beliefs about the role of healthcare workers and pain medications in 'curing' their pain. Responses were based on statements read to them during the study, with scores ranging from 1 = strongly agree to 5 = strongly disagree.

The findings showed that 42.3% of the patients believed they could adequately control their pain, while 57.7% either disagreed or remained neutral (Mean = 2.62). About 76.8% reported experiencing pain-related disabilities in their daily activities, whereas only 7.6% disagreed with this statement (Mean = 2.23). On the *medical cures* subscale of the SOPA-B, 42.3% of patients believed that it was the responsibility of the healthcare workers to cure their pain (Mean = 2.62). In addition, 30.8% believed that pain medications could cure their pain, while 50% disagreed and 19.2% remained neutral (Mean = 3.38) as shown in *Table 5.*

Table 5: Patients' attitudes and beliefs towards pain control.

Question	Mean	Std. Deviation	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly disagree (%)	Total (%)
Can pain medicine adequately control breast cancer pain?	2.62	. 8 9 8	11.5	30.8	42.3	15.4	0	100
Do you experience any difficulties with your day-to-day activities when you have pain?	2.23	.863	11.5	65.4	15.4	3.8	3.8	100
Do you believe that it is the responsibility of the healthcare worker to reduce/ cure your pain?	2.62	0.898	11.5	30.8	42.3	15.4	0	100
Do you believe that pain medications can cure your pain?	3.38	1.134	30.8	0	19.2	30.8	19.2	100

Patients' Beliefs about Side Effects of Pain Medications and Effectiveness of Related Interventions

Patients responded to items drawn from the four factors of the BQ-II questionnaire on pain beliefs, with scores ranging from 1 = strongly agree to 5 = strongly disagree.

Factor 1: Beliefs about the physiologic effects of pain medications. Six items were assessed. The results showed that 30.8% of patients agreed that side effects of pain medications are inevitable, while 70% disagreed (Mean = 3.38). About 34.6% believed that continued use of pain medications leads to tolerance and future ineffectiveness, while 26.9% disagreed (Mean = 2.96). Regarding the belief that pain medications can block recognition of new pain, 30.8% agreed while 50% disagreed (Mean = 3.38). Similarly, 26.6% agreed that pain medications prevent awareness of other bodily conditions, while 53.9% disagreed (Mean = 3.50). With respect to side effects, 15.4% believed constipation from cancer pain cannot be relieved, though 57.6% disagreed (Mean = 3.73). Finally, 23.1% agreed that nausea from pain medications cannot be relieved, while 50% disagreed (Mean = 3.58).

Factor II: Beliefs about fatalism. About 15.4% of patients agreed that pain is inevitable in breast cancer and cannot be prevented, while 57.7% disagreed (Mean = 3.73).

Factor III: Beliefs about communication of pain. About 30.8% agreed that reporting pain could distract doctors from treating the cancer, while 53.8% disagreed (Mean = 3.42). Additionally, 30.7% believed that talking about pain would lead to being labelled as complainers; 46.2% were neutral and 23% disagreed (Mean = 3.12).

Factor IV: Beliefs about harmful effects of pain medications. Approximately 30.7% agreed that cancer patients could become addicted to pain medication and that such medications could weaken the immune system. In contrast, 42.4% were neutral and 26.9% disagreed (Mean = 3.00) as shown in Table 6.

Table 6: Patients beliefs about side effects and effectiveness of related interventions

	Mean	Std. Deviation	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly disagree (%)	Total (%)
Do you believe that side effects of pain medications are inevitable and unmanageable?	3.38	1.134	30.8	0	19.2	30.8	19.2	100
When you use pain medicine your body becomes used to the effects and with time the medications do not work	2.96	1.113	7.7	26.9	38.5	15.4	11.5	100
Does use of pain medicine block your ability to know if you have any new pain?	3.38	1.134	30.8	0	19.2	30.8	19.2	100
Can pain medicine keep you from knowing what's going on in your body?	3.50	1.503	15.4	11.5	19.2	15.4	38.5	100
Constipation from pain medicine cannot be relieved	3.73	1.079	0	15.4	26.9	26.9	30.8	100
Feeling like vomiting from pain medicine cannot be relieved	3.58	1.172	0	23.1	26.9	19.2	30.8	100
Do you belief that Pain will always occur in cancer patients and that no one has power to stop it?	3.73	1.079	0	15.4	26.9	26.9	30.8	100
Could reports of pain distract a doctor from managing the cancer?	3.42	1.137	0	30.8	15.4	34.6	19.2	100
If I talk about pain, people will think I'm a complainer (good patients do not complain of pain)	3.12	1.071	0	30.8	46.2	3.8	19.2	100
Do you believe that people with cancer get addicted to pain medications which could harm their immune system?	3.00	1.200	11.5	19.2	42.4	11.5	15.4	100

DISCUSSION

A number of previous studies have reported high prevalence rates and barriers to optimal breast cancer pain management**.** This study reported an increasing incidence of breast cancer with age as majority of patients (73.1%) interviewed were above 40 years, however 26.9% of patients were below 40 years, signalling a changing trend with a rising incidence of breast cancer among younger

women which presents a higher symptom burden. This findings align with those of Bao et al. (2018), who observed that younger breast cancer patients are more likely to present with advanced local disease, undergo aggressive therapeutic interventions, and experience higher levels of pain due to altered pain perception and differences in physical activity compared to older patients.

On the stage of cancer; the finding that majority of the patients (65.3%) had advanced disease is consistent with Tahara et al. (2019) and Sugimoto et al. (2021) who reported that metastatic breast cancer involving the liver and lungs can produce mass effects, localized inflammation, and nerve damage, thereby causing multiple types of nociceptive pain (Panis & Pavanelli, 2015).

On the type of treatment; the treatment-related pain observed in this study aligns with prior research linking chemotherapy, radiotherapy, and hormonal therapy to chronic pain syndromes, specifically, Harsimrat. (2016) identified post-surgical complications and hormone therapy as common causes of musculoskeletal and bone pain among survivors. Similarly, Bao et al. (2018) reported that 34% of breast cancer survivors experienced chronic pain after non-hormonal treatment, with 78% reporting at least one treatment-related pain in the preceding week and 23% experiencing three or more types of pain. Aromatase inhibitor–induced musculoskeletal pain (49%) and surgical site pain (31%) were the most common. Guerreiro Godoy et al. (2014) further reported treatment-related lymphedema in 52% of post-mastectomy patients, 63.04% of those receiving 6-10 chemotherapy sessions, and 71.3% of those who had 30 sessions of radiotherapy. Similar associations between aggressive treatment and pain have been confirmed by Tuem et al. (2020).

On the daily pain experience; this study reported that 23% of patients had no pain, 26.9% mild, 38.4% moderate and 11.5% had severe pain. This partly aligns with international data. Kwekkeboom et al. (2021) found that 29% of U.S. patients reported no pain, while 41% reported severe pain higher than the 11.5% observed in this study. Dalal and Bruera (2019) reported pain prevalence of 30–50% among patients receiving treatment and up to 70% in those with advanced disease. Kiu et al. (2021) similarly reported that 56% of patients had no or mild pain, 34% had moderate pain, and 10% had severe pain. Shamieh et al. (2022) found that 68.7% of ambulatory patients in Jordan experienced

pain, with 42.5% reporting moderate and 23.1% severe pain.

Comparable findings were reported by Singh et al. (2017) in India, where 29.6% of patients had mild pain, 64.8% moderate, and 5.6% severe pain. The lower proportion of moderate pain in this study (38.4% vs. 64.8%) may be explained by differences in study settings: Singh and colleagues studied ambulatory patients in outpatient clinics, while the current study included both inpatients and outpatients, with inpatients possibly receiving better pain control. Conversely, findings from Ayder Comprehensive Specialized Hospital in Ethiopia differed markedly, with only 6.6% of patients reporting no pain, 54.9% reporting moderate pain, and 35.2% reporting severe pain (Tuem et al., 2020).

The finding that 23% of patients reported no pain suggests that pain may be effectively managed in some cases. This challenges the misconception that all cancer patients inevitably experience pain requiring analgesics. It is important for healthcare providers to recognize that some patients, even with metastatic disease, may report little or no physical pain following effective interventions. However, these patients may still experience other dimensions of pain ranging from psychological, social, or spiritual that require comprehensive assessment and management to address total pain.

On patients' experiences, communication behaviours and satisfaction with pain management; The finding that 88.4% of patients routinely reported their pain aligns with Stoorvogel et al. (2022), who found that only 20% of patients were reluctant to report their pain and were reluctant to take opioids while 10% considered pain treatment unnecessary due to the short duration of pain, with some even declining referrals to pain specialists.

Similarly, the finding that 61.5% of patients in this study reported receiving pain medication whenever they experienced pain, and that 73.1% were informed of the medication and adhered to prescriptions, is consistent with a study in China where 73.3% of patients reported complete adherence to prescribed opioids and 59.6% experienced complete pain relief (Ma et al., 2020). Comparable results were reported by Mazzotta et al. (2022), where 71% of Italian patients were satisfied with breakthrough cancer pain (BTcP) interventions.

Conversely, Bell et al. (2022) reported lower adherence, with only 55% of women reporting that they took their pain medications and just

9.3% achieving complete relief. Similarly, Kwekkeboom et al. (2021) found that only 58% of patients demonstrated adequate analgesic use relative to the severity of their pain, contrary to the findings of this study.

The finding that 69.2% of patients had their pain assessed before medication is consistent with Bell et al. (2022), who found that only 14.1% of the patients reported not being assessed before receiving medication. In this study, 7.7% similarly reported not being asked about their pain before medication, while 23.1% remained neutral.

On patients' attitudes and beliefs towards breast cancer pain management; the findings from this study that 42.3% of patients believed they could adequately control their pain, and that 76.9% reported pain-related disabilities in daily activities, aligns with Bell et al. (2022), who found that 58.6% of patients reported pain interfering with sleep, these results also align with Kiu et al. (2021), who reported that 29% of patients experienced mild interference with daily activities, while 74% reported moderate to severe interference. The results are also consistent with Tuem et al. (2020), where 98.9% of patients reported interference with daily activities. This findings however, contrast with those reported in Taiwan, where only 28.8% of patients experienced interference with sleep due to analgesics (Rau et al., 2017).

In this study, 42.3% of patients believed that it was the responsibility of healthcare workers to cure their pain, only 30.8% believed that pain medications could cure their pain, this aligns with the findings by Orujlu et al.(2022), in their qualitative study in Iran where barriers reported included; acceptance and endurance of pain, negative attitudes toward opioid effectiveness, limited patient knowledge, and reliance on self-management with neglect of pain management interventions. Patients' beliefs about side effects of pain medications and effectiveness of related interventions.

On physiologic effects; **t**he findings from this study that 30.8% of patients believed side effects must occur and 34.6% believed tolerance reduces medication effectiveness align with Stoorvogel et al. (2022), who reported that patients expressed concerns about side effects, fear of dependency and fear of bodily harm.

On beliefs about fatalism, this study showed that 15.4% of patients agreed that pain will always occur in cancer patients and that no one has the power to stop it, while 57.7% disagreed. The findings are also consistent

with Kiu et al (2021), who found fatalism to have the highest median score (5), followed by harmful effects (2), physiologic effects (1.3), and communication (0.7). Other researchers have cautioned that fatalistic beliefs may discourage patients from reporting pain and complying with treatment (Xu et al., 2018).

On beliefs about communication of pain, this study revealed that 30.8% of patients agreed that reporting pain could distract doctors from managing the disease. Furthermore, 30.7% agreed that if they talked about pain, they would be labelled as complainers; 46.2% remained neutral, and 23% disagreed. These findings align with studies in the Netherlands, where 30% of patients believed healthcare providers prioritized treating the disease over managing pain, 30% of the patients preferred no pain treatment for that reason, 20% were reluctant to report pain due to fear of limited interventions, 10% feared cancer treatment would be stopped, while 5% feared being labelled as complainers (Stoorvogel et al., 2022; Van Den Beuken-van Everdingen et al., 2018).

On beliefs about the harmful effects of pain medications, 30.7% of patients agreed that cancer patients can become addicted to pain medications, which could also harm their immune system, while 42.4% remained neutral and 26.9% disagreed. These findings are comparable to those of Liou et al. (2021), who reported barriers toward pharmacological pain management, with fear of addiction, constipation, and nausea ranking highest. In their study, 31.4% of patients preferred acupuncture with only 23.3% preferring analgesics, and 45.4% had no preference.

CONCLUSION

The proportion of patients with pain was notably high despite pain management strategies, Patient-related barriers included; not trusting pain medications, fear of being labeled as complainers, fatalistic beliefs and fear of side effects of pain medications.

RECOMMENDATION

The study recommends regular assessment, individualized care, and the use of multimodal pain management strategies. Both healthcare providers and patients require enhanced education using highly effective teaching methods to improve pain control practices and self-management. Continuous monitoring and improved access to appropriate therapies are essential to achieve better patient outcomes.

IMPLICATIONS TO NURSING PRACTICE

This study provided evidence on patient-related barriers that hindered effective breast cancer pain management. The findings will assist nurses in developing targeted educational interventions, improving pain management practices, enhancing therapeutic communication, and promoting holistic, patient centred oncology care. The study will inform nursing policies and evidence-based strategies aimed at improving pain outcomes and quality of life among patients with breast cancer.

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