

Research Article

Availability and Utilization of Psychosocial Services for Breast Cancer Patients in Addis Ababa, Ethiopia: A Mixed Method Study

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The provision of psychosocial services has a substantial impact on cancer care by reducing emotional distress and improving both the quality of life and survival of patients, but the availability and utilization of such services have not been well studied in developing countries, particularly, Ethiopia. Therefore, we explored the types of psychosocial services available for breast cancer patients in Addis Ababa, Ethiopia. A mixed method study was conducted using a cross-sectional survey involving 428 breast cancer patients, followed by a qualitative study. A total of nine in-depth interviews (IDIs) were conducted with four breast cancer patients and five key informants using two separate interview guides. In addition to descriptive statistics, logistic regression was performed to identify factors associated with the provision of psychosocial services. Thematic analysis was used for the qualitative data, using NVivo 12 plus software. Only 47 (11.1%) patients received psychosocial services along with their routine activities, and patients predominantly received social/emotional support from family members, friends, and colleagues. There were no well-structured counselling services, emotional support, or group discussion sessions for breast cancer patients in these health facilities. The main reasons for not providing these services were high patient flow/workload, inadequate space, lack of training, and not having qualified professionals to organise and deliver psychosocial services were not delivered in a structured way. Therefore, psychosocial services should be integrated in both private and government health facilities in Ethiopia.

1. Introduction

Cancer is a devastating disease causing significant psychological problems among patients and their caregivers [1]. Several studies have revealed that cancer patients face emotional, social, and psychological difficulties in the form of either anxiety or depressive disorders [2–5]. Evidence has also suggested that psychological disorders are significantly associated with substantial functional impairment, fatigue, pain, poor quality of life [6], and reduced survival [7]. Particularly, patients with breast cancer who are in the midst of treatment experience fear and concerns regarding mortality, disease recurrence, and body image impairment, especially in relation to mastectomy, hormonal treatment, and sexuality [1, 8, 9]. For this reason, the National Comprehensive Cancer Network (NCCN) Distress Management Panel guideline indicates the importance of assessing the physical, psychological, social, and spiritual needs of cancer patients and recommends regular screening for any form of distress, anxiety, and other common mental illnesses using appropriate and validated tools [10, 11].

Psychosocial services are one of the components of cancer care addressing the social, psychological, emotional, spiritual, and functional aspects of the patient's journey, requiring an interdisciplinary team of care and service providers [12]. These services include a variety of psychological and educational components, such as relaxation training, cognitive and behavioural coping strategies, cancer education/information sessions, and group social support [13–15]. Provision of psychosocial services to cancer patients in treatment revealed significant effects on reducing emotional distress, anxiety, and depression [16, 17]; it also improved adherence to treatment and enhanced the quality of life [18, 19] and survival of cancer patients [20, 21].

Significant advances in the effectiveness of psychosocial interventions have encouraged different health organizations, associations, and committees to develop, implement, and disseminate psychosocial guidelines and evidence-based treatments for several comorbid psychiatric disorders in cancer and other chronic illnesses [22–26]. For instance, the primary vision of the International Psycho-Oncology Society (IPOS) in collaboration with the World Health Organization (WHO) is to improve the quality of cancer care and cancer policies through the provision of psychosocial care globally [27].

Due to their positive impacts on several treatment outcomes, psychosocial services are being integrated and delivered in routine cancer care in high-income countries [9, 20, 23, 28]. However, some studies revealed that there is still a gap in identifying the psychological, social, and spiritual needs of cancer patients and properly addressing them through systematic and culturally tailored psychosocial services that can benefit patient well-being [29–31].

Particularly, cancer care systems in many low- and middle-income countries (LMICs) do not even address the current burden of cancer due to poor screening services and poor development of public health services. In addition, ignorance, unhealthy cultural and spiritual beliefs, and denial of diagnosis are common problems that create many challenges in terms of fewer treatment options, presentation at advanced stages of disease, and pain management, resulting in a greater need for psychosocial and palliative care. However, psychosocial services are not widely available in LMICs, especially in Africa [26, 32]. One of the major challenges in the implementation of existing clinical practice guidelines for psychosocial care is that most of these guidelines have been designed primarily for well-resourced settings, considering their culture and local context [33, 34].

So far, few studies have been conducted on the implementation of psychosocial services in LMICs. A qualitative study conducted in Indonesia reported that breast cancer patients obtained information about their diagnosis and

treatment from the doctors at the hospital. However, other types of psychosocial services, such as counselling and emotional support, were not provided for the patients [35]. According to a study conducted in Botswana, the majority of cancer patients received social support from family members and friends. However, the study revealed a gap in the provision of psychosocial services due to understaffed facilities and poor referral communications and scheduling systems [36]. Similarly, our previous study in Ethiopia revealed that breast cancer patients received social support from family members, friends, and significant others [37]. A few studies conducted in different parts of the country also found that the unmet supportive care and information needs of cancer patients are high, and sociodemographic, clinical, and information-related factors were identified as factors in the unmet needs of cancer patients in Ethiopia [38–40].

However, the provision of psychosocial services for breast cancer patients at the health facility level has never before been explored. Therefore, this study explored the availability and receipt of psychosocial services for breast cancer patients in selected hospitals in Addis Ababa, Ethiopia. The findings of this study may be helpful to identify gaps in the provision of psychosocial services and design appropriate psychosocial services by considering the socioeconomic and cultural context of the country.

2. Materials and Methods

2.1. Study Design and Research Environment. A sequential mixed study design (QUAN (qual)) was employed; in the first phase of the study, a cross-sectional study design was used, and quantitative data were collected from 428 breast cancer patients. In Ethiopia, there is a three-tier healthcare system, in which comprehensive cancer care is available at tertiary-level hospitals and some cancer treatments, such as surgical and chemotherapy services, are provided at secondary-level hospitals. This study was conducted at two large tertiary referral hospitals and five private oncology clinics in Addis Ababa. Based on the preliminary analysis conducted on the quantitative data, a small-scale qualitative approach was used for further exploration and validation of the quantitative findings by interviewing a few more breast cancer patients. In addition, the findings were triangulated by looking at the availability of the service from the perspective of health professionals as well. This also enabled us to identify barriers to the provision of psychosocial service in these health facilities. Ethical clearance was obtained from the Research Ethics Committee (REC) of the School of Public Health and the Institutional Review Board (IRB) of the College of Health Sciences, Addis Ababa University.

2.2. Study Participants and Sample Size. The sample size for the quantitative part of the study was calculated using the following assumptions: 95% confidence interval (CI), margin of error (d) = 5%, 40.3% prevalence of depression [41], and 20% nonresponse rate. The final calculated sample size was 444. The eligibility criteria were all pathologically confirmed breast cancer patients above 18 years of age who were undergoing treatment at the selected health facilities. In the qualitative part of the study, in-depth interviews (IDIs) were conducted with four purposively selected breast cancer patients and five health professionals (two oncologists, two BSc nurses, and one health officer) who were working in the respective oncology departments. Psychologists and psychiatrists are not available in most of the private cancer clinics and are not involved in cancer care in the two tertiary hospitals. Therefore, we purposively selected these nurses as they have a close attachment with cancer patients. An attempt was made to achieve the principle of maximum variation of participants by considering the type of health facility, duration of diagnosis, age, and place of residence.

2.3. Data Collection and Tools. For the quantitative part of the study, a structured questionnaire was developed and adapted to our context after reviewing the literatures. The questionnaire has a total of 26 multiple choice and yes/no questions organised into three subsections: sociodemographic characteristics (8), clinical characteristics (8), and types of psychosocial services received (10). At the end of the questionnaire, two open-ended questions were included in order to give the patients a chance to describe in more detail any related services they have received in those facilities. Breast cancer patients were considered to have received psychosocial services if they reported having received any kind of counselling service, emotional support, or information/educational materials from health professionals working at the current health facility. The quantitative data were collected through face-to-face interviews since a considerable proportion of women were expected to have little formal education. Therefore, seven data collectors (one at each site) were recruited and trained on the objective of the study, data collection tools, and interview techniques by the principal investigator.

For the qualitative study, two separate interview guides were prepared for IDIs with patients and key informants. The interview guide for the patients has seven main and probing questions about psychosocial problems encountered, methods of disclosure, types of information received, and counselling and other psychosocial supports received at the health facilities. Similarly, the interview guide for the health professionals has eight open-ended questions focusing on psychosocial challenges observed among breast cancer patients, available psychosocial services at their facility, how they are delivered, and their perception of psychosocial support and why it is not being provided. The principal investigator and a research assistant who has experience in qualitative research conducted all the interviews. Daily debriefings were held on emerging thematic areas, and all the information we gathered from these additional four patients was consistent and in support of our quantitative findings. Therefore, we did not continue interviewing more patients as we reached the theoretical saturation level. All the interviews were audio recorded and notes were taken during the interviews. The data were organised and appropriately labelled immediately after each interview. Subsequently, all recorded interviews were transcribed and translated verbatim.

2.4. Data Analysis Procedures. The quantitative data were organised using Epi data software and analysed using Statistical Package for Social Sciences (SPSS) version 25. A bivariate logistic regression analysis was performed for each independent variable associated with the receipt of psychosocial services. The crude and adjusted odds ratios (COR and AOR) with 95% CI were presented. The data analysis for the qualitative study was initiated in the field simultaneously to the data collection process. All transcribed documents, field notes, and reflexive memos were entered into NVivo12 plus software. Each statement and word were coded line by line based on the stated objectives.

Inductive thematic analysis was applied in order to summarise and explain the emerging categories and themes under each objective. The findings were guided and described using the tiered intervention model, which provides a framework to review existing services within the community, identify gaps in current service delivery, and implement psychosocial care using a community-based approach [42]. The model has five levels, and the appropriate psychosocial intervention is administered based on patients' distress levels at different service delivery points. In this study, we mainly focused on the first three levels: provision of general information and advice suitable for any cancer patient was considered as level one, universal care. The second level is known as supportive care, which focuses on the provision of psychoeducation, emotional support, and triage. Level three (extended care) includes focused counselling, coping skills training, and psychoeducation by trained health professionals. Level four (specialist care) and level five (acute care) are the final two levels of care provided by skilled therapists and multidisciplinary teams.

3. Results

The results of this study are organised and presented in two parts. The first section shows findings from the quantitative survey, describing the proportion of women who received psychosocial services in these health facilities. The analysis of the survey was conducted among 428 patients, with a response rate of 96.4%. The second section deals with the findings from the qualitative study, highlighting the types and locations of psychosocial services available for breast cancer patients. It also narrates the reasons for not providing psychosocial services for breast cancer patients in these facilities.

3.1. Section One: Quantitative Study Findings. The sociodemographic and clinical characteristics of the participants are summarised in Table 1. The majority of 354 (82.7%) of the study participants were aware of their diagnosis, while 61 (14.3%) believed that they had breast inflammation, and the remaining 13 (3.0%) did not know about their condition at all.

Concerning the psychosocial services received, our quantitative study revealed that only 47 (11.0%) of these patients had received any kind of psychosocial service at the current health facility, in the form of counselling, emotional

Variabl	es	<i>n</i> = 428	Percentage (%)
	20–29	41	9.6
	30-39	157	36.7
Categorised age	40-49	113	26.4
	50-59	61	14.2
	≥60	56	13.1
Type of health facility	Government	363	84.8
Type of nearth facility	Private	65	15.2
	Illiterate	88	20.6
	Read and write	26	6.1
Educational level	Primary	83	19.4
	Secondary	129	30.1
	Tertiary	102	23.8
	Orthodox	290	67.8
Religion	Catholic	5	1.1
Tengrom	Protestant	55	12.9
	Muslim	78	18.2
Residence	Inside Addis	203	47.4
	Outside of Addis	225	52.6
	Married	242	56.5
	Cohabiting	19	4.4
Marital status	Divorced	50	11.7
	Widowed	69	16.1
	Single	48	11.2
	Housewife	203	47.4
	Merchant	52	12.2
Occupation	Government employee	84	19.6
	Private/NGO ^a	50	11.7
	Farmer	18	4.2
	Other	21	4.9
Stage of cancer $(n = 417)$	Stage I	32	7.7
	Stage II	163	39.1
	Stage III	184	44.1
	Stage IV	38	9.1
Type of breast cancer	ER –ve	47	11.0
	ER +ve	36	8.4
	Unknown	343	80.6
Severity of pain	None	76	17.8
	Mild	213	49.8
	Moderate	114	26.6
	Severe	25	5.8
Chemotherapy $(n = 422)$	No	63	14.9
17 \	Yes	359	85.1
Surgery $(n = 422)$	No	45	10.7
	Yes	377	89.3
Radiotherapy $(n = 422)$	No	388	91.9
	Yes	34	8.1
Hormonal therapy $(n - 122)$	No	373	88.4
$\frac{1}{2} \frac{1}{2} \frac{1}$	Yes	49	11.6

TABLE 1: Sociodemographic and clinical characteristics of participants in the quantitative study.

^aNon Governmental Organization, *daily laborer and student.

support, or the provision of information from health professionals. Out of these patients, more than half, 27 (57.6%), had received information from health professionals, while the others had received other forms of psychosocial services. Most of the 356 patients (83.2%) stated that they preferred to visit health facilities in order to receive psychosocial services, 70 (16.4%) of them preferred religious places, and only 2 (0.5%) preferred traditional healers or other people.

Although the majority of participants are still involved in different social activities, 75 (17.5%) of the total participants reported that the disease affected different aspects of their lives. Out of these, 46 (61.3%) and 32 (42.6%) of the patients stated that the disease affected their social and spiritual lives, respectively (Table 2).

According to the multivariate analysis, residence was one of the sociodemographic factors that were significantly associated with the receipt of psychosocial care. Breast cancer patients who live in Addis Ababa were 2.54 times more likely to receive any psychosocial services than those who came from outside of Addis Ababa (AOR = 2.54 (95% CI 1.30, 6.27)) (Table 3). Clinical factors such as pain severity and the date of diagnosis also showed a significant association with receiving psychosocial services. Breast cancer patients who had moderate pain were three times more likely to receive psychosocial services than women without any pain (AOR = 2.84 (95% CI 1.02, 7.94)). Women who had been diagnosed more than 1 year earlier were three times more likely to receive these services than those who had been recently diagnosed (<1 year) (AOR = 3.17 (95% CI 1.27, 7.89)) (Table 3).

3.2. Section Two: Qualitative Study Findings. The sociodemographic and clinical characteristics of breast cancer patients who were involved in the qualitative study are summarized in Table 4. Similarly, the qualifications of the included health professionals and their years of experience are described in Table 5.

4. Theme 1: Available Psychosocial Services

The psychosocial services available for breast cancer patients were described and categorised into two main subthematic areas: (i) from the community and (ii) from health facilities.

4.1. Subtheme 1.1: From the Community. Despite the fact that there is an awareness gap and the way that the community provides social support has its own limitations, most of the breast cancer patients who participated in this study testified that they received various types of emotional support from family members. For instance, a 36-year-old breast cancer patient said, "The good thing, I receive a lot of support from my family. My husband is very supportive, my sisters, my mother and friends. All are very supportive." (BCP, Age 36)

In addition, cancer patients receive support from different groups of people in the community, such as close friends and colleagues.

""My close friends know about it and we always discuss about everything. They comfort me a lot...they are very supportive." (BCP, Age 35)" ""Even at work, people usually support me. For example, they reduce workload and give me permission when I have an appointment." (BCP: Age 36)"

4.2. Subtheme 1.2: From Health Professionals at Health Facilities

4.2.1. Disclosure and Counselling Services. In the health facilities visited, there was no structured way of disclosing a diagnosis to breast cancer patients. In most cases, the physician who made the diagnosis was the one who disclosed it to the patients, "The doctor is the one who handles most of these issues using the short time he has for examining all the patients. He provides the counselling service based on patient's knowledge and health condition." (HP: Health officer, private)

The patients also confirmed that the diagnosis had been disclosed by doctors, *"There was a doctor who did the investigation and told me as I have cancer."* (BCP, Age 35)

On the other hand, there were breast cancer patients whose diagnosis had been accidentally disclosed while they were waiting for their turn at the hospital or when they were referred to an oncologist. Sometimes, cancer patients remained unaware of their status. Respondents mentioned caregivers who informed the health professionals not to tell the patient about cancer because of fear of discontinuing the treatment and in order to prevent hopelessness.

""They didn't tell me anything about the disease except telling me that I will be linked to another doctor...Then, I heard from other patient who sited beside me as we are waiting for a cancer doctor." (BCP, Age 36)"

""Sometimes, patients bring their pathology result without being informed about their diagnosis...the family members insist us not to tell them and the doctor will not say anything." (HP: BSc nurse, private)"

All breast cancer patients who participated in the qualitative study reported that they did not receive any counselling services. They also mentioned that their diagnosis was not properly disclosed and that the health professionals did not provide any emotional support or counselling at the time of diagnosis.

""The way he told me was really shocking. Then, I isolated myself from any kind of medical treatment. The doctor told me as its breast cancer, and as there is no option other than removing my breast. I even asked him about the cause and he said we don't have time to discuss about this; rather we have to focus on the solution. That's all what he said to me." (BCP, Age 35)"

Variables		п	Percentages
Currently receiving any psychosocial service in this facility	No Ves	381 47	89.0 11.0
	Courselling comice		10.2
The set of $(1, 17)$	Counsening service	9	19.2
Type of psychosocial service received $(n = 47)$	Emotional support	11	23.4
		27	57.4
Participate in different gatherings	No	28	6.5
rancipate in anterent gamering.	Yes	400	93.5
	Spiritual	328	76.6
	Only funeral	323	75.5
Type of gatherings ($n = 428$ for each type)	Social	240	56.1
	Women	125	29.2
	Political	32	7.5
Challen and in malation to the discuss	No	353	82.5
Challenges in relation to the disease	Yes	75	17.5
	Problem on social activities	46	61.3
	Problem on spiritual life	32	42.6
Type of challenges encountered ($n = 75$ for each type)	Problem with family	27	36.0
	Problem with employer	22	29.3
	Health facilities	356	83.2
Preferred place to receive psychosocial support	Religious places	70	16.4
	Traditional healers' other people	2	0.5

TABLE 2: Type of psychosocial service received in selected health facilities in Addis Ababa, Ethiopia.

TABLE 3: Multivariate logistic regression model for factors associated with receiving psychosocial services among breast cancer patients in Addis Ababa, Ethiopia.

Variab	les	Crude OR (95% CI)	Adjusted OR (95% CI)
Health facilities	Government	1	1
	Private	1.57 (0.58, 4.13)	1.67 (0.46, 6.03)
Age		1.04 (1.01, 1.08)*	1.04 (0.99, 1.08)
Desidence	Outside Addis	1	1
Residence	Inside Addis	1.87 (0.97, 3.52)	2.54 (1.30, 6.27)*
	Single	1	1
	Married	2.00 (0.87, 4.62)	2.35 (0.91, 6.08)
Marital status	Cohabiting	0.87 (0.23, 3.24)	1.53 (0.25, 9.52)
	Divorced	2.70 (0.76, 9.30)	2.61 (0.63, 10.91)
	Widowed	3.01 (0.92, 9.56)	2.05 (0.49, 8.62)
	None (0)	1	1
Soverity of pain	Mild (1-3)	2.09 (1.02, 4.28)*	1.93 (0.82, 4.53)
Seventy of pain	Moderate (4-6)	3.21 (1.29, 7.99)*	2.84 (1.02, 7.94)*
	Severe (7–10)	2.78 (0.59, 13.12)	2.44 (0.46, 12.92)
	Stage I	1	1
Final stage of concer	Stage II	0.62 (0.13, 2.81)	0.88 (0.17, 4.49)
Final stage of cancer	Stage III	0.42 (0.09, 1.89)	0.65 (0.13, 3.29)
	Stage IV	1.20 (0.16, 9.04)	1.18 (0.14, 10.17)
Chom oth susar	No	1	1
Chemotherapy	Yes	0.53 (0.18, 1.52)	0.34 (0.076, 1.57)
Duration of du	Less than 1 year	1	1
Duration of ux	More than 1 year	2.95 (1.26, 6.86)*	3.17 (1.27, 7.89)*

Factors with significant influence are shown in bold.

In contrast, the health professionals reported that they were providing counselling services and emotional support for cancer patients insofar as the situation allowed them to. However, except for brief discussions with each patient, there were no structured psychosocial services such as counselling, emotional support, and discussion sessions with cancer patients, either individually or as a group. The physicians and nurses who were working in the oncology unit provided these services along with their other routine tasks.

""We do not have such structured system, even the psychological support and counselling is not provided adequately. But we are trying our best and we need both

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Age	Place of residence	Time since diagnosis	Educational status	Occupation	Type of treatment received previously	Current treatment	Type of hospital
1 36	Addis Ababa ^b	4 years	First degree	Bank teller	Surgery (mastectomy of one breast) Chemotherapy Hormonal treatment for 3 years 4 months of radiotherapy	Second round of chemotherapy (6 th cycle)	Private
42	Debre Markos ^c	2 years	Unknown	Housewife	Surgery (partial excision) Chemotherapy Hormonal therapy (>1 year)	Second round of chemotherapy (8 th cycle)	Government
51	Addis Ababa	6 months	Unknown	Merchant	Surgery (mastectomy of both breasts)	First round of chemotherapy (2 nd cycle)	Private
35	Dire Dawa ^d	1 year	First degree	Bank branch manager	Surgery (mastectomy of one breast)	First round of chemotherapy (4 th cycle)	Government

Code	Profession	Years of experience	Years of experience in the oncology department	Type of hospital
HP01	Oncologist	27 years	10 years	Government
HP02	Oncologist	15 years	11 years	Government
HP03	Clinical nurse	10 years	8 years	Private
HP04	Clinical nurse	5 years	4 years	Government
HP05	Health officer	2 years	2 years	Private

TABLE 5: Characteristics of health professionals involved in the qualitative study.

counsellors and clinical psychologists." (HP: Oncologist, government)"

4.2.2. Provision of Adequate Information and Brochures. Some participants reported that they had received some information from health professionals about the treatment options, side effects, and duration of treatment.

""When I start chemotherapy, the doctor told me that the treatment has an effect on my hair and as I should not be worried about it." (BCP: 42 years)"

However, most of the patients indicated that the information provided by health professionals was not adequate, and the majority of breast cancer patients held discussions amongst themselves and accessed a lot of information from other patients who had been diagnosed previously.

""No, I was not even informed about the no of cycles prescribed for me. On the third cycle, I asked the nurse and told me as its six cycles." (BCP: 35 years)"

""We usually talk among ourselves and get a lot of information from those patients who took the medication earlier." (BCP: 42 years)"

Concerning the provision of leaflets and brochures, none of the participants mentioned that they had received this kind of educational material. The health professionals also reported that they did not usually give these materials to their patients.

""No, no one gave me such kind of materials." (BCP: 36 years)"

""We try our best to help the patients with what we can but we do not provide educational materials or other supports." (HP: Oncologist, government)"

5. Theme 2: Determinants of Psychosocial Service Provision

Reasons for not providing psychosocial services in these health facilities were also explored in the qualitative part of the study, and several justifications were given by the key informants. These included a shortage of staff, a high workload, and not having an assigned person to deliver these services in an organised way. ""The main problem is staff shortage and high patient flow...umm.... we do not have a staff who is assigned for psychosocial activities..." (HP: BSc nurse, government)"

In addition, there was high patient flow in these health facilities due to the limited number of cancer centres in the country. Therefore, it was difficult for the health professionals to spend more time with each patient and address their emotional and psychosocial needs.

""I don't know the reason, but I think it's because of high patient flow. Let alone to spend some time with you and discuss about your disease condition, the medication by itself is given in hurry." (BCP: 42 years)"

""...because of the high patient flow, doctors are forced to see many patients per day specially in government hospitals." (HP: Oncologist, government)"

The other justification was a lack of skill/training on how to provide counselling and other professional support. They also stated that the set-up itself was not convenient for providing patients with individual counselling.

""There are no trained personnel, which makes it difficult to provide counselling service." (HP: Health officer, private)"

""The patients are very eager to listen, but the issue is we do not have adequate room for counselling services." (HP: BSc nurse, government)"

6. Discussion

In this study, the majority of breast cancer patients received social support from their family members, friends, and colleagues. This finding is consistent with those of other studies conducted in China [43], Turkey [44], and Botswana [36], which reported that cancer patients often received psychosocial support from their family members and friends.

6.1. Lack of Knowledge about the Diagnosis. Regarding disclosure of a cancer diagnosis, several guidelines recommend that all cancer patients should be well informed about their diagnosis, treatment options, and future prognosis of the disease [24–26, 45]. However, our study found that there were some breast cancer patients who were not even aware of their diagnosis. A previous study conducted in Ethiopia also reported a similar finding concerning the lack of disclosure of a cancer diagnosis among breast and cervical cancer patients [46]. This finding is not only seen in Ethiopia but also supported by a quantitative study conducted in Egypt that revealed that around 15% of cancer patients were not aware of their diagnosis, with only their family members being aware [47]. The main reason given by interviewees for not disclosing this to these patients was the pressure of relatives on caregivers to prevent hopelessness and discontinuation of treatment. This reason is also consistent with a study performed in India, which reported that the majority of caregivers preferred nondisclosure of a cancer diagnosis and prognosis to their patients [48]. Poor disclosure of a cancer diagnosis in developing countries may be associated with poor educational attainment [47], preference for traditional medicine, old age, and having other chronic illnesses [49].

6.2. Lack of Knowledge about the Planned Treatment. Several studies revealed that counselling services are one of the major components of psychosocial services that are being delivered in developed countries [12, 24–27, 50, 51]. However, breast cancer patients in this study reported that they did not receive counselling services at their current health facility. According to the cancer survivorship plan of the Institute of Medicine (IOM), the minimum level of care and information that should be given to each cancer patient includes the provision of information about the types of tests, results, and tumour characterization, as well as treatment details, including type, combination of treatments, duration, side effects, and regimen [33]. Nevertheless, patients in this study mentioned that they did not receive details about their diagnosis and treatment, including the number of chemotherapy cycles prescribed for them. They also stated that they never received educational materials in the form of brochures or leaflets. Similarly, many African countries do not provide comprehensive psychosocial services [27, 32, 52]. There is a lack of resources, including skilled people, infrastructure, and materials.

6.3. Rural-Urban Disparities in Access to Service. Patients who were residents of Addis Ababa were twice as likely to receive psychosocial services as those who were living outside of Addis Ababa. This finding can be explained by the fact that people living in urban areas probably have better health information and therefore insist on obtaining psychosocial services. This finding is supported by a study conducted in Egypt, which revealed that educational level and place of residence were significantly associated with disclosure and provision of psychosocial services [47]. This has implications for the importance of having daily coping mechanisms, involvement of community health, and establishing cancer support groups, particularly for those cancer patients who live further away from cancer centres, which are mostly concentrated in big cities.

6.4. Access to Counselling Services. The other factor associated with the provision of psychosocial services was having pain; the likelihood of breast cancer patients receiving psychosocial services was higher when they had moderate pain. This can be explained by the human nature of health professionals to feel sympathetic and provide more emotional or other psychosocial services for those with pain than stable patients. In this study, breast cancer patients who were diagnosed one and more years ago were more likely to receive psychosocial services as compared to those who were newly diagnosed. A possible explanation for this may be that, as the duration of stay in the health system increases, the chance of receiving these services will also be higher due to having repeated appointments with health professionals and receiving different types of treatment.

6.5. Strengths and Limitations. The main strength of this quantitative study is the large sample size and inclusion of private and government hospitals in Addis Ababa, leading to a broad picture of the situation. The maximum variation of responses was achieved by including newly diagnosed and recurrent cases. During our qualitative study, collecting information from both patients and health professionals increased the generalizability of the study. The major limitation of this study was that we only conducted IDIs, and it may be helpful if other data collection techniques, such as focus group discussions (FGD), were used in order to confirm our findings. Another limitation of this study was that we did not use a validated questionnaire for the quantitative part and that the questionnaire was developed through a review of the literature and modified for the local context

7. Conclusions

In this study, psychosocial services were found to be rarely available for breast cancer patients, whether in the form of counselling services, emotional support, or provision of information, and not in a structured way. A high workload, inadequate space, and a lack of trained health professionals were the major reasons for not providing these services. Therefore, innovative psychosocial services, possibly tasks shared through different professions, need to be better integrated into routine cancer care. The services need to be tailored to the local context through consideration of various sociocultural factors, the educational attainment of the community, and available resources. The Ministry of Health should expand the training of health professionals in different disciplines, including clinical psychology, palliative care, and social work. Palliative care units and patient support groups should be established to reach patients in rural and urban areas.

Abbreviations

- AOR: Adjusted odds ratio
- IOM: Institute of Medicine
- IPOS: International Psycho-Oncology Society
- IRB: Institutional Review Board

LMICs:	Low- and middle-income countries
FSA:	Food and Safety Authority
REC:	Research Ethics Committee
WHO:	World Health Organization.

Data Availability

The datasets used and/or analysed during the current study are available from the corresponding author on reasonable request.

Ethical Approval

Ethical clearance for this study was obtained from the Research Ethics Committee of the School of Public Health and the Institutional Review Board of the College of Health Science, Addis Ababa University. All analytical methods were performed in accordance with the Declaration of Helsinki.

Consent

Written informed consent was obtained from all participants.

Disclosure

A preprint of this article has previously been published in research square [53]. The funding body was not involved in the study design; collection, analysis, and interpretation of the data; or writing of the manuscript.

Conflicts of Interest

The authors declare that they have no conflicts of interest.

Authors' Contributions

All authors conceived and designed the study. AW and SH conducted the IDIs. AW, SH, WA, and AA performed the data analysis and contributed to interpretation of the findings. AW and WA drafted the manuscript. BZ, EK, AA, and ST were actively involved in data interpretation and critically reviewed the manuscript. All authors have read and approved the final manuscript.

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References

- L. Grassi, D. Spiegel, and M. Riba, "Advancing psychosocial care in cancer patients," *F1000Research*, vol. 6, p. 2083, 2017.
- [2] N. Vin-Raviv, T. F. Akinyemiju, S. Galea, and D. H. Bovbjerg, "Depression and anxiety disorders among hospitalized women with breast cancer," *PLoS One*, vol. 10, no. 6, Article ID e0129169, 2015.
- [3] A. Alacacioglu, E. Ulger, U. Varol et al., "Depression, anxiety and sexual satisfaction in breast cancer patients and their partners-Izmir oncology group study," *Asian Pacific Journal* of *Cancer Prevention*, vol. 15, no. 24, pp. 10631–10636, 2015.
- [4] N. Nikbakhsh, S. Moudi, S. Abbasian, and S. Khafri, "Prevalence of depression and anxiety among cancer patients," *Caspian J. Intern. Med.*, vol. 5, no. 3, pp. 167–170, 2014.
- [5] N. Z. Zainal, N. R. Nik-Jaafar, A. Baharudin, Z. A. Sabki, and C. G. Ng, "Prevalence of depression in breast cancer survivors: a systematic review of observational studies," *Asian Pacific Journal of Cancer Prevention*, vol. 14, no. 4, pp. 2649–2656, 2013.
- [6] C. C. Reyes-Gibby, K. O. Anderson, P. K. Morrow, S. Shete, and S. Hassan, "Depressive symptoms and health-related quality of life in breast cancer survivors," *Journal of Women's Health*, vol. 21, no. 3, pp. 311–318, 2012.
- [7] J. Walker, C. H. Hansen, P. Martin et al., "Prevalence, associations, and adequacy of treatment of major depression in patients with cancer: a cross-sectional analysis of routinely collected clinical data," *The Lancet Psychiatry*, vol. 1, no. 5, pp. 343–350, 2014.
- [8] American Cancer Society, Body Image and Sexuality after Breast Cancer 2009, American Cancer Society, Atlanta, Georgia, USA, 2009.
- [9] G. Christ, C. Messner, and L. Behar, Handbook of Oncology Social Work: Psychological Care for People with Cancer, Oxford University Press, Oxford, England, 2015.
- [10] M. B. Riba, K. A. Donovan, B. Andersen et al., "Distress management, version 3.2019, NCCN clinical practice guidelines in oncology," *Journal of the National Comprehensive Cancer Network*, vol. 17, no. 10, pp. 1229–1249, 2019.
- [11] P. Patterson, N. M. D'Agostino, F. E. J. McDonald et al., "Screening for distress and needs: findings from a multinational validation of the adolescent and young adult psychooncology screening tool with newly diagnosed patients," *Psycho-Oncology*, vol. 30, no. 11, pp. 1849–1858, 2021.
- [12] G. T. Macdonald, F. Baldassarre, P. Brown et al., "Psychosocial care for cancer: a framework to guide practice, and actionable recommendations for Ontario," *Current Oncology*, vol. 19, no. 4, pp. 209–216, 2012.
- [13] S. Daniels, "Cognitive behavior therapy for patients with cancer," J. Adv. Pract. Oncol., vol. 6, no. 1, pp. 54–56, 2015.
- [14] F. Xiao, X. Song, Q. Chen et al., "Effectiveness of psychological interventions on depression in patients after breast cancer surgery: a meta-analysis of randomized controlled trials," *Clinical Breast Cancer*, vol. 17, no. 3, pp. 171–179, 2017.
- [15] C. Reese, J. Weis, D. Schmucker, and O. Mittag, "Development of practice guidelines for psychological interventions in the rehabilitation of patients with oncological disease (breast, prostate, or colorectal cancer): methods and results," *Psycho-Oncology*, vol. 26, no. 10, pp. 1513–1518, 2017.
- [16] Z. Guo, H. Tang, H. Li et al., "The benefits of psychosocial interventions for cancer patients undergoing radiotherapy," *Health and Quality of Life Outcomes*, vol. 11, no. 1, p. 121, 2013.

- [17] F. D'Abramo, U. Goerling, and C. Guastadisegni, "Targeted drugs and Psycho-oncological intervention for breast cancer patients," *Journal of Negative Results in BioMedicine*, vol. 15, no. 1, p. 6, 2016.
- [18] K. Parahoo, S. McDonough, E. McCaughan et al., "Psychosocial interventions for men with prostate cancer: a Cochrane systematic review," *BJU International*, vol. 116, no. 2, pp. 174–183, 2015.
- [19] L. S. Hoon, C. W. Chi Sally, and H. Hong-Gu, "Effect of psychosocial interventions on outcomes of patients with colorectal cancer: a review of the literature," *European Journal* of Oncology Nursing, vol. 17, no. 6, pp. 883–891, 2013.
- [20] W. Fu, M. Marko Popovic, A. Agarwal et al., "The impact of psychosocial intervention on survival in cancer: a metaanalysis," *Annals of Palliative Medicine*, vol. 5, no. 2, pp. 93–106, 2016.
- [21] S. Mirosevic, B. Jo, H. C. Kraemer, M. Ershadi, E. Neri, and D. Spiegel, ""Not just another meta-analysis": sources of heterogeneity in psychosocial treatment effect on cancer survival," *Cancer Medicine*, vol. 8, no. 1, pp. 363–373, 2019.
- [22] B. L. Andersen and C. S. Dorfman, "Evidence-based psychosocial treatment in the community: considerations for dissemination and implementation," *Psycho-Oncology*, vol. 25, no. 5, pp. 482–490, 2016.
- [23] G. Rubin, A. Berendsen, S. M. Crawford, R. Dommett, and C. Earle, "The expanding role of primary care in cancer control," *The Lancet Oncology*, vol. 16, no. 12, pp. 1231–1272, 2015.
- [24] L. Grassi and M. Watson, "Psychosocial care in cancer: an overview of psychosocial programmes and national cancer plans of countries within the International Federation of Psycho-Oncology Societies," *Psycho-Oncology*, vol. 21, no. 10, pp. 1027–1033, 2012.
- [25] J. Turner, B. McAvoy, K. Luxford, and J. Fletcher, "Clinical practice guidelines for the psychosocial care of adults with cancer. welcome support for gps," *Australian Family Physician*, vol. 33, no. 1-2, pp. 63–65, 2014.
- [26] C. J. Recklitis and K. L. Syrjala, "Provision of integrated psychosocial services for cancer survivors post-treatment," *The Lancet Oncology*, vol. 18, no. 1, pp. e39–e50, 2017.
- [27] L. Travado, B. D. Bultz, A. Ullrich et al., "2016 President's Plenary International Psycho-Oncology Society: challenges and opportunities for growing and developing psychosocial oncology programmes worldwide," *Psycho-Oncology*, vol. 26, no. 9, pp. 1231–1238, 2017.
- [28] K. M. Fennell, D. A. Turnbull, N. Bidargaddi, J. L. McWha, M. Davies, and I. Olver, "The consumer-driven development and acceptability testing of a website designed to connect rural cancer patients and their families, carers and health professionals with appropriate information and psychosocial support," *European Journal of Cancer Care*, vol. 26, no. 5, Article ID e12533, 2017.
- [29] C. Hung, Y. Chen, J. Chan et al., "Psychological distress, social support, self-management ability and utilization of social resources for female patients with cancer in oncology outpatient settings in Taiwan," *Supportive Care in Cancer*, vol. 28, no. 7, pp. 3323–3330, 2020.
- [30] B. van Oorschot, K. Ishii, Y. Kusomoto et al., "Anxiety, depression and psychosocial needs are the most frequent concerns reported by patients: preliminary results of a comparative explorative analysis of two hospital-based palliative care teams in Germany and Japan," *Journal of Neural Transmission*, vol. 127, no. 11, pp. 1481–1489, 2020.

- [31] E. O'Hea, A. Kroll-Desrosiers, A. S. Cutillo et al., "Impact of the mental health and dynamic referral for oncology (MHADRO) program on oncology patient outcomes, health care utilization, and health provider behaviors: a multi-site randomized control trial," *Patient Education and Counseling*, vol. 103, no. 3, pp. 607–616, 2020.
- [32] L. Grassi, D. Fujisawa, P. Odyio et al., "Disparities in psychosocial cancer care: a report from the international federation of psycho-oncology societies," *Psycho-Oncology*, vol. 25, no. 10, pp. 1127–1136, 2016.
- [33] B. L. Andersen, R. J. DeRubeis, B. S. Berman et al., "Screening, assessment, and care of anxiety and depressive symptoms in adults with cancer: an American Society of Clinical Oncology guideline adaptation," *Journal of Clinical Oncology*, vol. 32, no. 15, pp. 1605–1619, 2014.
- [34] S. C. Lechner, N. Ennis-Whitehead, B. R. Robertson et al., "Adaptation of a psycho-oncology intervention for black breast cancer survivors: project CARE," *The Counseling Psychologist*, vol. 41, no. 2, pp. 286–312, 2012.
- [35] A. Iskandarsyah, C. de Klerk, D. R. Suardi, M. P. Soemitro, S. S. Sadarjoen, and J. Passchier, "Psychosocial and cultural reasons for delay in seeking help and nonadherence to treatment in Indonesian women with breast cancer: a qualitative study," *Health Psychology*, vol. 33, no. 3, pp. 214–221, 2014.
- [36] C. A. Brown, R. E. Kohler, O. John et al., "Multilevel factors affecting time to cancer diagnosis and care quality in Botswana," *The Oncologist*, vol. 23, no. 12, pp. 1453–1460, 2018.
- [37] A. Wondimagegnehu, W. Abebe, A. Abraha, and S. Teferra, "Depression and social support among breast cancer patients in Addis Ababa, Ethiopia," *BMC Cancer*, vol. 19, no. 1, p. 836, 2019.
- [38] B. Legese, A. Addissie, M. Gizaw, W. Tigneh, and T. Yilma, "Information needs of breast cancer patients attending care at Tikur Anbessa Specialized Hospital: a descriptive study," *Cancer Management and Research*, vol. 13, pp. 277–286, 2021.
- [39] H. Y. Amane, A. M. Tessema, K. A. Seid et al., "Factors associated with unmet supportive care needs of oncology patients at Dessie Referral Hospital," *Ecancermedicalscience*, vol. 15, p. 1300, 2020.
- [40] T. Afework, A. Wondimagegnehu, A. S. Bogale, E. J. Kantelhardt, and A. Addissie, "Predictors of unmet supportive care needs of adult cancer patients in Ethiopia," *European Journal of Cancer Care*, vol. 31, no. 6, Article ID e13694, 2022.
- [41] A. O. Popoola and A. O. Adewuya, "Prevalence and correlates of depressive disorders in outpatients with breast cancer in Lagos, Nigeria," *Psycho-Oncology*, vol. 21, no. 6, pp. 675–679, 2012.
- [42] S. D. Hutchison, S. K. Steginga, and J. Dunn, "The tiered model of psychosocial intervention in cancer: a communitybased approach," *Psycho-Oncology*, vol. 15, no. 6, pp. 541–546, 2006.
- [43] J. A. Su, D. C. Yeh, C. C. Chang et al., "Depression and family support in breast cancer patients," *Neuropsychiatric Disease* and Treatment, vol. 13, pp. 2389–2396, 2017.
- [44] A. Bener, R. Alsulaiman, L. Doodson, and T. Agathangelou, "Depression, hopelessness and social support among breast cancer patients: in highly endogamous population," *Asian Pacific Journal of Cancer Prevention*, vol. 18, no. 7, pp. 1889–1896, 2017.
- [45] A. Montazeri, A. Tavoli, M. A. Mohagheghi, R. Roshan, and Z. Tavoli, "Disclosure of cancer diagnosis and quality of life in

cancer patients: should it be the same everywhere?" BMC Cancer, vol. 9, no. 1, p. 39, 2009.

- [46] A. Gebremariam, A. W. Yalew, S. Hirpa et al., "Application of the rapid ethical assessment approach to enhance the ethical conduct of longitudinal population based female cancer research in an urban setting in Ethiopia," *BMC Medical Ethics*, vol. 19, no. 1, p. 87, 2018.
- [47] S. A. Alsirafy, S. S. Abdel-Kareem, N. Y. Ibrahim, M. A. Abolkasem, and D. E. Farag, "Cancer diagnosis disclosure preferences of family caregivers of cancer patients in Egypt," *Psycho-Oncology*, vol. 26, no. 11, pp. 1758–1762, 2017.
- [48] L. Nyblade, M. Stockton, S. Travasso, and S. Krishnan, "A qualitative exploration of cervical and breast cancer stigma in Karnataka, India," *BMC Women's Health*, vol. 17, no. 1, p. 58, 2017.
- [49] Z. Bruwer, M. Futter, and R. Ramesar, "Communicating cancer risk within an African context: experiences, disclosure patterns and uptake rates following genetic testing for Lynch syndrome," *Patient Education and Counseling*, vol. 92, no. 1, pp. 53–60, 2013.
- [50] A. Surbone, L. Baider, T. S. Weitzman, M. J. Brames, C. N. Rittenberg, and J. Johnson, "Psychosocial care for patients and their families is integral to supportive care in cancer: MASCC position statement," *Supportive Care in Cancer*, vol. 18, no. 2, pp. 255–263, 2010.
- [51] M. Eichler, M. Hechtner, B. Wehler et al., "Use of psychosocial services by lung cancer survivors in Germany: results of a German multicenter study (LARIS)," *Strahlentherapie und Onkologie*, vol. 195, no. 11, pp. 1018–1027, 2019.
- [52] L. Ashley and I. Lawrie, "Tackling inequalities in cancer care and outcomes: psychosocial mechanisms and targets for change: tackling inequalities in cancer care and outcomes," *Psycho-Oncology*, vol. 25, no. 10, pp. 1122–1126, 2016.
- [53] A. Wondimagegnehu, Availability and Utilization of Psychosocial Services for Breast Cancer Patients in Addis Ababa, Ethiopia: A Mixed Method Study, Research Square, Durham, NC, USA, 2021.