The comfort level in breast cancer patients' based on patients' characteristics during the COVID-19 pandemic

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Abstract

Background: Comfort is an important factor in determining the successful outcomes of palliative care in breast cancer patients. During the COVID-19 pandemic, the comfort of cancer patients was disrupted due to restrictions on the number of visits, due to being categorized as a high-risk group for COVID-19. Patients were concerned about coming to the hospital for treatment because they were afraid of being infected, which served as an obstacle in treating breast cancer patients.
Purpose: This study aims to describe patients' comfort levels during the COVID-19 pandemic and to investigate the relationship between patients' characteristics and comfort levels.
Methods: This study involved 108 respondents with breast cancer at the National Cancer Center Hospital in 2021, using a cross-sectional research method. The study was conducted using a consecutive sampling technique, including breast cancer patients who were actively undergoing treatment in the hospital. The research instrument was the Comfort Assessment Breast Cancer Instrument (CABCI), using a scale of 1-4, with lower score indicating higher level of comfort. The data were analyzed using the Kruskal-Wallis test.
Results: The results showed that respondents' level of comfort was still lacking. The best comfort aspect was the environmental aspect, and the worst aspect was the physical aspect. In addition, there were two variables related to comfort: type of treatment ($p = 0.000$; $\alpha = 0.05$) and type of service in the hospital (outpatient and inpatient) ($p = 0.000$; $\alpha = 0.05$). The best comfort level was found in chemotherapy treatment and outpatient rooms. Patients felt comfortable with a neat, clean, conducive hospital environment and the implementation of health protocols, believing that these aspects could effectively prevent the spread of COVID-19.
Conclusions: The results of this study suggested that dimension of patients' comfort are influenced by multiple aspects. Nursing services are recommended to optimize and improve controllable variables to maintain a higher level of comfort. Interventions that maintain or improve comfort will optimize patients' health conditions.

Keywords: breast cancer; comfort; COVID-19; level of comfort

Introduction

Breast cancer is one of the cancer types with the highest incidence worldwide. The number of new breast cancer cases in 2020 reached 11.7% of all cancer types (Sung et al., 2021). Meanwhile, breast cancer cases in Indonesia have reached 16.6% of the total population (Globocan, 2020). In 2018, Dharmais Cancer Hospital, a national cancer centre hospital in Jakarta, reported that the most common cancer diagnose is breast cancer at 19.18% (Ministry of Health, 2019). The number of breast cancer cases in Indonesia is also expected to rise. This could mean the increase of cancer burden in Indonesia. Therefore, all aspects that can improve the health

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condition of breast cancer patients and promote recovery should be considered. One such aspect is the comfort aspect.

According to Kolcaba's theoretical comfort approach, comfort is defined as "the immediate state of experience of solving problems and thus having comfort by being strengthened through answering the human needs for relief, ease, and transcendence in a physical, psychospiritual, environmental, and sociocultural context" (Lin et al., 2023). Patients' comfort level will affect their adherence to medical recommendations and oncological treatment regimens and improve their health conditions. A study conducted in Indonesia before the COVID-19 pandemic discovered that the mean level of comfort with breast cancer was of 1.82 + 0.43 of the scale 1-4, with lower score indicating a higher level of comfort (Nuraini et al., 2018).

Corona Virus Disease-19 (COVID-19) is an infectious respiratory disease that first appeared in Wuhan, China, and spread to the whole world (WHO, 2020). This unprecedented health crisis, for which no healthcare system is fully prepared, has led to changes in patient care management worldwide (Curigliano et al., 2020). During the COVID-19 pandemic, the cancer patients' treatments and activities were disrupted due to restrictions on the number of visits, as cancer patients are included to a high-risk group for COVID-19. Cancer has been determined as a factor that aggravates the patient's condition if affected by COVID-19.In addition, a study conducted during the COVID-19 pandemic has discovered COVID-19 as a new stressor that can cause concern and discomfort for breast cancer patients (Liang et al., 2020).

In Indonesia, the Dharmais Cancer Hospital, as a national cancer center, has also implemented management changes, such as closing the outpatient clinic for early cancer detection and undergoing cancer treatment since March 2020 (Dharmais, 2020a) and delaying doctor consultations (Dharmais, 2020b). Cancer services reopened in June 2020 by implementing a strict screening protocol and advising breast cancer patients to visit the hospital for a checkup (Dharmais, 2020c).

Some patients might be unsure whether going to the hospital is risky for their health (Curigliano et al., 2020). Patients experience dilemmas and worries during the pandemic about visiting the hospital. The patient feels the need to continue treatment, but is also worried about being infected with COVID-19. The main dilemma for continuing treatment during a pandemic is that the incidence and mortality of cancer patients exposed to COVID-19 are higher than those of other patients (Liang et al., 2020).

The changes in management as a response to the COVID-19 pandemic affected the patients' schedule in treatments and consultations as well as activities, which may lead to discomfort and negatively impact recovery. As one of the vital aspects in patients' care, an adequate level of comfort is needed. This comfort can affect the quality of life and resilience of cancer patients. Nurses are responsible for making patients comfortable despite their illness. However, research on the comfort of breast cancer patients during the COVID-19 pandemic in Indonesia is still limited.

The COVID-19 pandemic period is declared to have ended, but the learning process during the pandemic must not be forgotten. With the trend of global health following the changing lifestyle and global climate, it is not improbable for other pandemics to occur in the future. In this case, nurses as healthcare providers, must always be ready to face any pandemic disaster, especially a contagious disease pandemic. For these reasons, the researchers identified the need in examining the comfort of breast cancer patients during the COVID-19 pandemic and the factors that influence it to expand on the body of knowledge in relation to pandemics.

Materials and Methods

Design

This study used a cross-sectional design and was conducted from April to May 2021. The population in this study was cancer patients at the National Cancer Center Hospital. The researchers used the proportion estimation formula to determine the number of sample, resulting in 108 breast cancer patients as respondents.

$$n = \frac{(Z\alpha/2)^2 \, p.q}{d^2}$$

Proportion Estimation Formula (Sastroasmoro and Ismael, 2014)

Sample and setting

The respondents were selected from the population who satisfied the criteria of inclusion namely breast cancer patients who were actively undergoing treatment at the National Cancer Center Hospital, were fully conscious, and were able to comprehend and communicate in Indonesian Language as well as willing to complete an informed consent form. Patients with comorbid conditions were excluded from the sample population to keep the research focused on the level of comfort during a pandemic and not on COVID-19 exposure. Research samples used a consecutive sampling method. Data were collected directly using the demographic data form and the Comfort Assessment Breast Cancer Instrument (CABCI).

Variables

The demographic data form was used to collect the characteristics of patients as follow: age; level of education; marital status; occupation; monthly income; cancer stage; time of diagnosis; health insurance; social support; and type of care. Patients'

Table 1. Respondents' Characteristics (n = 108)

Characteristic	Frequency (n)	Percentage (%)
Age		
Early adults (26-35 years old)	13	12.0
Late adults (36-45 years old)	29	26.2
Early elderly (46-55 years old)	40	37.0
Elderly (56-65 years old)	17	15.7
Late elderly (> 65 years old)	9	8.3
Level of Education		
Higher education (Diploma, Bachelor, Master, Doctoral Degree)	36	33.3
High education (High school, Islamic high school, Vocational high school)	52	48.1
Lower education (Elementary school, Islamic elementary school, Junior high school, Islamic junior high school)	20	18.5
Marital status		
Married	98	90.7
Have not married yet/ unmarried	10	9.3
Occupation		
Employed	29	26.9
Unemployed	79	73.1
Monthly income		
< IDR 4,416,186 (283 USD)	69	63.9
> IDR 4,416,186 (283 USD)	39	36.1
Cancer stage		
Stage 1	7	6.5
Stage 2	30	27.8
Stage 3	52	48.1
Stage 4	19	17.6
Diagnosis duration		
< 1 year	50	46.3
1 until 3 years	38	35.2
> 3 years	20	18.5
Treatment undertaken		
Surgery (pre/post)	33	30.6
Chemotherapy	61	56.5
Mixed therapy (>1 therapy)	14	13.0
Health insurance		
BPJS Kesehatan	104	96.3
Private insurance	2	1.9
Do not have an insurance	2	1.9
Social support		
Yes	107	99.1
No	1	0.9
Room		
Outpatients	48	44.4
Inpatients	60	55.6

Table 2. Respondents' Comfort (n = 108)

Comfort Variable	Mean (scale 1-4)	Std Deviation	Median (scale 1-4)	Min-Max	95% Confidence interval
Physical	2.47	0.74	2.5	1-4	2.33
Psycho-spiritual	1.84	0.53	1.69	1-3.31	1.73-1.94
Socio-cultural	2.06	0.67	2	1-4	1.94-2.19
Financial	2.08	0.97	2	1-4	1.89-2.26
Environment	1.78	0.84	1.67	1-4	1.62-1.94
General Comfort	2.04	0.58	1.99	1.17-3.7	1.93-2.16

exposure to COVID-19 was not included in the demographic form as COVID-19 patients were inaccessible during isolation.

Instruments

The CABCI was developed by the main author in 2018 and has been tested for validity and reliability with Cronbach's α of 0.93 and 0.88, respectively (Nuraini et al., 2019; Gonzalez-Baz et al., 2023) Reliability and validity in our samples (true samples): 0.94 and 0.437-0.747. The CABCI consists of 32 items, consisting of eight items for the assessment of physical comfort, 13 psychospiritual items, five sociocultural items, three financial items, and three environmental items; each domain used a scale of 1-4.

Data collection

The score value interpretation was low score represents higher level of comfort, meaning the score of 1 represents the highest level of comfort and the score of 4 represents the lowest level of comfort. Data were collected on a paper-based form, and researchers directly collected data by asking respondents to fill out the form.

Ethical clearance

This study has passed the ethical clearance from Dharmais Cancer Hospital, no. 035/KEPK/IV/2021, dated April 19, 2021.

Data analysis

This study also investigated the relationship between respondents' characteristics and comfort levels. Data obtained were then analyzed by JASP 0.14.1.0 for univariate and bivariate data. Researchers used the Kruskal-Wallis test method for testing data. After the data were collected and tested for normality, the results were not normal, as the p value of Kolmogorov Smirnov showed 0.00 (< 0.05).

Results

The study identified characteristics of respondents consisting of age, level of education, marital status, occupation, monthly income, cancer stage, duration of diagnosis, treatment undertaken, health insurance, social support, and type of care (outpatient or inpatient). The description of the characteristics of the respondents is explained in Table 1. A total of 108 respondents were involved in this study. Most respondents were aged between 46 and 65 years, representing 61% of the sample; most respondents graduated from high school (88 respondents, or 81.5%) with 33.33% graduated from higher level of education (Diploma, Bachelor, Master, Doctoral Degree); and most respondents were married (98 respondents or 90.7%). In this study, 79 respondents (73.1%) were unemployed, and the monthly family income of each respondent (69 respondents, or 63, 9%) was mainly below Jakarta's regional minimum wage, or < IDR 4,416,186.00, or 283 USD.

The most represented cancer stage was stage 3, experienced by 52 respondents (48.1%) with most respondents diagnosed within less than a year (50 respondents, 46.3%). The majority of respondents (61) underwent chemotherapy treatment amounting to (56.5%), and BPJS insurance (National Social Security Agency) was most widely used by respondents for 103 respondents (96.3%). Almost all respondents (106 respondents, or 99.1%) received social support from their family. Forty-eight respondents (44.4%) underwent treatment in the outpatient room, and 60 (55.6%) underwent treatment in the inpatient room.

The total of respondents' comfort level is considered uncomfortable (mean: 2.04 + 0.58). The five aspects of comfort show that the best comfort level was found in the environmental aspect (mean: 1.78 + 0.84) and the least comfortable domain was found in the physical aspect (mean: 2.47 + 0.74). Aspects of comfort are described in Table 2.

The comfort normality test using the Kolmogorov-Smirnov test has revealed a significance of <0.05 (p=0.011). The result of normality test for each domain show only physical domain with p value 0.2, and another domain <0.05. The value indicated that the data were not normally distributed, thus the Kruskal-Wallis test was used as the bivariate. Table 3 shows the relationships between characteristics and comfort variables. There are two variables that have a significant difference from the comfort variables (p = 0.000; α 0.05). The variables of type of treatment and type of service in the hospital (outpatient and inpatient) have a significant relationship with patient comfort. The highest aspect influencing comfort is patients who are on chemotherapy treatment. Patients undergoing outpatient treatment have the

Table 3. Relationships between Respondents' Characteristics and Comfort (n = 108)

Characteristic	N	Mean Rank	p-values
Age			
Early adults (26-35 years old)	13	58	0.156
Late adults (36-45 years old)	29	59.55	
Early elderly (46-55 years old)	40	46.78	
Elderly (56-65 years old)	17	51.59	
Late elderly (> 65 years old)	9	73	
Level of education			
Higher education (Diploma, Bachelor, Master, Doctoral Degree)	36	54.33	0.978
High education (High school, Islamic high school, Vocational high school)	52	55.06	
Lower education (Elementary school, Islamic elementary school, Junior high school, Islamic junior high school)	20	53.35	
Marital status			
Married	98	54.76	0.791
Have not married yet/ unmarried	10	52	
Occupation			
Employed	29	59.79	0.287
Unemployed	79	52.56	
Monthly income			
< IDR 4,416,186 (283 USD)	69	53.72	0.732
> IDR 4,416,186 (283 USD)	39	55.87	
Cancer stage			
Stage 1	7	42	0.373
Stage 2	30	57.77	
Stage 3	52	51.44	
Stage 4	19	62.32	
Diagnosis duration			
< 1 year	50	52.98	0.796
1 until 3 years	38	57.26	
> 3 years	20	53.05	
Treatment			
Surgery (pre/post)	33	63.97	0.000*
Chemotherapy	61	43.89	
Mixed therapy (>1 therapy)	14	78.43	
Health insurance			
BPJS Kesehatan	104	55.73	0.109
Private insurance	2	27.5	
Do not have an insurance	2	17.5	
Social support			
Yes	107	54.12	0.194
No	1	95	
Room			
Outpatients	48	35.9	0.000*
Inpatients	60	69.38	

* indicates a significant difference in α 0.05. The smaller the rank, the more comfortable

highest comfort value, by four times, compared to inpatient treatment. Meanwhile, the variables of age, level of education, marital status, occupation, monthly income, cancer stage, diagnosis period, health insurance, and social support are not significantly different from comfort ($p > 0.05$).

Discussion

Univariate (Comfort Variables)

This study has revealed that patient comfort is still lacking, with a mean value of 2.04□0.58 (score 1-4). The higher value represented lower level of comfort for the respondents. In comparison with previous related study by Nuraini et al. (2018), which discovered that mean value of 1.82□0.43, the results indicated an increase in discomfort.

Physical discomfort had the highest mean score (2.47□0.74). This is in accordance with previous research, which shows that physical discomfort, especially pain, is the discomfort that most often occurs in breast cancer patients, and the pain felt is in the moderate group (Gayatri et al., 2021; Miller et al., 2021). Nurses can provide non-pharmacological interventions that can help reduce pain in patients with breast cancer (Krishnasamy Yuvaraj et al., 2023).

Finances were the second highest discomfort factor (2.08□0.97). Cancer treatment in Indonesia is covered by the national health insurance. However, there were terms and conditions for the coverage that meant some treatments and other related costs were not covered. Therefore, while the national health insurance covered the cancer treatment, it was still a problem to meet other needs, such as nutrition, transportation costs, and other costs. As the majority of Indonesian households come from middle to lower income level, the diagnosis of cancer leads to poor financial and economic conditions. It causes financial problems that cancer patients cannot avoid and can cause delays in treatment (Martina et al., 2022; Sakafu et al., 2022).

Socio-cultural factor was the third highest ranking as a discomfort factor (2.06□0.67). Culture considerably influences Indonesian people's participation in therapy and seeking primary healthcare. While there are no statistical data, many people in Indonesia still believe in unproven traditional treatments. This has resulted in the phenomenon of severe cancer patients who undergo treatment late because they prefer alternative treatment instead of modern medicine (Martina et al., 2022; Sakafu et al., 2022). Therefore, health education to follow appropriate therapy is of importance for the Indonesian people.

In contrast, respondents showed higher level of comfort in the psychological-spiritual element (1.84□0.53). The researchers reasoned that it is contributed to Indonesians having a good spirituality and strong belief in religion, with the majority being Muslims (Komariah et al., 2020; Martina et al., 2022). The cancer diagnosis is seen as a form of ordeal or test from God. This spirituality can be developed further to improve the patient's ability to deal with the illness. Psychological strength and spirituality can make patients live comfortably because they are confident that everything that happens to them is from the will of the Creator. Patients believe if they accept everything sincerely, they will have a better life after their passing (Komariah et al., 2020).

The last discomfort was environmental discomfort (1.78□0.84). This result explains that the quality of health services is good and can make patients comfortable even if they are physically ill. The pandemic situation was expected to lower the level of comfort in relation to the environmental condition as many environmental restrictions were applied to prevent the spread of COVID-19 to the greatest extent. Environmental comfort is very necessary for cancer patients. This environmental comfort can be included in transcendence-type comfort according to Kolcaba's theory (Gonzalez-Baz et al., 2023). Nurses can help increase environmental comfort by providing distraction using virtual reality technology (Gautama et al., 2023).

Univariate Test (Characteristics of Respondents)

The gender was not used as a variable as all the respondents were female. In Indonesia in particular, breast cancer cases in men are rarely found, with no statistical data.

The study shows that most of the respondents are 46–64 years old. The results of this study are similar to Narisuari and Manuaba (2020), who investigated Sanglah Central General Hospital (RSUP) in Denpasar, Bali, and discovered the highest age proportion of breast cancer survivors is 41–50 years old. According to Laconi et al. (2020) the incidence of most cancers increases with age because of mutations which accumulate in body tissues throughout life, and some of these mutations contribute to cancers.

Furthermore, the majority of the respondents earned higher education, starting from high school until a doctoral degree. Narisuari and Manuaba (2020) discovered that most breast cancer patients earned a high school degree and a bachelor's degree. The researchers include high school graduates at a higher education level because the data indicate that the majority of Indonesian citizens earned secondary education or high school (Central Bureau of Statistics, 2019). Higher education contributes to proper information receival and adequate comprehension. Proper education according to educational background is something that nurses need to pay attention to when providing information. The data of this study were in line with Ministry of Health (2019) findings' postulating that women with higher education tend to find the breast cancer earlier because they have better accessibility to cancer screening and diagnosis than other groups (Ministry of Health, 2019).

Most respondents of this study were married. Previous research also shows that the number

of married respondents is greater than single respondents (Susilowati and Alfiyanti, 2021). Respondents who are married have a partner who might be able to provide comfort. Most of the respondents were unemployed, which aligns with most similar studies in Indonesia. Many married women in Indonesia prefer to not work to better care for their family or quit their job for family-related reasons. It contrasts with the results of studies of women with breast cancer in other countries who showed higher number of working women (Dumas et al., 2019; Park et al, 2020). The cancer diagnosis also contributed to the number of unemployed women. The reason for being sick with breast cancer is what makes respondents who originally had jobs choose to quit their jobs and focus on the treatment they are undergoing. Treatment-related factors such as mastectomy and the combination of chemotherapy and hormone therapy affected them to leave their work (Taguchi et al., 2019). Being out of work can be financially uncomfortable. Cancer patients require enormous costs for therapy and daily living expenses. The income generated from work can help in the treatment process for breast cancer patients (Mudaranthakam et al., 2023).

In addition, the study found that the most common cancer stages suffered by the respondents are stages III–IV. Previous study also discovered that most of the respondents suffer from stage III cancer because of delayed treatment during the pandemic (Akhtar et al., 2023; Narisuari and Manuaba, 2020). Kumar and Dey (2020) stated other factors that might delay treatment including financial issues, social containment and travel restrictions during the pandemic, imposing difficulties for patients to attend the hospital for treatment. Furthermore, some patients came from rural area for treatment, driving them to look for accommodation and food facilities. Amidst the lockdown, arranging for food and shelter was another big hurdle faced by these patients.

On the other hand, with the increase in surge of COVID-19 patients, hospitals were forced to allocate resources and oncology surgeries to be delayed. In the first half of 2021, due to the rising trend of the COVID-19 pandemic, there had been an acute shortage of ventilators as well as PPE, causing further surgical delays. Also, a shortage of staff members dealing with oncology treatment and intervention led to unwanted delays. Late-stage cancer conditions certainly caused greater discomfort than early stages and the prognosis for the treatment results was certainly worse (Kumar and Dey, 2020).

Most of the respondents had been diagnosed for less than three years. This shows that the majority of respondents were new cases of breast cancer, in line with the number of new cases of breast cancer which reached 68,858 cases (16.6%) out of a total of 396,914 new cases of cancer in Indonesia (Globocan, 2020). Baseline Health Research (BHR) data show an increase in cancer prevalence in Indonesia from 1.4% in 2013 to 1.49% in 2018 (Prihantono et al., 2023).

The results also showed that the majority of respondents were undergoing chemotherapy treatment. Anwar et al. (2020) investigated Dr. Sardjito Central General Hospital, Yogyakarta, and indicated that most of the respondents undergo chemotherapy. The use of chemotherapy treatment was covered by national health insurance, resulting in most of the respondents having registered national health insurance, namely BPJS Kesehatan. This finding was in line with reports that cancer was the second-highest disease that costs BPJS Kesehatan after heart disease. BPJS Kesehatan reported that the cost burden caused by cancer in 2018 was IDR 2.7 trillion (Kusuma and Nodia, 2019). BPJS Kesehatan remained helpful for patients who cannot afford it because it guarantees almost all medical expenses.

Almost all respondents in this study have received social support. This condition is supported by Aruan and Isfandiari (2015), who proved a relationship between social support and motivation to recover from breast cancer, thus, patients are encouraged to get treatment immediately. The strengths of Indonesian culture include supporting sick family members and friends. However, lengthy illness could cause family fatigue. Therefore, nurses also need to pay attention to the comfort of family members in addition to patient comfort.

Bivariate Test (Characteristics and Comfort Variable)

The results showed that there were no significant differences in the variables of age, level of education, marital status, occupation, monthly income, cancer stage, diagnosis duration, health insurance, and social support to gain comfort. In contrast to previous research, social support did not show a relationship as only one respondent did not receive it. This was a limitation of this research. Cancer patients not only struggle with their disease physically and psychologically but also struggle with social restrictions. Patients with lower education levels and income status, retired or unemployed, and/or having larger household sizes experienced more psychosocial burden (Okyere Asante et al., 2023).

However, there was a significant difference between the variables of treatment and room and the variable of comfort ($p < 0.05$). The highest comfort value was found in chemotherapy treatment and outpatient rooms. These two characteristics were related because chemotherapy is the most widely used outpatient treatment. The results of this study were supported by the literature, which postulated that patients undergoing chemotherapy are considered to have controlled cancer with good performance status thus reducing the costs and limiting the risk of hospital-acquired infections (Kimura et al., 2016). Such a condition certainly increases the comfort of chemotherapy outpatients.

Tan et al. (2016) reported that outpatients could

significantly adjust their psychological conditions because they received social support from families who live with them. Thus, these outpatients showed a better comfort level than inpatients did. During the COVID-19 pandemic, the Dharmais Cancer Hospital still recommended patients visit the hospital for medical check-ups, especially when they were scheduled to undergo chemotherapy, radiotherapy, or surgery. The Dharmais Cancer Hospital emphasized that delaying cancer treatment would worsen the patient's condition (Dharmais, 2020d). This study discovered that most patients firmly trust the hospital's new policies. Moreover, their anxiety levels decreased because they and the hospital staff wear PPE. They felt comfortable in a more conducive, clean, and tidy room. Such conditions certainly improve the quality of chemotherapy services.

The results of this study were supported by Prajoko and Supit (2020), who investigated at Dr. Kariadi Hospital, Semarang and discovered that, despite changes in hospital and treatment policies, more than half of the respondents still perceived that the quality of general healthcare and chemotherapy services remained consistent or even better during the COVID-19 pandemic. Most patients have continued to do standard chemotherapy since the pandemic. They argued that more PPE worn by hospital staff could further improve the quality of services. Moreover, most patients possessed adequate knowledge and appropriate practices about COVID-19 prevention measures.

On the other hand, most of the inpatients underwent surgery and therapies and showed higher discomfort scores in contrast. Some inpatients might have been newly diagnosed or underwent treatment for the first time. Thus, they experienced physical and mental health crises over understanding gender identity when being diagnosed with breast cancer. The surgical procedures and various treatments, such as radiotherapy and chemotherapy, were perceived as complex and challenging for patients and their families. Such a condition negatively impacted the comfort of inpatients (Gina and Sigiro, 2019).

This study has limitations in sample size because the data collection was carried out during the COVID-19 pandemic. However, the sample size still meets the minimum requirements. A more comprehensive survey is required to provide accurate statistical data to the number of breast cancer patients and their prevalence to serve as a base to calculating a bigger sample size for studies. As this study simply described how the comfort conditions of breast cancer patients during the COVID-19 pandemic and what factors influence it, future research is required to make a model for proper managerial scheme in ensuring a high level of comfort for breast cancer patients during a pandemic or similar situation.

Conclusions

The characteristics of respondents, such as age, gender, level of education, marital status, occupation, monthly income, cancer stages, duration of diagnosis, health insurance, and social support, are not related to comfort levels. However, the treatment and type of care are related to comfort. Chemotherapy treatment and patients undergoing treatment at outpatient rooms showed greater level of comfort than in other groups.

Patients felt comfortable in a neat, clean, and conducive hospital environment and perceived that implementing health protocols prevented the spread of COVID-19. This study recommends that nursing services optimize all possible aspects of comfort. Nurses could assist patients to relieve the physical symptoms when patients experience physical discomfort. In addition, nurses could work with patients and families to determine patients' comfort during the treatment, especially for those in pre- or post-surgery inpatient rooms. Nurses could conduct activities such as providing moral support, relaxing interventions, facilitating patients to perform religious activities, and creating a calm environment. Interventions that can maintain or improve the comfort aspect will optimize patients' health conditions.

Declaration of Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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Data Availability

Data is available from breast cancer patients who were undergoing treatment at Dharmais Cancer Hospital and were willing to fill out an informed consent form, and data is stored using the Excel software.

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