PSYCHOSOCIAL DISTRESS, BODY IMAGE PERCEPTION, AND COPING MECHANISMS AMONG BREAST CANCER PATIENTS: A CROSS-SECTIONAL STUDY AT A TERTIARY HEALTH FACILITY IN SUB-SAHARAN AFRICA

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ABSTRACT

Background: **Breast cancer is the most common malignancy among women worldwide, often leaving survivors with significant psychological distress and altered body image. Understanding these psychosocial challenges and the coping mechanisms used is crucial for providing holistic care.**

Aim: **This study assessed the prevalence of psychological distress, body image perception, and coping mechanisms among breast cancer survivors and explored the relationship between coping strategies and body image perception.**

Methods: **A cross-sectional study recruited 160 adult female breast cancer survivors (mean age 42.77±7.50 years). Data were collected using structured questionnaires, including the General Health Questionnaire (GHQ-12) for distress, a psychosocial support scale, a body image perception tool, and the Brief Coping Orientation to Problems Experienced (Brief COPE) inventory. Data were analysed using descriptive statistics and t-tests.**

Results: **High rates of distress were observed: 57.5% of respondents reported psychological distress, and 62.5% experienced body image dissatisfaction. Psychosocial support was low for 51.9% of participants. The most common coping mechanisms were 'religion' and 'active coping'. Higher body image distress was significantly associated ($p < 0.05$) with both adaptive (active coping, acceptance, religion) and maladaptive (self-distraction, denial, venting, behavioural disengagement, self-blame) coping strategies.**

Conclusion: **Psychological distress and body image dissatisfaction are highly prevalent in this group of breast cancer survivors. These findings underscore the need for early, targeted psycho-oncological interventions that address the complex relationship between body image distress and reliance on both adaptive and maladaptive coping strategies.**

Keywords: Breast cancer, Psychosocial distress, emotional suffering, coping adaptation or maladaptation, Brief COPE.

INTRODUCTION

Breast cancer remains an immense global public health challenge. It stands as the most frequently diagnosed malignancy and the leading cause of cancer-related mortality among women worldwide, contributing to millions of lost life-years annually.[1] The burden is particularly significant and rapidly increasing in low- and middle-income countries (LMICs), especially those in sub-Saharan Africa.[1,2] In this region, incidence rates are rising, and the disease often presents at advanced stages, compounding the challenges of limited healthcare infrastructure and restricted access to specialised oncology care.[3,4] Consequently, survival outcomes in sub-Saharan Africa often lag behind global averages, influencing not just physical health but also the profound psychosocial experience of the patients.[3]

A breast cancer diagnosis is inherently life-altering, and survivorship is commonly accompanied by substantial psychosocial burden.[5,6] This burden manifests as significant psychological distress, including high rates of anxiety, depression, and fear of recurrence.[7,8] Furthermore, the physical treatments, namely surgery (mastectomy or lumpectomy), chemotherapy, and radiotherapy, can dramatically affect the body.[9] The resulting visible changes, such as surgical scars, hair loss, and treatment-induced weight fluctuations, can severely compromise body image and self-esteem, impairing intimate relationships and social functioning.[9,10] These factors necessitate effective emotional and social adaptation, making the patient's coping mechanisms central to their quality of life.

The way women manage these stressors, their coping strategies, can either promote resilience (adaptive coping like active problem-solving or acceptance) or worsen distress (maladaptive coping like denial or self-blame).[11] While comprehensive, multidisciplinary psychosocial support is standard in high-income countries, patients in resource-constrained settings, such as many parts of sub-Saharan Africa, often face their illness with suboptimal or non-existent formal support systems.[12] Understanding how women in this specific context cope with the interplay of psychological distress and altered body image is thus critical for developing meaningful support services.

Although global literature consistently highlights the psychological and social dimensions of cancer care, there is a recognised paucity of region-specific empirical data from sub-Saharan Africa.[13] The unique blend of cultural norms around illness, strained economic resources, varying educational attainment, and healthcare system limitations likely shapes the disease experience, psychosocial responses, and coping strategies in ways that global studies cannot fully capture. To bridge this critical gap and provide evidence-based recommendations, this study was undertaken. It aims to comprehensively assess the prevalence and interplay of psychological distress, body image perception, and specific coping mechanisms among breast cancer patients receiving care at a major tertiary healthcare facility in sub-Saharan Africa. The findings are intended to inform the design of culturally and contextually relevant psycho-oncological interventions.

METHOD

Study Setting and Design

This study employed a cross-sectional design to gather information from eligible breast cancer patients. The research was conducted at the Department of Radiation Oncology, University College Hospital (UCH), Ibadan, Oyo State, Nigeria. UCH is a major tertiary healthcare facility in the region, serving a large catchment area.

Study Population and Eligibility

The target population comprised adult women with a confirmed histological diagnosis of breast cancer who were actively receiving or accessing care at the Department of Radiation Oncology.

- **Inclusion Criteria:** Participants had to be at least 18 years of age and have been accessing care at the facility for a minimum of 12 months.
- **Exclusion Criteria:** Patients presenting with other acute debilitating medical conditions or documented mental illnesses were excluded to ensure that the psychological distress and coping responses measured were primarily related to the cancer experience.

Sample Size

The minimum sample size was calculated using the Leslie Kish formula for a single proportion.

$N = Z^2pq/d^2$

N = desired sample size, Z = standard normal deviate, usually set at 1.96 corresponding to 95% confidence level, p = proportion of the target population estimated to have a negative body image perception.

A prevalence of 30% representing the proportion of women with breast cancer dissatisfied with their body image, was used.[14]

q = proportion of the target population not having the characteristic, d = degree of accuracy required = 7.5%, Z = 1.96

$n = \frac{1.962 \times 0.3 \times 0.7}{0.0752} = 143$

The estimated sample size is 143.

Adjusting for a 10% non-response rate,

N = Sample size/ (1 - nonresponse),

N = 143/0.9

N = 158.9 ≈ 159

Sampling Technique and Recruitment

A systematic random sampling technique was used to select eligible participants. Given the average daily patient flow of approximately 40 breast cancer patients and a proposed data collection period of 23 working days, the sampling interval (K) was calculated as 6.

• Recruitment Process: The researcher approached every sixth (6^{th}) patient scheduled for care on their clinic day. The goal was to recruit up to seven patients daily. This systematic selection process continued over the 23 days until the desired sample size was achieved. Once approached, the study's purpose was thoroughly explained to each potential participant. Written informed consent was obtained before the administration of the questionnaires.

Data Collection Instruments

Data were collected using a structured, self-administered questionnaire divided into four main sections:

Socio-demographic and Clinical Profile:

A proforma was used to capture essential background information, including age, education level, marital status, employment, household income, and relevant clinical details such as duration of illness and treatment history.

Data Management and Statistical Analysis:

All data were coded, cleaned, and analysed using SPSS version 22 software. Descriptive statistics (means, standard deviations, frequencies, and percentages) were

used to summarise the sample characteristics. Inferential statistics, including independent samples t-tests, one-way analysis of variance (ANOVA), Pearson correlation, and Chi-square tests, were performed to test for associations and differences between variables. A 5% (0.05) level of significance was used for interpreting all statistical results.

Tools used for evaluating key concepts in the study

Assessment of psychological distress:

The General Health Questionnaire (GHQ) was utilised to evaluate psychological distress among respondents during the four weeks preceding the study.[15] Each item in the questionnaire offers four possible response options, which are scored using a binary method, assigning either 0 or 1 depending on the severity of the response. The total score for each individual is calculated by summing the item scores, resulting in a possible range from 0 to 12. A total score between 0 and 5 was interpreted as indicating 'no psychological distress, whereas a score of 6 or higher was classified as representing 'probable psychological distress.

Assessment of body image perception:

We utilised a 10-item scale originally developed by Hopwood et al,[8] to assess patients' perceptions of their appearance and any changes they may have experienced due to illness or treatment. The questionnaire asked respondents to rate their feelings over the past week(s) using a 4-point Likert scale, ranging from 'not at all' (0) to 'very much' (3). Each of the 10 items was scored accordingly, and the individual item scores were summed to generate a total score for each participant, with possible scores ranging from 0 to 30. A score of zero indicated no symptoms or distress, whereas higher scores reflected increasing levels of symptom burden and psychological distress related to appearance. For analysis, the mean score across all items was used as a threshold to dichotomise responses into two categories: scores of less than 12 were classified as reflecting a positive body image perception, while scores greater than 12 indicated a negative perception.

Assessment of coping mechanisms:

To evaluate the coping strategies employed by participants, we utilised the Brief Coping Orientation to Problems Experienced (Brief COPE) inventory developed by Carver,[6] a widely used and validated instrument for assessing various coping mechanisms in response to stress. The tool comprises 28 items, grouped into 14 distinct subscales, with each subscale representing a specific coping strategy (e.g., active coping, denial, substance use, acceptance, planning, etc.). Each coping strategy is measured using two items, allowing for a nuanced understanding of the different ways individuals respond to challenging situations.

Participants were asked to reflect on their behaviours and thoughts during a recent period of stress and indicate the extent to which they engaged in each coping activity. Responses were recorded using a four-point Likert scale, ranging from 0 ("I haven't been doing this at all") to 3 ("I've been doing this a lot"). This format provides a quantifiable measure of the frequency and intensity of various coping responses, allowing for both individual and group-level analysis.

Data management and statistical analysis

All data were analysed using descriptive and inferential statistics with SPSS version 22 software. (IBM Corp: Armonk, NY, USA). Frequencies and proportions were used to summarise the categorical variables, while means with standard deviations or medians with interquartile ranges were used for numerical variables. Test for association was performed using t-tests, and statistical significance was defined as $p<0.05$.

Ethical considerations

The study protocol received approval from the UI/UCH Institutional Review Committee (Approval Number: UI/EC/190195). The research strictly adhered to the principles of clinical ethics, ensuring data confidentiality, beneficence, and voluntariness throughout the process. Written informed consent was obtained from every participant before data collection. The study adhered to the Declaration of Helsinki.

RESULTS:

A total of 160 adult female participants were enrolled in the study, with a mean age of 42.77 years (SD = 7.50). One hundred and twenty-nine (80.63%) women were married, out of which 108 (83.7%) belonged to monogamous family structures. Among the participants, 119 women (74.38%) had been living with a breast cancer diagnosis for more than three years at the time of the study. Regarding cancer staging at the time of diagnosis, 53 participants (33.13%) were identified with stage I breast cancer, 66 participants (41.25%) with stage II, and 41 participants (25.63%) with stage III disease. The majority of breast masses were detected through breast self-examination (BSE), accounting for 135 participants (84.38%). In terms of treatment history, 97 women (60.63%) had undergone mastectomy, and 135 participants (84.38%) had been receiving treatment—either chemotherapy or radiotherapy—for three years or less. A positive family history of breast cancer was documented in 24 participants (15%). Table 1 details the sociodemographic characteristics of participants.[8]

Table 1: Socio-demographic characteristics of participants

Sociodemographic characteristics (160)	Frequency	Percentage
Age		
< 40 years	74	46.25
≥ 40 years	86	53.75
Highest level of education		
Primary	50	31.25
Secondary	52	32.50
Tertiary	58	36.25
Marital status		
Currently married	129	80.63
Not currently marries	31	19.37
Have children		
Yes	143	89.36
No	17	10.64
Currently living with		
Adult offspring	34	21.25
Nuclear family members	105	65.62
Others	21	13.13

Prevalence of psychosocial distress among respondents

Using the GHQ scoring method, we discovered that psychological distress was probable in 57.5 % of the study respondents (Figure 1, Table 2)

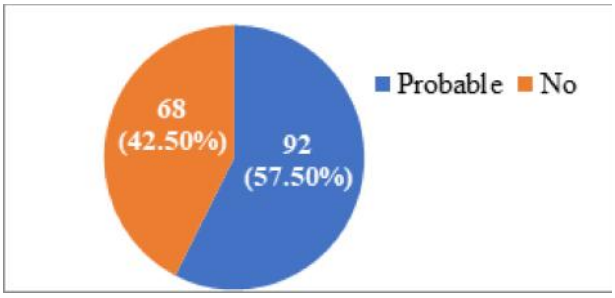

Figure 1: Probability of psychological distress (categorised)

The frequency distribution of the GHQ items indicates a substantial psychological impact on the patients, with over half of the sample reporting struggles with core aspects of self-worth, specifically by losing confidence in themselves (n=83, 51.88% in high-distress categories). The affective components of distress were also highly pronounced, as more than half of the patients (n=91, 56.88%) reported difficulty feeling reasonably happy**,** and 76 (47.51%) patients frequently felt unhappy and depressed. Conversely, a smaller proportion of patients reported severe difficulties with basic cognitive function like concentrating on activities (n=46, 28.76% in high-distress categories), suggesting emotional and confidence-related struggles are more pervasive than acute cognitive impairment. Details of the GHQ items measuring psychosocial distress are added in the supplementary materials as Table 1.

Body image perception among respondents

Severe body image concerns were highly prevalent across the sample, with 67 (41.88%) patients reporting high distress ("Quite a bit" or "All of the time") concerning both feeling less sexually attractive and being dissatisfied with the appearance of their scar. Furthermore, the impact was widespread, as nearly half of the respondents consistently reported experiencing moderate distress ("A little of the time") across nearly all items, including feeling less physically attractive (n= 78, 48.75%) and feeling dissatisfied with their appearance when dressed (n=77, 48.13%). Details of the body image perception among respondents are in the supplementary materials (Table 2)

Recategorization of body image perception into no positive or negative body image perception revealed that 62.5% of the respondents reported negative body image perception (Table 2)

Table 2: Recategorised body image perception among breast cancer patients

Category of Perception	Frequency (n)	Percentage (%)
Negative body image perception/ Increasing symptoms/distress	100	62.5
Positive body image perception/ No symptom/ distress	60	37.5
Total	160	100

Table 3: Coping mechanism (subscales)

Coping Mechanism	Mean	Standard Deviation
Adaptive Strategies		
Active coping	3.00	1.45
Planning	2.80	1.30
Positive reframing	2.50	1.45
Acceptance	2.93	1.36
Humour	2.03	1.59
Religion	3.83	1.68
Using emotional support	2.67	1.42
Using instrumental support	2.99	1.25
Maladaptive Strategies		
Self-distraction	2.74	1.55
Denial	2.84	1.43
Venting	2.67	1.17
Substance use	1.77	1.77
Behavioural disengagement	2.53	1.40
Self-blame	2.30	1.39

Coping mechanisms of study participants

Table 4 shows that the respondents employed various coping mechanisms, with the means (±SD). Among all the coping mechanisms employed, respondents had an average score of more than three in just 'Active coping' and 'Religion' as coping mechanisms.

Table 4: Coping and body image perception

Coping mechanisms	Body Image Perception, Mean (SD) Positive	Negative	T-test	P value
Active coping	2.52(1.59)	3.29 (1.28)	-3.351	**0.001**
Planning	2.60(1.47)	2.93 (1.65)	-1.561	0.121
Positive reframing	2.32 (1.50)	2.62 (1.43)	-1.284	0.201
Acceptance	2.58 (1.43)	3.13 (1.28)	-2.497	**0.014**
Humour	2.07 (1.50)	2.01 (1.65)	0.217	0.828
Religion	3.33 (1.71)	4.12 (1.61)	-2.920	**0.004**
Using emotional support	2.40 (1.42)	2.83 (1.40)	-1.866	0.064
Using instrumental support	2.72 (1.38)	3.16 (1.43)	-2.195	**0.030**
Self-distraction	2.01(1.45)	3.17 (1.45)	-4.864	**0.001**
Denial	2.36 (1.57)	3.12 (1.27)	-3.323	**0.001**
Venting	2.20 (1.30)	2.96 (0.99)	-4.163	**0.001**
Substance use	1.43 (1.44)	1.97 (1.93)	-1.863	0.064
Behavioural disengagement	1.73 (1.19)	3.00 (1.30)	-6.145	**0.001**
Self-blame	1.85(1.33)	2.57 (1.35)	-3.265	**0.001**

Association between coping mechanisms and body image perception of respondents

Table 4 shows that the use of coping mechanisms such as active coping, acceptance, religion, instrumental support, self-distraction, denial, venting, behavioural disengagement, and self-blame was significantly associated with body image perception ($p < 0.05$).

DISCUSSION

The findings of this cross-sectional study offer a critical, context-specific view into the emotional landscape of breast cancer patients accessing care in a major tertiary health facility in Sub-Saharan Africa. By quantifying the prevalence of psychological distress, documenting the severity of body image concerns, and mapping the corresponding coping mechanisms, our study addresses a recognised gap in region-specific psycho-oncology literature. The most salient finding is the alarmingly high prevalence of distress and dissatisfaction, coupled with a complex association between body image distress and the simultaneous use of both adaptive and maladaptive coping strategies.

Prevalence of Psychological Distress and Body Image Concerns

Our observation that 57.5% of the study participants exhibited probable psychological distress (GHQ score e"6) is striking. This figure is notably higher than the distress prevalence often reported in high-income countries (HICs), where rates typically range between 30% and 50% in oncology settings.[5,7] Also, a systematic review and meta-analysis of 34 studies gave a pooled prevalence of 50%.[16] The elevated rate observed here may be a direct reflection of the unique and compounded burdens faced by patients in low- and middle-income countries (LMICs). These burdens go beyond the physical disease and include profound financial strain, challenges with transportation, social stigma, and limited access to comprehensive, affordable psychosocial services.[12,13] Recent studies from Nigeria confirm that psychological morbidity remains high among breast cancer patients, often exceeding 50%, reinforcing the need for immediate, localised intervention.[17,18] For many patients in this setting, the diagnosis does not just mean battling cancer, but battling the entire socio-economic system.

Similarly, the finding that 62.5% of respondents reported negative body image perception is deeply concerning, aligning with global literature that places body image disruption as a central issue in breast cancer survivorship.[9,18] The granular data revealed that the highest distress was related to feeling less sexually attractive and dissatisfaction with the appearance of the surgical scar. Given that 60.6% of our cohort underwent mastectomy, these findings underscore that the physical alteration of the breast carries a deep psychological cost, impacting self-worth, femininity, and intimate relationships, regardless of geographic location.[10,14] The high prevalence confirms the critical need to view surgical recovery not just in terms of wound healing, but in terms of psychological reintegration.

Coping Strategies in a Resource-Constrained Context

In response to this substantial burden and distress, patients demonstrated a reliance on two primary

coping mechanisms: Active Coping (Mean = 3.00) and, most prominently, Religion (Mean = 3.83). The high use of active coping, which involves taking steps to remove or circumvent the stressor,[6,11] is encouraging, suggesting that these women are actively engaged in managing their illness and treatment.

However, the overriding reliance on religious coping is a hallmark finding in Sub-Saharan African psychosocial studies and speaks directly to the region's cultural context. Religion often functions as the primary, and sometimes only, available social support mechanism, offering hope, meaning, and a framework for enduring suffering in the face of unpredictable and devastating illness.[12,19] While religious coping can provide immense comfort and positively impact mental health,[20] its predominance in the absence of robust formal psychosocial support means it cannot replace the need for professional, evidence-based medical and psychological care.

The Complex Interplay Between Body Image and Coping

Perhaps the most significant contribution of this study is the exploration of the association between body image perception and coping strategies. We found that patients who reported negative body image perception utilised a wider and more intense range of coping mechanisms, exhibiting a statistically significant association ($p < 0.05$) with almost all strategies tested, including both:

- Adaptive Strategies: Active coping, Acceptance, Religion, and Instrumental Support.
- Maladaptive Strategies: Self-Distraction, Denial, Venting, Behavioural Disengagement, and Self-Blame.

This counterintuitive finding suggests that heightened body image distress serves as a potent, overwhelming stressor that forces patients to mobilise every available coping resource. Patients who feel the most distressed about their appearance are the ones who are simultaneously trying hardest to solve the problem (Active Coping) and seeking meaning (Religion), but are also so overwhelmed that they rely on destructive emotional avoidance (Denial and Venting) and internalising blame (Self-Blame). This pattern indicates not just the use of coping, but a potential failure of coping efficacy, highlighting the desperate need for professional help to discard maladaptive strategies while reinforcing adaptive ones. Clinically, this reveals that high distress does not lead to passivity; rather, it leads to a chaotic and less effective "kitchen sink" approach to managing emotional pain.

Implications for Clinical Practice

These results carry profound implications for the design of psycho-oncological services at tertiary centres in Sub-Saharan Africa. The integration of mental health screening should be routine; the General Health Questionnaire (GHQ-12), as successfully employed here, is a simple, cost-effective tool that should be used universally to identify patients at high risk of distress immediately upon entry to the cancer unit.

Furthermore, interventions must be culturally sensitive and multidisciplinary. They should include:

1. **Body Image-Specific Counselling:** Dedicated programs must address sexual health, intimacy, and scar management, especially for the high number of mastectomy patients, utilising techniques that promote self-acceptance.[8,18]
2. **Coping Skills Training:** Training should focus on transitioning patients away from maladaptive strategies (Denial, Self-Blame) by reinforcing Active Coping and leveraging the existing strength of religious coping without promoting fatalism.
3. **Harnessing Social Context:** Given the high percentage of patients who are married (80.63%) and live with family, interventions should be extended to include family members to improve instrumental and emotional support, thereby reducing the individual's psychosocial burden.

Strengths and Limitations

A key strength of this study is its cross-sectional design utilising validated, standardised instruments (GHQ-12, Brief COPE) within a homogenous patient group in a resource-constrained setting, thus offering a unique benchmark for future research in the region. However, the cross-sectional nature limits our ability to infer causality; we cannot definitively state that body image dissatisfaction causes the use of maladaptive coping, only that they occur simultaneously. Furthermore, the findings are specific to patients accessing care at a single tertiary hospital, potentially excluding individuals who have faced greater barriers to care or have been lost to follow-up, which might lead to an underestimation of the true prevalence of distress in the wider community.

Conclusion

Psychological distress and body image dissatisfaction are overwhelmingly prevalent among breast cancer patients in this Sub-Saharan African cohort. The significant association between body image distress and a pattern of simultaneous adaptive and maladaptive coping strategies highlights the critical need for integrated psycho-oncology support. Targeted interventions must be urgently developed to routinely screen for distress, address body image concerns as a

priority, and cultivate effective, culturally grounded coping skills to enhance the overall quality of life for these survivors.

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SUPPLEMENTARY MATERIALS

Table 1: Patient responses to general health questionnaire (GHQ) items measuring psychological distress

Items	Frequency of Response Categories (%)				Total (%)
	1	2	3	4	
1. Have you recently been able to concentrate on whatever you are doing?	30 (18.75)	84 (52.50)	31 (19.38)	15 (9.38)	160 (100)
2. Have you recently lost much sleep over worry?	26 (16.25)	71 (44.38)	51 (31.88)	12 (7.50)	160 (100)
3. Have you recently felt you are playing a useful part in things?	16 (10.00)	69 (43.13)	56 (35.00)	19 (11.88)	160 (100)
4. Have you recently felt capable of making decisions about things?	9 (5.63)	73 (45.63)	54 (33.75)	24 (15.00)	160 (100)
5. Have you recently felt under strain	21 (13.13)	74 (46.25)	59 (36.88)	6 (3.75)	160 (100)
6. Have you recently felt you could not overcome your difficulties	27 (16.88)	62 (38.75)	61 (38.13)	10(6.25)	160 (100)
7. Have you recently been able to enjoy day-to-day activities?	21 (13.13)	59 (36.88)	59 (36.88)	21 (13.13)	160 (100)
8. Have you recently been able to face up to your problems?	11 (6.88)	76 (47.50)	60 (37.50)	13 (8.13)	160 (100)
9. Have you recently been feeling unhappy and depressed?	13 (8.13)	71 (44.38)	67 (41.88)	9 (5.63)	160 (100)
10. Have you recently been losing confidence in yourself!	23 (14.38)	54 (33.75)	71 (44.38)	12 (7.50)	160 (100)
11. Have you recently been thinking of yourself as a worthless person?	33 (20.63)	49 (30.63)	70 (43.75)	8(5.00	160 (100)
12. Have you recently been feeling reasonably happy, all things considered?	19 (11.88)	50 (31.25)	73 (45.63)	18 (11.25)	160 (100)

Table 2: Body image perception

Body Image Assessment	Not at all	A little of the time	Quite a bit	All of the time	Total (%)
Have you been feeling self-conscious about your appearance?	45 (28.13)	61 (38.13)	43 (26.88)	11 (6.88)	160 (100)
Have you felt less physically attractive as a result of your disease or treatment?	34 (21.25)	78 (48.75)	41 (25.63)	7 (4.38)	160 (100)
Have you been dissatisfied with your appearance when dressed?	33 (20.63)	77 (48.13)	41 (25.63)	9 (5.63)	160 (100)
Have you been feeling less feminine/masculine as a result of your disease or treatment?	35 (21.88)	67 (41.88)	50 (31.25)	8 (5.00)	160 (100)
Did you find it difficult to look at yourself naked?	37 (23.13)	67 (41.88)	50 (31.25)	6 (3.75)	160 (100)
Have you been feeling less sexually attractive as a result of your disease or treatment?	27 (16.88)	66 (41.25)	59 (36.88)	8 (5.00)	160 (100)
Did you avoid people because of the way you felt about your appearance?	30 (18.75)	71 (44.38)	48 (30.00)	11 (6.88)	160 (100)
Have you been feeling the treatment has left your body less whole?	27 (16.88)	71 (44.38)	50 (31.25)	12 (7.50)	160 (100)
Have you felt dissatisfied with your body?	26 (16.25)	68 (42.50)	53 (33.13)	13 (8.13)	160 (100)
Have you been dissatisfied with the appearance of your scar?	24 (15.00)	69 (43.13)	53 (33.13)	14 (8.75)	160 (100)

Mean body image perception score = 12.30 ± 6.12