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Unpacking the psychological and physical well-being of Ghanaian patients with breast cancer



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ABSTRACT

This study explored the psychological and physical well-being of 12 Ghanaian women diagnosed with breast cancer, aged between 22 and 69 years. Individual in-depth interviews were conducted with participants to understand their lived experiences following their diagnosis and treatment. Reflexive thematic analysis was used to analyse the transcripts. Findings revealed that patients' psychological and physical well-being relative to breast cancer diagnosis and treatment are marked by (a) persistent pain, (b) concerns with physical appearance, (c) a willingness to lose a breast for survival, (d) positive religious coping, and (e) posttraumatic growth (i.e., positive psychological changes in the aftermath of diagnosis or treatment). The findings suggest that recognising patients' concerns with pain, physical changes, and the will to lose a breast to survive in the care continuum may yield public health dividends. Moreover, the findings highlight the need for individualised psychotherapeutic interventions to assist the patients to deal with the disease in the aftermath of their diagnosis and treatment.

Introduction

Breast cancer is a leading cause of cancer mortality among Ghanaian women [1,2], and remains the most commonly diagnosed cancer in women in Ghana [3]. For example, the total number of new cases of cancer reported among Ghanaian women in the year 2020 was 14,078 [4,5]. Of this number, breast cancer represented 31.8%, exceeding cervical cancer (19.9%), ovary cancer (7.1%), and liver cancer (6.9%) [4]. Despite the increasing breast cancer incidence and mortality in Ghana, commensurate research attention has not been devoted to this population health problem. A related problem is that most available studies on breast cancer in Ghana have been conducted using population-based cancer registries, which are quantitative. See, for example, the following quantitative studies on the breast cancer experience in Ghana [3,6]. Only a few studies have used qualitative research approaches to unpack women's experiences of the disease [7-10]. Thus, to date, the psychological and physical experiences and breast cancer journeys of Ghanaian patients regarding their diagnosis and treatment have not been fully explored.

Although quantitative research on breast cancer is useful, it does not routinely offer research participants the opportunity to provide rich descriptions and relevant information on their experiences as they are lived, relative to time, context, and place. Scholars have long highlighted the importance of qualitative inquiry in healthcare when they argued that it offers researchers the opportunity to unpack research participants' subjective

experiences, options, and choices as well as how they respond to and live through those experiences [11,12]. It is well known that qualitative research brings to the fore the importance of human agency in health and illness. Because breast cancer affects the lived experiences of individuals with the disease in a cultural context, we used a social constructivist paradigm to guide the present study [13,14]. The constructivist paradigm holds that human experiences are the product of social interactions and that cognitive functions cannot be separated from the social context in which they occur. Therefore, we expected patients with breast cancer to offer different constructions and interpretations of breast cancer diagnosis and treatment relative to their socio-cultural context. Viewed from the constructivist and interpretivist perspectives [13], the present study aimed to explore the psychological and physical well-being of women diagnosed with breast cancer by answering the following research questions. What are Ghanaian women's experiences of living with breast cancer? How do Ghanaian women with breast cancer experience their diagnosis and treatment?

Method

Design

A qualitative exploratory design was used to assess the psychological and physical well-being of the patients.

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Participants

Participants were 12 outpatients receiving breast cancer treatment at the Oncology Clinic of a teaching hospital in Ghana. Following Braun and Clarke's recommendation that the number of interviews or focus group discussions to be conducted (i.e. sample size) should not be a prerequisite for achieving code and meaning-saturation in reflexive thematic analysis [15], the 12 participants were considered adequate for the present study.

Procedure

Purposeful sampling was used to recruit 12 women diagnosed with breast cancer aged between 22 and 69 years, and undergoing chemotherapy and mastectomy in a teaching hospital in Ghana. Permission to conduct the study was obtained from the Surgical Department of the teaching hospital. Participants were approached individually at the Oncology Clinic during clinic days by the research team with the help of clinic staff. The aims of the study were explained to patients and those who expressed interest in the study were recruited and interviewed. The inclusion criteria included being diagnosed with breast cancer (irrespective of the stage of cancer), being 18 years of age or older, being in a stable health condition following the initiation of treatment, and a willingness to participate in the study. Three participants who expressed interest in the study but did not meet the inclusion criteria were excluded from the study.

We conducted all interviews in a private space within the premises of the hospital to ensure participants' privacy. Individual in-depth interviews (IDIs) were conducted with participants to understand their lived experiences, following their diagnosis and treatment. Interviews were conducted using a pre-tested semi-structured interview guide. When necessary, participants were debriefed after an interview session. The interviews were audiotaped using a cell phone. To achieve reflexivity, field notes and memos were kept alongside the tape-recording. The interviews were conducted in English, GaDangme, and Twi depending on the respondent's fluency in the preferred language. The interviews lasted between 45 min and 1 hour.

Research ethics and patient consent

The study protocol was approved by the Ethics Committee for the Humanities (ECH) of the University of Ghana (Ref#: ECH104/16-17). All procedures performed in the study followed the ethical standards of the ECH of the University of Ghana and complied with the 1964 World Medical Association's Declaration of Helsinki and its later amendments or comparable ethical standards, including the International Committee of Medical Journal Editors' (ICMJE) Recommendations for the Protection of Research Participants. Permission to conduct the study was granted by the Medical Directorate of the teaching hospital. Oral informed consent was obtained from all of the participants before each interview.

Data analysis

The data were transcribed verbatim, entered, and coded in ATLAS. ti [16], a data management software. The coding process was guided by reflexive thematic analysis [17,18]. Reflexive thematic analysis is based on the inductive method of coding and allows the generation of analytical themes during the process of carefully reading through the interview transcripts [18]. All of the interview transcripts were coded independently by the principal investigator (ETK) and the third author (YAAU). Both ETK and YAAU have expertise in the use of ATLAS.ti. We carefully read the data and generated initial themes by examining patterns of shared meaning across interview transcripts. The focus was to unpack a participant's accounts of what she has lived through (psychological and physical) or is living through relative to breast cancer diagnosis and treatment. We generated descriptive themes to capture the essence of the breast cancer experience. All generated themes were compared to each other to determine

if a new theme was necessary or if it could be categorized under a previous theme.

Next, we generated central organizing themes (major themes) by regrouping similar subthemes. ATLAS.ti facilitated the generation of emergent themes and allowed the data to be analyzed iteratively. Through this iterative process, sections of data transcripts corresponding to each central organizing theme were extracted and reviewed to corroborate the generated themes. ETK and YAAU printed their ATLAS.ti analysis outputs and examined them for consistency and descriptive validity, alongside the original data transcripts. To enhance inter-coder agreement, coding discrepancies were resolved by consensus between ETK and YAAU. We present findings that illustrate the psychological and physical experiences of our participants relative to breast cancer diagnosis and treatment. In presenting the findings, we used participant identifiers in the data exemplars.

Rigour

Because qualitative research is known to contribute significantly to praxis (evidence-based practice), we made efforts to achieve rigour in the present study. To ensure rigour and establish the trustworthiness of our findings, we followed Guba's four criteria (i.e. credibility, dependability, confirmability, transferability) [19] and integrated them into the design, development of data collection tools, data collection, and the data analysis process. We ensured dependability by clearly describing the data analysis process as well as the findings following the recommended best practice [20,21]. We carefully selected quotations (data exemplars) to support the interpretation of the emerged themes. To enhance the credibility and confirmability of our findings, we described the aims and methods of this study in fluorescent ways. In addition, we undertook triangulation by using two methods of data collection (i.e., tape recording and note-taking/memos). Further, reflexivity in the interpretation of the interview data was ensured through the different perspectives the researchers brought to the data analysis process, where disagreements relating to codes/themes were resolved through discussions and consensus decision-making.

In addition, we followed the COREQ checklist (COnsolidated criteria for REporting Qualitative research) [22] in preparing our research report. We note that ETK is male and YAAU and ASG are female. All of the researchers did not have a relationship with the participants before the commencement of the study. All of the researchers believe in the social construction of knowledge and have inclinations toward phenomenology's methodological orientation. The researchers made efforts to bracket out their epistemological positions and ontological perspectives from influencing the data collection, analysis, and interpretation, consistent with best practice [23–25]. In addition, we returned the transcribed data to four of the research participants for member-checking and participant feedback.

Findings

Major themes emerging from the data related to study participants' experience of persistent physical pain, concerns with physical appearance, a willingness to have the *diseased* breast removed, positive religious/spiritual coping, and post-traumatic growth. The themes are presented in turn and are illustrated with quotations from the interviews. Quotations are annotated with participant identifiers. The socio-demographic characteristics of the participants are presented in Table 1.

Living with persistent pain

For some women, their diagnosis and treatment were associated with persistent pain in the breast, chest, or armpit. Various accounts of the experience of persistent pain from the *diseased* breast emerged prominently in the interviews. Here is what some participants had to say:

As we speak I'm feeling some shooting pains in my armpit, my chest. If I try to stretch my hand like this [patient stretches hand], I feel the pain. It's like a sharp pin pricking me. It's pain like no other. (Patient, 47-year-old)

Table 1 Sociodemographic characteristics of study participants (N = 12).

Variable	Frequency	Percentage (%)
Age range (years)		
20-39	3	25
40–59	7	58.3
60–79	2	16.7
Gender		
Female	12	100
Marital status		
Single	6	50
Married	4	33.3
Divorced/separated	2	16.7
Educational level		
Basic	2	16.7
Secondary	5	41.7
Tertiary	5	41.7
Religion		
Christian	9	75
Muslim	3	25
Employment status		
Employed	4	33.3
Unemployed	2	16.7
Self-employed	6	50
Living arrangement		
Alone	4	33.3
With family	8	66.7
Years lived with breast cancer		
<1 year	2	16.7
1–3 years	5	41.7
4–6 years	3	25
>6 years	2	16.7
Monthly household income		
<gh¢999< td=""><td>3</td><td>25</td></gh¢999<>	3	25
Gh¢1000-1,999	5	41.7
Gh¢2000-2,999	2	16.7
Gh¢3000-3,999	1	8.3
>Gh¢4000	1	8.3

I started feeling pain to the extent that I wasn't able to sleep well at night. The way I'm experiencing this thing...the thing is paining me. (Patient, 59-year-old)

Eii, for this disease, it was ok initially but now pains, intense pains in my breast. Because of that, they prescribed some medicine for me which reduced the pain. I know this medicine will make me feel better because when I started with the new treatment today, the pain I was feeling has reduced. (Patient, 25-year-old) ... I feel intense pain all over my chest and my hands feel awkward. (Patient, 62-year-old)

Concerns with physical appearance

Most of the participants indicated that they were placed on chemotherapy, before mastectomy. An important theme that emerged from participants' accounts revolved around the changes in the physical appearance of their body which they considered to be concerning. Specifically, participants' accounts suggested that they were concerned about loss of hair, changes in skin colour, rashes on body, swollen hands, and numbness arising from treatment. Some participants recounted their experiences as follows:

My nipples looked crooked and had sunk in. They're also hard. Because I'm on chemo, I can see that they're now becoming flexible. But the chemo is having impact on my skin colour. Can you see the blackening around this part? There're some rashes here too [patient shows body part]. But my doctor says they're side effects of chemo. (Patient, 52-year-old)

My breast was filled with fluid and the draining process took about a week. I'm on chemo. This is my second shot and my palms are all numb. But I think the symptoms are going away gradually. Previously, my hands were swollen and looked very awkward. So yesterday I went to take a scan to verify if things have normalized. (Patient, 43-year-old)

My condition was worsening by the day. I was scared about the breast surgery. However, the doctor told me the surgery would not affect my breast much. I, thus, chose to have surgery. Sadly, aside from the surgery scars, I don't like the look of my breast any more. (Patient, 36-year-old)

...I've lost all my hair, and my palm has blackened. When I eat I don't feel the taste of the food. (Patient, 57-year-old)

I braided my hair before starting the chemotherapy. After sometime when I went back home to lose the braids my hair had become weak. It can even fall off by just holding it. If you observe the spaces between my braids it looks as if my hair has been scraped off my scalp with a blade. (Patient, 40-year-old)

Willingness to lose a breast

One of the major themes that emerged from participants' accounts reflected their willingness to have the *diseased* breast/tissue removed. It would seem that, for most women in the present study, the idea of surgically removing a diseased breast (i.e., mastectomy) does not pose a big problem as long as they are convinced that other women with a similar illness have undergone similar surgical procedures and are doing well. This willingness to have the diseased breast removed seemed to be motivated by their survival instincts or self-preservation. Their accounts suggested that they hoped the breast removal may also 'remove' the source of their persistent pain.

My doctor explains that you'll see a woman passing by but she may probably have had her breasts removed, but you can't tell unless she reveals it. So this explanation assures me that the whole diagnosis and treatment isn't scary. That's why I asked the doctor to remove both breasts; I don't even want them again. (Patient, 36-year-old)

I believe God will help me go through it. I told the doctor that if the solution is to remove my breasts, he should go ahead and do it. (Patient, 28-year-old) I came to the hospital and did some tests. After the tests, the doctor reviewed the report and said it was breast cancer, and that he would put me on chemotherapy, and remove the diseased breast afterwards so that I can be well. I said that's fine with me. (Patient, 60-year-old)

Yeah... I told the doctor that if they could remove the diseased breast, then they should. But they did not because it had developed wounds. The doctor explained that it wouldn't be possible to remove it until they treated the wound first. (Patient, 52-year-old)

Positive religious coping

For some of the participants, praying and having faith in God seemed to be strategies they used to understand and deal with their health problems. This enabled them to not only cope with the physical and psychological aspects of their illness and treatment but also to find meaning in life. Their accounts suggested that adhering to one's treatment and medication may be complemented by divine intervention from God regarding healing.

If you're sick, you must add prayers and take your medicine, it will work. I'm telling you. It's good to go to the hospital while seeking healing from God. It will be well with you. You see... I can be in my room and receive healing. (Patient, 25-year-old)

Jesus heals but you also have to try and go to the hospital and add all to it. You will get well. (Patient, 59-year-old)

...oh it didn't frighten me, but what I know is that every disease has a name. Malaria can kill, cancer can kill, but it all depends on your level of faith in God. As for me I put my faith in God and believe that he will heal me of my disease. (Patient, 60-year-old)

... as for prayers, we all pray. To be frank, it's my prayer request that God should help me overcome this disease because I don't have any helper, he is my only helper. (Patient, 36-year-old)

Posttraumatic growth

Some of the participants seemed to have experienced positive psychological changes and personal growth reflecting posttraumatic growth (PTG), following their diagnosis and treatment. It seemed clear that for these participants this "new growth" was not there before their struggles

with breast cancer. Literature has shown that PTG can be experienced in five ways. They are (a) greater appreciation of life, (b) improved relationships with others, (c) new possibilities in life, (d) increased personal strength, and (e) spiritual change. Because individuals process trauma in unique ways, some of the accounts of our participants related to new possibilities in life, whereas others related to increased personal strength, or a greater appreciation of life.

I had heard about breast cancer but I did not know about its nature. When I was diagnosed with it, the days and weeks that followed were hell for me. Why me? What did I do wrong? My thoughts would go back and forth on my life's journey to try to identify what or who could have been responsible for this disease. But one year on, I know bad things do happen to good people for a reason. It was meant to prepare me for the next phase of my life. (Patient, 43-year-old)

It's not a nice diagnosis, but then the era we are in now, breast cancer is not scary anymore. Coping with the pain is manageable. It's not that fearful. I have an exam at school tomorrow so I try not to focus on the disease. (Patient, 28-year-old)

My diagnosis of breast cancer didn't worry me so much. I even thought it was a normal disease. It's rather people who called me to express great worry, telling me they heard I was sick and this and that... How they act rather tends to scare me. One friend called and was surprised at my reaction because she was rather crying but I wasn't. (Patient, 47-year-old)

The loss of my hair does not bother me because I know I'm endowed with much hair. When I'm through with the treatment I'm certain I'll recover my hair. (Patient, 45-year-old)

Discussion

This study explored the psychological and physical well-being of Ghanaian women diagnosed with breast cancer and undergoing treatment. The present qualitative data provide a preliminary understanding of the meaning-making and coping experiences in this patient population. Most women in the present study reported experiencing persistent pain in the diseased breast. This finding is consistent with that of previous qualitative research in Ghana, which reported that the negative effects of breast cancer treatment, such as pain, incapacitated most patients and reduced their activities of daily living [10]. Other qualitative work in Ghana has shown that some women diagnosed with breast cancer reported experiencing severe pain, which gave rise to suicidal ideations [26].

It is well known that pain is a subjective experience and can weaken a patient's resolve to continue with their treatment. Our results find support in earlier research which reported that, regardless of individual differences, persistent pain affects a breast cancer patient's psychological, physical, social functioning, and quality of life [27,28]. In addition, our results are consistent with that of a meta-analytic work which found that, regardless of the stage of cancer, approximately 51% of survivors experience pain [29]. The researchers also found cancer pain prevalence to be 55% (during treatment), 39% (post-treatment), and 66% with metastatic disease (at the end of life) [29].

An important finding in this study was patients' willingness to lose a breast to survive, despite that women generally consider the breast a very important part of their body because it accentuates their femininity, personal identity, and attractiveness [30,31]. Thus, living with breast cancer could impact a woman's body image with potentially adverse effects on physical and psychological well-being. Conversely, in the present study, women diagnosed with breast cancer seemed to be aware of the consequences of the diagnosis, including pain and death, and thus indicated their willingness to have the diseased breast removed so that they may live. Our findings compare favourably with that of a previous Ghanaian study which found the will to live as a major theme in the accounts of women diagnosed with breast cancer [26]. In addition, our findings are similar to those of prior studies which found that the will to survive motivated Taiwanese and British women diagnosed with breast cancer to opt for mastectomy/breast removal [32,33]. Further, the present result is consistent with those of a research which reported that, most Swedish women diagnosed with breast cancer seemed unfazed with

mastectomy and described it as "no big deal" and that losing a breast did not seem to affect their view of themselves as women [34]. Other work reported that Chinese women diagnosed with breast cancer expressed their unwillingness to gamble with life, and thus were eager to undergo mastectomy [35]. Taken together, these findings suggest that survival seems to be the most proximal consideration for having mastectomy among some Ghanaian women living with breast cancer.

Moreover, in this study, we found that most participants experienced some physical changes emanating from their treatment, which have brought about concerns with body image and physical appearance. It is common knowledge that the beauty of a woman is said to be in her hair, and for this reason, most women invest a lot of time and resources in grooming their hair. Thus, losing one's beautiful hair to breast cancer, as a result of chemotherapy, seemed to have affected their appearance and body image negatively. This finding is consistent with that of other work reporting that Ghanaian women living with breast cancer who experienced a loss of hair as a result of chemotherapy, felt uncomfortable about their appearance to the extent that they resorted to the use of wigs to cover their baldness [10]. Our result also finds support in a recent work which reported concerns about the loss of hair among Ghanaian women undergoing chemotherapy [9].

Furthermore, in this study, we found that some of the participants relied heavily on their religious/spiritual resources to cope with their illness. Our finding is consistent with that of earlier research which found that people diagnosed with cancer and who engaged in religious coping and surrendered control to God reported less depression and pain severity [37]. The study found that positive religious coping was associated with greater physical well-being and less anxiety. In addition, our finding is similar to that of a recent work which found a heavy reliance on spiritual coping among Ghanaian women diagnosed with breast cancer [8]. The form of spiritual coping in the present sample may be described as positive because it offers patients the opportunity to explore their relationship and spiritual connectedness with a transcendent force [38,39]. Empirical studies and metaanalyses have provided evidence suggesting that many people turn to religion/spirituality in coping with major life stressors to understand and deal with their difficulties [38,40]. For example, there is evidence that Christian prayer serves multiple functions in the coping process, including seeking divine guidance and expressing gratitude for life [41]. Other work found that spiritual coping helps women to interrogate and accept reality, deal with existential questions and lessons of life, and engage in spiritual surrender [42,43].

Relatedly, we found preliminary evidence suggesting that positive psychological changes (i.e., increased personal strength, new possibilities in life, greater appreciation for life, improved relationships, and spiritual change) in the aftermath of a breast cancer diagnosis can help to reduce distress among patients. This finding reflects aspects of posttraumatic growth (PTG) in some patients with breast cancer [44]. Posttraumatic growth describes the positive change a person experiences following a struggle with a traumatic event or adversity [45]. Our finding is similar to prior research which reported evidence of posttraumatic growth reflecting personal strength, improved relationships, appreciation for life, new possibilities, and spiritual growth among adult cancer survivors [46]. The idea that stressful life events or trauma can bring about positive changes has been the subject of growing research [47,48]. Various researchers, working independently, have provided empirical evidence to support the theory that a positive impact/growth can follow a traumatic event [49–52].

Implications for practice

Our findings have important implications for healthcare professionals attending to women diagnosed with breast cancer. Generally, growing research has demonstrated that psycho-oncological care is crucial to quality of life in cancer patients [53,54]. The Lancet Oncology Commission noted that efforts to reduce the growing cancer crisis in Sub-Saharan Africa must include the provision of psychosocial, supportive, and palliative care [54]. Other work has demonstrated the need for psycho-oncology care to be integrated into the cancer diagnosis and treatment in Ghana [55]. This

is because cancer survivorship is a process anchored in body-mind interactions [56], which can be moderated and/or mediated by various psychosocial factors. This situation calls for increased psychosocial interventions to support breast cancer patients to deal with the disease every step of the treatment journey. To achieve their desired effects, psycho-oncological interventions ought to be targeted to specific needs of the patient. Ghanaian therapists, psychologists, and medical oncologists can find intervention targets in Lang-Rollin and Berberich [56]. Psycho-oncology interventions that relate specifically to the findings in the present study are discussed in the paragraphs that follow.

First, pain is known to have a severe impact on the cognitive and affective functioning of patients. Thus, healthcare professionals should show interest in listening to, and respecting patients' complaints of pain and finding caring ways to manage the pain to reduce the impact of pain on their physical and psychological well-being. For example, healthcare professionals can recommend relevant games or moderate physical activities as a form of psychotherapeutic intervention to divert patients' attention from their pain. Second, medical practitioners ought to be aware of the survival instincts aroused by a breast cancer diagnosis and make survival a crucial part of their recommendation when assisting women living with breast cancer to take mastectomy decisions. This is because the need for self-preservation will most likely override women's meanings of the breast and its related emotional attachments.

Third, the role of religion/spirituality in the meaning-making and coping process during illness requires the attention of Ghanaian healthcare professionals. Healthcare professionals should recognize that most patients are also spiritual beings because they maintain a relationship with a transcendent being [38,57], which relationships and beliefs have been shown to influence their interpretation of health and illness. Thus, healthcare professionals could bring respected pastors to the hospital wards for prayer sessions with patients (who would require it), as well as provide patients with a place in the hospital where they may have a quiet time with a Supreme Being or make use of their spiritual resources. We note that it is not the duty of a healthcare professional to promote a religious belief system. Nevertheless, a corpus of research evidence shows that healthcare professionals who take a respectful stance on a patient's religious/spiritual explanations for their health and illness and deal with such existential questions are perceived by patients to be providing comprehensive healthcare that meets their aspirations [40].

Fourth, it is well known that individuals process trauma differently. A systematic review has shown that factors such as sharing negative emotions (emotional disclosure), cognitive processing, positive coping strategies (positive reappraisal) can promote PTG [58]. Correspondingly, healthcare professionals can help patients to experience personal growth by helping them to share their traumatic experiences and by assisting them to restructure their cognitions about their struggles with the disease through individualised psychotherapy sessions. Indeed, healthcare professionals ought to recognise that for some patients "that which does not kill them strengthens them" [59,60].

Finally, patients' concerns with their physical appearances following breast cancer diagnosis and treatment such as their concerns with hair loss, breast loss, blackened palm, and numbness in the legs and hands should be taken seriously by healthcare professionals, as they can have a substantial impact on the patient's body image. Systematic reviews have demonstrated that body image is crucial to quality of life in breast cancer survivors [61,62], and that poor body image can have adverse mental health outcomes such as self-stigma in cancer patients [63–65].

Limitations

This qualitative study is not without its limitations. First, the data represent subjective experiences of patients and thus, can be attended by response bias. Second, this study did not probe strategies used by patients with breast cancer to manage pain. Future research can build upon our findings to fill this gap in our knowledge. The present study did not investigate the role of socioeconomic status in breast cancer development and

prognosis. Future research can examine the influence of sociodemographic characteristics on the breast cancer experience in Ghana and assess the implications of the results for practice. Third, in this study, we used religion and spirituality interchangeably for ease of capturing all the aspects of a patient's accounts. There may be some nuances in the meaning of these two words. Fourth, our participants were recruited in only one Region (Greater Accra Region) out of the 16 administrative Regions in Ghana. Thus, the lived experiences of breast cancer patients in the Greater Accra Region may not necessarily reflect those of women living with breast cancer elsewhere in Ghana. Readers should consider these limitations in interpreting our findings.

Conclusion

Overall, we found experiences of breast cancer relating to persistent pain, concerns with physical appearance, a willingness to have the diseased breast removed, positive religious coping, and posttraumatic growth in our sample. The findings provide valuable opportunities for medical practitioners and healthcare professionals to respectfully accommodate patients with existential questions about their health and illness. The findings also suggest the complexity of the meaning-making and coping process involving Ghanaian women living with breast cancer. Therefore, there is a need for individualised psychotherapeutic interventions to assist Ghanaian women with breast cancer to deal with their illness to promote positive psychological changes in the aftermath of their diagnosis.

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CRediT authorship contribution statement

Enoch Teye-Kwadjo: Conceptualization, Data curation, Formal analysis, Investigation, Writing – original draft, Writing – review & editing. **Aku-Sika Goka:** Conceptualization, Data curation, Investigation. **Yvette Akuokor Afowa Ussher:** Formal analysis.

Declaration of Competing 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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