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A qualitative study on women's breast cancer diagnosis disclosure preferences and disclosure experiences in a middle-income country

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ABSTRACT

With the increasing cancer incidence in Ghana especially breast cancer among women, its diagnosis and prognosis present enormous fear and worry for women and their families. Thus, breaking the news of breast cancer diagnosis to patients presents enormous difficulty to healthcare professionals.

Aim: This study sought to explore the preferences of people living with breast cancer regarding the disclosure of their diagnosis.

Methods: The study used an exploratory-descriptive qualitative design to recruit and interviewed 17 women diagnosed with breast cancer and receiving treatment in a National Radiotherapy and Nuclear Medicine Center of a major Teaching Hospital in Ghana. Data were analyzed using Braun and Clarke's 2006 thematic analysis approach.

Findings: Two major themes, six subthemes, and five sub-subthemes were generated from the data. The study found that patients preferred detailed information on the stage of their cancer diagnosis, treatment options, and the lifestyle necessary to enhance their health. The participants preferred that the news of their diagnosis be broken to them gradually in the form of a conversation with consolatory gestures, without any hidden information. From the study, clinicians do not follow any specific systematic method in the disclosure process, clinicians used a conversation approach involving consolation, encouragement, comic words, and pampering mostly in disclosing cancer diagnosis which was found relieving.

In conclusion, People living with breast cancer prefer full gradual disclosure of diagnosis in a conducive environment in the presence of loved ones in a humane manner.

1. Introduction

As a leading cause of death, cancer contributes immensely to the reduction of life expectancy worldwide (Bray, Laversanne, Weiderpass, & Soerjomataram, 2021). This is evident in the World Health Organisation's (WHO) reports that cancer is the second leading cause of death among people below the age of 70 years in most parts of the world (World Health Organization, 2020). New cancer cases recorded worldwide in 2020 were 19.8 million with almost 10 million of the patients dying (Sung, et al., 2021).

Female breast cancer is reported to have surpassed lung cancer as the main cause of death from cancers in 2020 (Lu, Ren, & Rao, 2022; Yuki, et al., 2021). Breast cancer is the most prevalent and leading reason for cancer deaths in Africa, with 186,598 new cases and 85,787 deaths in 2020 (Globocan, 2021). Although Africa has a lower occurrence of breast cancer than most other continents except Asia, it is ranked highest globally in terms of mortality based on age-standardized rates, with Nigeria having the highest mortality rate (Azubuike, Muirhead, Hayes, & McNally, 2018). Therefore, it is evident that breast cancer is becoming a life-threatening condition in Africa, and as a result, women experience

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immense fear and anxiety regarding its diagnosis and prognosis. Any form of information on breast cancer diagnosis and prognosis affects the entire life of the patient, and his/her family's physical, spiritual, economic, and psychological states (Iddrisu, Aziato, & Dedey, 2020).

Although patients are entitled to receive information about their health conditions based on medical ethics and the rights of patients (Mostafavian, Shaye, & Farajpour, 2018), the level of breast cancer diagnosis and prognosis information disclosure to patients continues to be debated. Diagnosis and prognosis disclosure is approached differently across countries worldwide (Abe, et al., 2019). In Europe and America, the laws of many countries are in favour of the ethical obligation of telling the whole truth, and hence the precedence of patients' autonomy (Rosenzweig, 2012). However, health professionals in Turkey, Italy, Lebanon, Greece, Japan, and China are currently entangled in an ethical dilemma on how, when, and the quantum of information on diagnosis and prognosis that should be disclosed to their patients (Crico, Sanchini, Casali, & Pravettoni, 2022; Tsoussis, et al., 2013).

As indicated in many studies in Africa, many cultures in the region rarely favour a routine disclosure of cancer diagnosis of patients (Hafeez, et al., 2021; Kpanake, Gossou, Sorum, & Mullet, 2016). This has also been reported in Eastern and Southern Europe (Arraras, et al., 2012; Zielonke, et al., 2020), and in the Middle East (Feghali, et al., 2019; Mansour, Nassan, Saleh, & Soliman, 2017). Whereas only a small proportion of individuals in Asia and Africa want to discuss their life expectancy (Alzahrani, et al., 2018), in Western Europe and North America, about 81 percent of patients with cancer prefer discussions on the same topic (Stocklassa, Zhang, Mason, & Elsner, 2022). Most African cultures do not promote individual autonomy, but instead, consider the family and the general community (Akpa-Inyang & Chima, 2021; Mansour, Nassan, Saleh, & Soliman, 2017). The supporters of the argument of withholding relevant diagnostic and prognostic information about patients' diseases perceive it as an effective way of managing anxiety, stress, and depression associated with diagnosis disclosure of life-threatening conditions (Feghali, et al., 2019). However, it is also argued that a lack of information has the potential to increase uncertainty, anxiety, dissatisfaction, and deterioration of relationships between patients and physicians (Abdel-Hafeez, et al., 2022).

The evidence from the discussions above indicates that the level of disease disclosure varies from individual to individual and country to country (Vromans, et al., 2021). Whereas in Western Europe patients diagnosed with cancer largely prefer full disclosure as there is a limited stigma (Abdel-Hafeez, et al., 2022; Alzahrani, et al., 2018; Wu, et al., 2021; Yennurajalingam, et al., 2021), this is not the case in the Middle East and Africa because of a high level of stigmatisation (Feghali, et al., 2019). Many patients in Western Europe believe that knowing their diagnoses and prognoses will help them to be prepared to foresee difficulties, plan for extra treatment and their families (Ghoshal, et al., 2019). On the contrary, it has been reported in extant literature that patients in Africa and Asia prefer partial to non-disclosure, passive participation, and family involvement in decision-making (Abdel-Hafeez, et al., 2022; Dhage & Wilkinson, 2017). This happens most especially in the case of minimal chance of recovery (Alzahrani, et al., 2018; Feghali, et al., 2019; Woldemariam, Andersson, Munthe, Linderholm, & Lindström, 2021). In line with this, many physicians perceived that patients that know their diagnosis and prognosis might have a detrimental impact on them in the course of their disease, thus resulting in stress, sadness, loss of hope, and confidence (Ghoshal, et al., 2019).

Notwithstanding the differences in the preferences of patients in different parts of the world, the general expectations of patients are generally not fully met regarding the disclosure practices of physicians (Dhage & Wilkinson, 2017). The existing literature, therefore, reports the gap between the disclosure experiences of cancer patients and their expectations worldwide (Fisseha, Mulugeta, Kassu, Geleta, & Desalegn, 2020; Wu, et al., 2021). Nonetheless, the reported gap between the disclosure experiences and expectations of patients with cancer in Africa, especially sub-Saharan Africa (SSA) is seemingly dominant and prevalent in the extant literature (Fisseha, Mulugeta, Kassu, Geleta, & Desalegn, 2020; Woldemariam, Andersson, Munthe, Linderholm, & Lindström, 2021). It is therefore imperative to pay attention to diagnosis disclosure preferences of patients with cancer in SSA, especially those with breast cancer due to the increasingly alarming and worrisome level of incidence and mortality rate of breast cancer in the sub-region.

In Ghana, for instance, breast cancer is the most prevalent and leading cause of cancer deaths (Amoako, et al., 2019). With increasing mortality, the diagnosis and prognosis of breast cancer present enormous fear and worry for Ghanaian women and their families. Thus, breaking the news of breast cancer diagnosis and prognosis to patients is extremely difficult for healthcare professionals, patients, and families. Healthcare professionals in Ghana tend to avoid open communication with terminally ill patients concerning their diagnoses and prognoses without knowing their disclosure preferences (Eyiah, Agyen-Mensah, & Baidoo, 2021; Oti, et al., 2016). Getting it right in the disclosure of information on breast cancer diagnosis and prognosis to patients is important to the effective management of a patient's health.

The extent of information to be disclosed to patients and their families poses a difficult decision in clinical settings since the information disclosure preferences of patients vary significantly (Stocklassa, Zhang, Mason, & Elsner, 2022). Notwithstanding, the importance of information disclosure in the management of cancer, coupled with studies on the topic is limited in sub-Saharan African settings and Ghana. Available studies on disclosure have focused on chronic hepatitis (Adjei, Stutterheim, Naab, & Ruiter, 2020), and general situations (Edwin, 2008; Oti, et al., 2016). Also, a larger volume of studies on patients' diagnosis disclosure in the existing literature is more general, as the majority investigated the situation of general cancer patients with a limited focus on people living with breast cancer (Abazari, et al., 2017; Abdel-Hafeez, et al., 2022; Dhage & Wilkinson, 2017; Feghali, et al., 2019; Mansour, Nassan, Saleh, & Soliman, 2017). However, it is unlikely that the preferences of general cancer patients will necessarily be the same as women living with breast cancer. This study, therefore, sought to explore the experiences of women living with breast cancer and identify their preferences regarding the disclosure of their diagnoses and prognoses in a Teaching Hospital in Ghana.

2. Methodology

2.1. Research design

This study used an exploratory descriptive qualitative design (Sandelowski, 2004). Based on the aim of the study which was to explore the disclosure experiences and preferences of women living with breast cancer, the Exploratory-Descriptive Qualitative (EDQ) approach was deemed appropriate since little is known about the phenomenon (Polit & Beck, 2012).

2.2. Research setting

The study was carried out in one of the major Teaching Hospital in Ghana with a 2,000-bed capacity and the number-one referral centre in Ghana (Konadu-Yeboah, et al., 2020). The hospital houses the National Plastic and Reconstructive Surgery Centre, the National Cardiothoracic Centre, and the Radiotherapy Centre, which are all centres of excellence. The hospital is presently Africa's third-largest hospital and Ghana's main national referral centre linked to the University of Ghana Medical School. The hospital has established a cancer registry that helps to regularly gather data on all cancer cases presented to the hospital. The hospital treats an average of 400 new breast cancer cases per year and reviews about 4,249 old and new cases yearly. The Oncology Unit of the hospital was used as the recruitment outlet for this study.

2.3. Study population

This study targeted all women living with breast cancer and seeking healthcare at the Teaching Hospital.

2.4. Inclusion criteria

This study included women diagnosed with breast cancer for at least three months and receiving treatment at the National Radiotherapy and Nuclear Medicine Centre for at least one month before the commencement of data collection. This is because women suspected of having breast cancer undergo several diagnostic procedures before a diagnosis is established, hence by the third month, it is anticipated that the patient would have been informed about her diagnosis.

2.5. Exclusion criteria

The study excluded persons living with breast cancer who could not express themselves in Twi or English language and persons with communication difficulties, as well as seriously ill patients.

2.6. Sampling method

A purposive sampling approach was used to recruit 17 women diagnosed with breast cancer for the study. The researcher purposely sampled women diagnosed with breast cancer who have been told their diagnosis and could share their experiences on their disclosure processes. This sample size was reached through a theoretical saturation (Bryant & Charmaz, 2007; Morse, 2015). This is a point at which no new information or theme came from participants' narrations and repetitive information received from participants.

2.7. Data collection procedure

The first author obtained site approval with an introductory and ethical clearance letter. The National Radiotherapy and Nuclear Medicine Centre unit heads were notified of the study and requested to help identify prospective participants. Prospective participants were met, told the rationale of the study and copies of the information sheet given to them. Participants' contact details were obtained to arrange for the mode, date, and venue of interviews. Participants' permission was sought for interviews to be recorded. Face-to-face and telephone interviews were done based on participants' choices. In addition to the recording, non-verbal cues were documented during the interviews. Questions asked include *1. Please share with me how you were told about your diagnosis (breast cancer) Probes; How did you feel? 2. Kindly share with me how you wish it should have been disclosed to you. Probes: Venue, Person Present, Time, and why would you want it that way? 3. Please tell me about your opinion on the environment in which the diagnosis was disclosed to you. 4. How were you prepared to receive the diagnosis? Probes; Emotional, Physical, Psychological Social, etc.* 5. *How were you involved in the treatment decisions?* Participants were assigned numbers to avoid the use of names that could trace links to their true identities. The interviews with each participant took about 45 to 60 min. All participants were informed of their prerogative rights to opt out of the study or not to answer any questions they considered private and that doing so would have no impact on their care.

2.8. Data analysis

Braun and Clarke's (2006) approach to data analysis was employed. Data were analysed inductively and deductively. This was appropriate as the themes generated were partly guided by the study objectives and the content of the data. The researchers initially familiarised themselves with the data by repeatedly listening to the interview audio. Subsequently, the audio recordings were transcribed verbatim and read through severally. In this phase, the transcripts were critically reviewed, and notes were taken about patterns in the data and codes assigned. Initial codes were subsequently generated to organise the data into meaningful groups (subthemes). Consequently, all sections that fit specific groups were further collated to form themes. All authors reviewed the themes further and refined them. In the subsequent step, the themes were named and described.

2.9. Trustworthiness

To ensure the trustworthiness of the findings of qualitative studies, Korstjens and Moser (2018) emphasised the need for credibility, transferability, dependability, and confirmability. Thus, to achieve credibility; the interviewer had prolonged engagement with the participants and allowed them to speak freely in a conducive environment they deemed fit for the individual interviews.

Participants' meanings were also validated after each interview through a summary of essential features to verify they have not been altered.

Transferability was ensured by keeping an audit trail of the process involved to achieve the objectives of the study. A thick description of the population, site, and method have been provided.

All the authors worked hand in hand to help achieve dependability. an audit trail of all events and procedures followed.

Confirmability was also ensured by having two of the authors do the coding independently and the generated themes and subthemes reviewed by all authors. Three of the researchers scrutinised the data for the accuracy of participants' narrations and kept an audit trail.

2.10. Ethics

Ethical clearance was obtained from the Scientific and Technical Committee of the Korle Bu Teaching Hospital, Ghana with study number; KBTH-STC 00053/2022. Confidentiality and anonymity were also guaranteed for all participants. These were achieved whereby numbers were used to denote participants' names. In addition, the demographic characteristics of participants were separated from the main interview data to prevent anyone from forming linkages in the data to the sources. COVID-19 protocols were observed during face-to-face interviews (social distancing and wearing of face masks) even though the practice was not mandatory at the time of the data collection.

2.11. Findings

A total of 17 women were interviewed and their demographic characteristics are presented in Table 1.

2.12. Main themes and subthemes

The data generated two major themes, six subthemes, and five sub-subthemes. Details of the themes and subthemes are displayed in Table 2.

2.13. Breast Cancer Diagnosis disclosure

This theme talks about how breast cancer diagnosis was disclosed to participants, the mode or approaches to disclosure, as well as who was involved in the disclosure process. According to participants, some of the places where their diagnosis was disclosed to them were not the best as some were in the open, while the personnel involved in the disclosure were not part of the core healthcare professional involved in the care. Participants expected their diagnosis disclosure in the form of conversation coated with words of consolation, pampering, a show of compassion, and concern in the form of counseling. Two subthemes and five sub-subthemes were further developed under this theme. The subthemes were for disclosure resources and mode/method of disclosure.

Table 1
Participants' Characteristics (n = 17).

Participant ID	Age	Marital status	Occupation	Educational level	Religion	Cancer stage
BrCa1	39	Married	Housewife	No formal education	Christian	III
BrCa2	34	Single	Hairdresser	Basic	Christian	IV
BrCa3	45	Married	Peasant farmer	No formal education	Muslim	III
BrCa4	49	Divorced	Housewife	Basic	Muslim	III
BrCa5	44	Single	Petty trader	Basic	Christian	III
BrCa6	45	Married	Peasant farmer	Secondary	Christian	III
BrCa7	54	Married	Hairdresser	Basic	Christian	IV
BrCa8	52	Married	Petty trader	Basic	Christian	IV
BrCa9	52	Divorced	Peasant farmer	No formal education	Muslim	IV
BrCa10	58	Married	Peasant farmer	No formal education	Christian	III
BrCa11	51	Married	Peasant farmer	Basic	Muslim	III
BrCa12	56	Divorced	Petty trader	Secondary	Muslim	IV
BrCa13	63	Married	Peasant farmer	Basic	Muslim	IV
BrCa14	69	Widow	Petty trader	Secondary	Traditionalist	III
BrCa15	66	Married	Peasant farmer	Basic	Muslim	III
BrCa16	69	Widow	Peasant farmer	No formal education	Muslim	IV
BrCa17	72	Widow	Peasant farmer	Basic	Muslim	III

Table 2
Themes, subthemes, and sub-subthemes.

Theme	Subtheme	Sub-subthemes
1. Breast Cancer Diagnosis Disclosure	A. Resources Needed for the Disclosure	I. Disclosure Environment II. Professionals involved and family presence
	B. Mode of Disclosure of Cancer Diagnosis	I. Disclosure through Counselling II. Disclosure through encouragement, consolation, and pampering III. Disclosure through compassion and concern
2. Factors Affecting Breast Cancer Diagnosis Disclosure	A. Extent of Disclosure B. Inadequate Preparation Before Disclosure C. Emotional and psychological distress associated with Disclosure D. Non-involvement of Patients in Decision-making	

2.13.1. Resources needed for the disclosure

Participants narrated their preferences for a specific environment and people who should be part of the disclosure through their presence and support for the disclosure process. For most participants, the news of their breast cancer diagnosis was disclosed in the consulting rooms by physicians.

> *"The news was disclosed to me in the consulting room. I was sitting when it was disclosed to me."* (Interviewee 10)
> *"I was scheduled to meet the doctor, which I did on the due date in the consulting room. So, it was disclosed to me in the consulting room in the presence of a nurse. It was me, the doctor, and a nurse. …The environment was okay, I will take it like that…hmmm."* (Interviewee 12)

2.13.1.1. Disclosure environment. The participants preferred that the diagnosis is disclosed in the consulting room with the clinician and close relatives. The participants preferred a comfortable environment with at least a familiar face to provide emotional and psychological support during the disclosure of the bad news about the diagnosis and prognosis of breast cancer.

> *"The environment should be the consulting room with your doctor and relatives."* (Interviewee 3).

However, there were circumstances where the diagnosis was disclosed to patients on the ward, and in this circumstance, the patient was not emotionally and psychologically prepared for the diagnosis disclosure.

> *"… I was told about the extent of the problem at the ward, wherein the treatment procedure was revealed to me."* (Interviewee 5).

For some participants, the suitability of the environment of the diagnosis disclosure was based on the person(s) present during the disclosure. Some participants emphasised that the presence of close relatives made the disclosure environment more conducive and satisfactory. In the description of the breast cancer diagnosis disclosure environment, a participant indicated that:

> *"The environment was good since I was there with my daughter."* (Interviewee 3)

The participants preferred that the diagnosis is disclosed in the consulting room with the clinician and close relatives. The participants preferred a comfortable environment with at least a familiar face to provide emotional and psychological support during the disclosure of the bad news about the diagnosis and prognosis of breast cancer.

> *"The environment should be the consulting room with your doctor and relatives."* (Interviewee 3)
> "*I went to the hospital with my sister. It was disclosed to me in the consulting room. I was sitting in front of the doctor."* (Interviewee 9)

> *"…when the result came, the doctor called and said he was referring me … I was then called by another doctor to come there with a relative, so I went with my daughter who happened to be a nurse at that hospital. The doctor first spoke with my daughter before he called me to the consulting room.*

2.13.1.2. Professionals involved and family presence. The lived experiences of most of the people living with breast cancer showed that physicians often disclosed the diagnosis in the presence of the patient's relatives or close family relations which the participants much appreciated. The participants believed that close relatives are in a better position to provide the needed emotional and psychological support during the diagnosis disclosure.

> *"I will love to have my son with me when the information is disclosed to me."* (Interviewee 1).
> "…. *Preferably, your mother or your father or son or daughter, someone close to you, because they are your family, they can cool you down and they can advise you not to lose hope."* (Interviewee 3).

It was evident that there was no consistency in the disclosure approach by healthcare professionals. Additionally, there were no specific professionals designated with the role of diagnosis disclosure hence, some patients were informed of their diagnosis by laboratory technicians, and nurses at places participants deemed inappropriate and unsuitable for disclosure.

"The nurse told me that the lump in the breast is cancer, and there is the need to perform surgery and remove it." (Interviewee 1).

Meanwhile, this same participant had also been informed by a laboratory technician before the physician's disclosure.

"…. After the scan, I went to see the doctor, but I had already been informed by the lab technician who performed the scan said the lump in my breast is cancer." (Interviewee 1).
"*I went for an X-ray and other things, after the result, I was called to sit at the place where the nurses check blood pressure (BP) and the nurse told me that I have breast cancer. She said, if the lump is removed, I will be okay and that I will see improvement when I start the treatment process. So, I shouldn't allow my situation to worry me.*" (Interviewee 8).

2.13.2. Mode of disclosure of cancer diagnosis

This subtheme explains how breast cancer diagnosis disclosure happened among the participants and how participants prefer it to be done among other patients. Participants identified that different physicians employed different approaches in the disclosure process. From the data, three different approaches have been identified that form the subsubthemes under this subtheme.

2.13.2.1. Disclosure through counseling. A section of the participants in this study preferred their diagnoses to be disclosed to them during counseling and they also wished to have full disclosure so that they could plan their treatment and care.

"*I prefer disclosure through counseling. The news should be broken to me like a mother calmly talking to the child, that way I will take cool.*" (Interviewee 8)
There is no need to hide anything from me. If I have the disease, just counsel me and tell me everything. I would want everything to be disclosed to me so that I can start treatment as early as possible. At least, the whole truth should be told." (Interviewee 11).

2.13.2.2. Disclosure through encouragement, consolation, and pampering. For many patients with breast cancer, the disclosure process started with the clinicians engaging them in a conversational mode that involved words of encouragement, consolation, and pampering,

"*It was disclosed to me through conversation that involved pampering, consoling and advise."* (Interviewee 9).
"The news should come from the doctor through conversation that involves consoling and pampering." (Interviewee 14*)*
"…The doctor spoke to me like a father talking to a daughter. Another cousin doctor of mine also came home and spoke to me and even explained further." (Interviewee 3).

A participant also indicated that the information was disclosed to her through a heartfelt conversation with a physician who employed words of encouragement and consolation.

"*I met the doctor after receiving the result and he subsequently confirmed that the lump was cancerous. He had a conversation with me, during which he said encouraging and consoling words and pampered me a bit before breaking the bad news*." (Interviewee 6).
"*I don't want the news to be broken to me straightforwardly. I prefer counseling. The news should come from the doctor through conversation that involves consoling and pampering*." (Interviewee 3).

Further evidence from the study showed that clinicians did not follow any systematic procedure or employed a single-defined method in the disclosure process. The mode of disclosure of breast cancer diagnosis to patients differed from one clinician to the other.

2.13.2.3. Disclosure through compassion and concern. In the compassionate and concerned mode of disclosure, some physicians employed a more comic approach to ease the weight of the information. Additionally, others behaved like parents disclosing the diagnosis to their children.

"The doctor spoke to me like a father talking to a daughter." (Interviewee 5).
"The news should be broken to the patient like a mother talking to a child". (Interviewee 15)
For another participant, the physician's approach was like a father breaking bad news to his daughter, with much compassion and concern.
"*He said it funnily as if he was joking with me.*" (Interviewee 10).

Notwithstanding the predominant usage of the conversational approach, pampering, and consolation in the disclosure process, some clinicians went straightforward with the disclosure, an approach which was deemed inappropriate and unsatisfactory to the participants that lived the experience.

"I was told straight away that I have breast cancer. In the consulting room, the doctor just told me that they will have to cut my breast and I asked why they will have to cut off my breast. I wasn't pleased with the way the news was broken to me, but I don't have any option." (Interviewee 7).

2.13.3. Factors affecting breast cancer diagnosis disclosure

This theme brings to bare several issues that affect the disclosure process. Participants preferred gradual and full disclosure of their diagnosis. Many of the participants indicated that they would want to know everything about a disease that affects their health. The participants perceived that gradual disclosure was necessary to minimise the impact of the emotional and psychological distress associated with the disclosure process. Four subthemes were generated under this theme, and they include the extent of disclosure, inadequate preparation towards disclosure, emotional and psychological distress associated with disclosure, and the non-involvement of patients in decision-making.

2.13.3.1. Extent of disclosure. Evidence from the interview showed that people living with breast cancer predominantly preferred full disclosure of the state of their disease. The patients preferred to be given detailed information about the state of their disease gradually as some believe sudden disclosure can kill.

"*I want the news to be disclosed to me gradually because sudden disclosure can kill someone and so must be delivered satisfactorily*." (Interviewee 3)
"*I would like to be told everything since it's something on my body."* (Interviewee 1).
"*I prefer full disclosure. I want to be told everything about the disease I have.*" (Interviewee 7).

The patients preferred detailed information about the stage of cancer, treatment options, the lifestyle necessary to enhance their health, and many others.

"*I should be told everything, the treatment options, what is suitable for me and what would be suitable for me*." (Interviewee 5).
"*There is no need to hide anything from me. If I have the disease, I will want everything to be disclosed to me so that I can start treatment as early as possible. At least, the whole truth should be told.*" (Interviewee 11).

Despite the demand for full disclosure, the participants preferred that the news is broken to them in bits through a gradual process without necessarily hiding anything. The participants preferred to avoid a situation of information overload, where the clinician is too straightforward and releases all information to the patient without engaging them in a conversation. The participants also preferred that clinicians avoid the usage of scary words that could be a source of worry and cause emotional distress.

"*… the doctor called my name and said, your result says that you have breast cancer and with your own, you must do chemotherapy, then I will take off the breast before you will do radiotherapy. You must look for money because all the treatments are expensive and involving"* (Interviewee 15).
"*Because they said the disease has been with me for a very long time and spreading to my heart and other parts of the body. Upon hearing that I felt very sad.*" (Interviewee 4)

The participants reported that their preference for full but gradual disclosure was underpinned by their desire to know what to do and what not to do under their current circumstances and be fully aware of the extent of the problem to be better prepared for the battle ahead.

"*Since it is a disease on my body, I would like to know everything about it.*" (Interviewee 1)
"*It is important to be told everything so that I would be aware of what to do and what not to do.*" (Interviewee 5)
"*I want it that way since if you know what you are facing then you can better prepare yourself for the battle ahead. I am a believer, so I want to know if I must pray or hold on to my faith, or I want to know the way I am going to handle it.*" (Interviewee 10).

2.13.3.2. Inadequate preparation before disclosure. Most of the patients with breast cancer were generally not prepared emotionally and psychologically to receive the news of their cancer diagnoses. Besides the individual patient's unpreparedness, the clinicians also did not prepare the patients adequately for the disclosure process.

"*I wasn't emotionally and psychologically prepared to receive the information at all. But I felt I needed to be bold and face the news.*" (Interviewee 6)
"*I didn't know that was coming. I wasn't prepared. To be honest with you I am a strong person. I may be hurt but I try to find a way to get out of the situation. That day had a little psychological and emotional impact on me but what can I do? It has come so what can we do.*" (Interviewee 11)

The patients were therefore enormously affected emotionally and psychologically due to their unpreparedness to receive the bad news. With the associated shock, some of the patients suffered psychological and emotional distress that affected them. A participant was perceived to have suffered high BP after receiving the diagnosis information.

"*That day I felt very sad, I continuously asked myself how I had the disease."* (Interviewee 1).
"*I was not emotionally and psychologically prepared for the news. It was through it that I got blood pressure because I was continuously thinking about it."* (Interviewee 12)

2.13.3.3. Emotional and psychological distress associated with disclosure. The general feeling of many of the participants during and after the breast cancer disclosure was sadness, bad feeling, and weeping. These feelings emanate from the fear of the disease, its stage or extent of spread, and the financial requirement for treatment.

"*For the first time experiencing such a thing, I wept small…but just had to leave everything in the hands of God.*" (Interviewee 3).
"*After seeing the signs with the breast and the diagnosis and disclosure, I felt very bad and sad, but after discussing with the nurses I was a bit okay.*" (Interviewee 2).
"*Upon diagnosis, I felt very sad. It was the worse day of my life. I heard breast cancer was deadly and killer disease so felt my world has come to an end.*" (Interviewee 6).

However, some patients did not panic due to the extent of information they already had before their interaction with the clinicians. Some patients also drew hope from the experiences of other patients they encountered during the visit to clinicians. For instance, a participant said:

"*There was a woman whose breast cancer was in stage five, but her appearance was good, which indicated that there was hope for me.*" (Interviewee 6)
"*I did not panic because I saw several people and my cousin with a similar condition. I saw several young girls I am older than with similar conditions and that served as a source of courage. I saw a 31-year-old journalist with just a child who had both breasts removed, and since I am far older, I don't think I should panic.*" (Interviewee 8)

Amid these thoughts during and after the breast cancer disclosure, the participants reported having received support from clinicians in the form of advice and encouraging words. For instance, a patient was advised by a clinician to amass courage from the massive support from close relatives. Another participant reported having continual advice and words of encouragement from nurses.

"*The healthcare professionals were very helpful. The clinical psychologist even came to assist but I told her that for me I believe that everything is in the hands of God. I believe God will take care of me. I was okay.*" (Interviewee 10)
"*The doctor told me not to panic or get worried because I have the full support of my family since there are several people who visit the hospital alone.*" (Interviewee 8)

For most participants, the information provided by clinicians was clear. However, the patients, particularly those with a higher educational background often searched for more information on the disease for a better understanding of their situation online.

2.13.3.4. Non-involvement of patients in decision Making. During the interaction between clinicians and patients concerning their conditions and the various alternative treatment options available to patients, the participants indicated that the treatment choices were often not discussed with them as clinicians only availed them of the treatment procedures suitable for them. Some of the participants believed that clinicians should not solely make treatment decisions without thorough discussions with patients on alternatives available to them. According to the participants, since the treatment is going into their bodies, they deserve to be part of the decision-making.

"*I wasn't given any treatment options; I was told I will go through mastectomy, that's all.*" (Interviewee 3).
"*I wasn't given options, the clinician just told me that I will have to undergo radiotherapy.*" (Interviewee 7)
"*After the surgery, radiotherapy was the option offered to me. Yes, we should be allowed to make our own choices. No one knows it all, you may know something but someone might also have a divergent view that might be better so we should be willing to welcome all views, be it from a patient or a healthcare professional.*" (Interviewee 10).

The participants were dissatisfied with the treatment options offered them and indicated that they would have gone for different options if they are to start the treatment process all over. The dissatisfaction of the participants with the offered treatment options largely emanated from the perceived infectiveness and the time required for the treatment per period.

"*If it was today, I will rather opt for different treatment at the hospital since I waste longer time with the chemotherapy unit and the chemotherapy process is also time-consuming about three and half hours. I would want to know other options I have to make a choice*." (Interviewee 5)

"*Even after the radiotherapy I still have lymphoedema…I don't know why I have to get this disease after the radiotherapy if indeed this was the best option.*" (Interviewee 7)

Notwithstanding the limited input of patients in the selection of treatment options, some participants were satisfied with offered options.

"*I will still go with the treatment option offered to me. I realised it wasn't scary like people have been saying.*" (Interviewee 10).

3. Discussions

The general belief in Ghana within the healthcare system is that patients do not need full information about their illness, particularly in the case of life-threatening illnesses like breast cancer (Adjei, Stutterheim, Naab, & Ruiter, 2020). Caregivers therefore often limit the degree of information released to patients about the diagnosis and prognosis of their illness, with much of the information relayed to selected family members. Contrary to the general belief in Ghana, patients diagnosed with breast cancer who participated in this study preferred full disclosure – to be given detailed information – about the state of the disease. For many patients with breast cancer, full knowledge of diagnosis and prognosis aids in preparation, treatment plan, complications anticipation, and proper future planning for their children and the entire family (Ghoshal, et al., 2019). This finding is consistent with the preferences of people living with breast cancer reported in extant literature (Alzahrani, et al., 2018; Abdel-Hafeez, et al., 2022). Participants desired information about the stage of cancer, treatment options, and lifestyle required necessary to enhance their health and many others. It is reported in the extant literature that patients want and expect complete disclosure even if the information presented is unpleasant, upsetting, or severely concerning as long as it is factual (Abdel-Hafeez, et al., 2022). Notwithstanding the demand for full disclosure, the participants preferred that the news is broken to them in bits through a gradual process in a conversation that would involve consolatory gestures, without necessarily hiding anything. This preferred mode of disclosure is further corroborated by the study conducted by Fisseha et al. (2020) in Ethiopia wherein they reported a significant proportion of patients were happy with the conversation method employed by clinicians. Again, it is reported by the study of Fujimori et al. (2007) that almost all cancer patients highly desired to discuss their present medical status and treatment choices with their doctors, as well as having their physicians consider the sentiments of their family.

Patients with breast cancer preferred a high level of information in diagnosis disclosure since they would want to know everything about the disease and the extent to which the disease is affecting their health. The patients also reported that their preference was underpinned by the desire to know what to do and what not to do under their current circumstances and be fully aware of the extent of the problem to be better prepared for the battle ahead. This is in tandem with Alzahrani et al. (2018) findings that emphasised that the disclosure preference of people living with cancer was mostly affected by anxiety about the depth of the disease. The patients also perceived that full disclosure through the gradual method in the form of conversation was necessary to minimise the impact of the emotional and psychological distress on the health of patients. This is supported by the work of Mansour et al. (2017) which emphasised that the preference for a higher level of information disclosure is to ensure an effective process that is not impaired by psychological and emotional distress. Contrary to this suggestion, there is also a small proportion of patients with breast cancer that preferred limited information (Ghoshal, et al., 2019). Thus, the bad news disclosure preferences of patients with breast cancer vary from individual to individual (Vromans, et al., 2021). It is reported that a smaller number of patients with breast cancer do not want to hear the details of their malignancy, according to Rao et al. (2016)'s study, which might be due to the time of the news, the way information on the diagnosis is provided to patients, or due to family members present.

With the enormous variations in patients' preferences for information disclosure, caregivers do not follow a systematic procedure in the disclosure of the diagnosis of breast cancer to patients. Caregiver information disclosure is often individual patient-based, an approach that is often met with differences in satisfaction. For many of the cancer patients, the information disclosure approaches utilised by caregivers were satisfactory. The conversation mode of disclosure involved words of encouragement, consolation, and pampering, which was frequently utilised by the caregivers, wherein it was much appreciated by the breast cancer patients. In addition, the preferred environment of diagnosis disclosure in the form of consulting rooms with clinicians, patients, and close relatives of patients was often utilised by the caregivers. The caregivers' information disclosure environment was therefore predominantly described by the breast cancer patients as satisfactory due to close relative presences. In support of this finding, Dhage and Wilkinson (2017) reported that all patients desired family presence when receiving bad news. In the consulting room, the presence of a family member(s) is perceived to offer adequate support and enhance patients' confidence to ask the necessary questions about the state of their illness. Besides family presence, Berkey, Wiedemer, and Vithalani (2018) asserted that the patient's opportunity to ask many questions is also enhanced through the caregiver's ability to disclose information in plain and easy-to-understand language.

Notwithstanding, the satisfaction of the patients with many of the information disclosure approaches of the caregivers, there were preference gaps about participation in decision-making, as the patients perceived that treatment decisions were solely taken by caregivers with their limited input. Thus, the patients were not satisfied with the non-provision of alternative treatment choices by clinicians. The reported preference gap is corroborated by the study of Chen, Wang, and Tang (2018) which also reported a gap between the preference of people living with cancer and the received level of information or their actual prognosis reception. It is reported that patients with breast cancer predominantly have specific information requirements in the form of involvement in treatment decisions (Abdel-Hafeez, et al., 2022).

Many clinicians in Ghana do not practically utilise the generally recommended PEWTER and SPIKEs models of bad news disclosure during communication with patients but rather rely on unsystematic and varying disclosure procedures based on personal analysis of individual patients. Furthermore, with the inadequacy of the preparation of breast cancer patients before information disclosure that often culminated into a source of psychological and emotional stress for patients, it is imperative for training policies for breast cancer caregivers to give adequate attention to diagnosis and prognosis disclosure of breast cancer patients through the internationally recommended PEWTER and SPIKEs models.

4. Limitations of the study

The study employed a qualitative descriptive approach to recruit participants who were selected from a teaching hospital and therefore the experiences shared cannot be compared to other hospitals. However, the heterogeneity of the participants and the probing done during the data collection explored in detail the disclosure preferences. Since the aim of a qualitative study is not for generalisation purposes, the findings could be transferred to similar settings. We suggest that future studies should include other cancer types, more facilities, and use a quantitative approach so that the findings could have more external validity.

5. Conclusion

When women are diagnosed with breast cancer, they feel as though their world has come to an end because of the deadly nature of the disease, the stigma associated with it due to societal perception, and the loss of breasts through surgery. Knowing the significant role, the breast plays in the life of a woman as the symbol of feminism and completeness of womanhood, the disclosure of breast cancer diagnosis and the disease prognosis must be done using evidence-based approaches tested with positive impact. This study found that women want the disclosure of their diagnosis of breast cancer done in a calm environment possibly in the consulting room of a doctor through counselling in a concerned, compassionate, and consolatory manner with lots of pampering in the presence of their close family members who will offer them the needed support. Again, women require a gradual full disclosure of their diagnosis to avoid stress and emotional breakdown.

Author Contribution

FO and GD conceptualised the idea, FO obtained the data, OR and TGQ analysed the data, all author reviewed the findings, MI drafted the manuscript, GD and PA reviewed the manuscript, and all authors read the manuscript.

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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