

Traumatic Stress in Diagnosis and Treatment of Breast Cancer amongst Women in Nairobi County, Kenya

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Abstract

Breast cancer has been on the increase lately and it is the leading cause of cancer-related death among females worldwide. Specifically, the study was guided by the following objective that assessed traumatic stress associated with diagnosis and treatment of breast cancer among female survivors in Nairobi County, Kenya. The study adopted a mixed method embedded research design combining *ex post facto* and survey designs from the quantitative paradigm and phenomenology from the qualitative paradigm. Participants in this study were 60 females who had undergone diagnosis of breast cancer and received treatment including, mastectomy, chemotherapy and radiotherapy within the last three years. Participants were sampled using Purposive sampling for quantitative data and extreme case sampling for qualitative data. Quantitative data was collected using an Impact of Event Scale – Revised (IES-R) tool, while interviews were used for qualitative data. Ethical considerations of informed consent, confidentiality, anonymity and debriefing were applied. Data was analyzed using descriptive statistics for the quantitative data and thematic analysis for qualitative data. The findings of the study indicated that a vast majority of the participants (90.00%) reported severe PTSD with only 6.70% and 3.30% of participants reporting moderate and sub clinical PTSD respectively. Precipitators of traumatic stress during the diagnosis, and treatment phases were reported to be how diagnosis results were communicated and treatment related side effects including mastectomy, hair loss, weight loss/gain and body image related changes. These findings may be relevant in designing future interventions that combine physical and mental health of breast cancer survivors, in order to alleviate the traumatic stress associated with diagnosis and treatment.

Introduction and Background

Breast cancer (BC) is the most commonly diagnosed cancer in women with an estimated 2.1 million new cases being diagnosed each year representing 24.2% of all cancer diagnoses among women (Francies, Hull, Khanyile & Dlamini, 2020). It is estimated that in 2011 over 508 000

women in the world died due to breast cancer (Global Health Estimates, WHO 2013). BC is therefore a leading cause of cancer-related death among females worldwide. In 2012, an estimated 1.7 million cases and 521,900 deaths occurred (Ferlay et al., 2012). Although breast cancer is thought to be a disease of the developed world, almost 50% of breast cancer cases and 58% of deaths occur in less developed countries (GLOBOCAN, 2008). Incidence rates vary greatly worldwide from 19.3 per 100,000 women in Eastern Africa to 89.7 per 100,000 women in Western Europe. In most of the developing regions the incidence rates are below 40 per 100,000 (GLOBOCAN, 2008). The lowest incidence rates are found in most African countries but breast cancer incidence rates are on the increase globally.

Breast cancer survival rates vary greatly worldwide, ranging from 80% or over in North America, Sweden and Japan to around 60% in middle-income countries and below 40% in low-income countries (Coleman et al., 2008). The low survival rates in developing countries can be explained mainly by the lack of early detection and early diagnosis. The situation is made complex by lack of adequate diagnosis and treatment facilities leading to a high proportion of women presenting with late-stage disease and or poor prognosis.

Psychological implication of Breast Cancer Diagnosis

In the event of diagnosis of breast cancer, the attention of hospital staff in oncology wards is naturally focused on treatment, physical recovery with little or no emphasis on the physiological side-effects of treatment (Aziz, 2007). This may be explained by the fact that an accurate and early diagnosis and timely treatment is essential for positive outcome. Unfortunately, the vigorous treatment protocols can sometimes be weighty for the patient who is required to psychologically process the therapeutic process. Of importance to note is the quickness between diagnosis and treatment which may not match the speed the patient is handling the entire issue psychologically

Despite the increased survival rates, being diagnosed with BC is often accompanied by high levels of distress (Vickberg, Bovbjerg, DuHamel, Currie, & Redd, 2000; Watson et al., 1991; Zabora, Brintzenhofeszoc, Curbow, Hooker, & Piantadosi, 2001), a feeling of helplessness (Watson et al., 1991), uncertainty (Oxlad, Wade, Hallsworth, & Koczwara, 2008), and mortal fear (Waring, 2000). In their study, Hermelink and Voigt (2015) examined a group of 166

patients who had been newly diagnosed with breast cancer. During the interval between diagnosis of cancer and the initiation of treatment, 82.5% of all patients were found to exhibit symptoms of PTSD. The symptoms included recurrent and intrusive reminders of the experiences associated with cancer, feelings of detachment and emotional numbness, increased arousal, sudden outbursts of anger and an exaggerated startle response. These results are possible indicators that breast cancer initial diagnosis can greatly be overwhelming to an affected patient. Although a full diagnosis of PTSD was found in only 2% of patients one year after the cancer diagnosis, more than half (57.3%) continued to display one or more symptoms of the disorder at that point.

Once diagnosed, cancer has the potential to affect nearly every aspect of an individual's life, including the physical, psychological, interpersonal, vocational, and spiritual domains (Aziz, 2007). The diagnosis and treatment of cancer can be an exceptionally difficult, and possibly a traumatic, experience. Consistent with this observation, a number of studies have documented the presence of posttraumatic stress disorder (PTSD), as defined in the Diagnostic and Statistical Manual of Mental Disorders (5th ed.; DSM-5; American Psychiatric Association, 2013), in response to cancer diagnosis and treatment (Alter et al., 1996; Andrykowski, Cordova, Studts, & Miller, 1998; Green et al., 1998; Widows, Jacobsen, & Fields, 2000).

Although the majority of breast cancer patients today have a good prognosis, the initial diagnosis, subsequent treatment and implications of breast cancer appear to precipitate extreme stress for the patient. This suggests that paying attention to the mental health of breast cancer patients is important for their quality of life (Elklit & Blum, 2011). Almost always, diagnosis of breast cancer, as in any other cancer, is followed by rigorous treatment. This study explored the trauma load associated with diagnosis and subsequent treatment related side effects.

Psychological implication of Breast Cancer Treatment

Part of treatment of breast cancer sometimes includes mastectomy which is a surgical procedure which may involve a permanent change to the appearance of the woman which causes some women to go for plastic surgery to create an artificial breast (Cebeci, Yangın & Tekeli, 2011). This can be attributed to the fact that culturally the breast is considered a part of a woman's identity that represents femininity, sexuality, beauty, motherhood, and feeding infants. The

perceived loss of any of these attributes may lead to psychopathology associated to the change in body image. While in itself breast cancer diagnosis is enough stress, breast loss through mastectomy makes the whole process complex and therefore can be very overwhelming. Studies (Cebeçi, Yangın & Tekeli, 2011) have confirmed that a woman's breast is quite significant in many aspects and has a powerful impact upon her body image. While the loss of a breast through mastectomy may be positive in informing the prognosis of the patient, it will definitely have multiple meanings and can be accompanied by different emotions. This therefore means that the emotional attachment that the woman has on the breast informs the level of distress upon mastectomy. Consequently, depending on the negative change in a woman's body, any perceived losses may lead to various psychosocial problems (Begovic, Chmielewski, Iwuagwu, Chapman, 2012).

Other than mastectomy, treatment may involve chemotherapy and or radiotherapy (Penedo et al., 2013). Such treatment has been associated with hair loss, facial discoloration, and loss of previous glow. These body changes can greatly affect the individual's body image. Body image is defined as the mental picture of one's body, an attitude about the physical self, appearance, and state of health, wholeness, normal function, and sexuality (Forbair et al., 2006). For some individuals, a change in appearance can lead to a negative body image and consequently low self-esteem which can evoke several psychosocial difficulties which may result to the development of psychopathology. In their study of Body image and sexual problems in young women with breast cancer, Fobair et al (2006), found that negative body image among breast cancer survivors includes dissatisfaction with appearance, perceived loss of femininity and body integrity, reluctance to look at one's self naked, feeling less sexually attractive, self-consciousness about appearance, and dissatisfaction with surgical scars. Additionally, relevant literature emphasizes that patients with breast cancer can experience changes in body image, self-concept, emotions, behavior, family dynamics, and the roles of the patient and her family (Özbaş 2007). The main objective of this study was to investigate traumatic stress associated with pre and post diagnosis of breast cancer among female survivors in Nairobi.

Methodology

The study adopted a mixed method embedded research design combining *ex post facto* and survey designs from the quantitative paradigm and phenomenology from the qualitative

paradigm. According to Salkind (2010), ex post facto research design is conducted where investigation starts after a phenomenon has occurred. It involves putting the purposively selected respondents in a particular group based on some prior characteristic they have. The target population comprised of women who had undergone a diagnosis of breast cancer and received treatment including mastectomy, chemotherapy and radiotherapy. The assessment of traumatic stress targeted the symptoms present within the first year after the diagnosis. Since this study focused on survivors of breast cancer who had been diagnosed and received treatment of breast cancer, purposive sampling technique was used to select a sample of 60 cancer survivors from 3 selected hospitals in Nairobi. All the 60 participants participated in the quantitative phase of the study after which 30 were selected for the qualitative phase using extreme case sampling. These were participants who had recorded the highest scores on the Impact of Events Scale. The study considered this rich sample in terms of the post-traumatic growth and traumatic experiences as their scores indicated that they had experienced the highest distress as a result of diagnosis with breast cancer as compared to the rest.

Traumatic stress was assessed using the 15 item Impact of Events Scale (IES). This is a standardize tool that was designed to measure subjective distress related to a specific event. In this study the scale measured the overall stress score of participants with possible minimum score being zero and the highest being 75. A total score of 37 and above indicated severe stress. The scale further examined the nature of PTSD symptoms that is avoidance and intrusive symptoms with the lowest possible mean being zero and the highest being five. Traumatic stress was also assessed subjectively using interviews and focus group discussions.

Results

Traumatic Stress among Female Survivors of Breast Cancer

The results are presented in Table 1.

Table 1: Trauma Load

	N	Mean	Std. Deviation
Avoidance Symptoms Score	60	3.63	1.199
Intrusive Symptom Score	60	3.95	1.027
Total Stress Score	60	56.69	15.064

From Table 1, most of the survivors recorded high intrusive symptoms (Mean=3.95; SD 1.027) followed by avoidant symptoms (mean=3.63; SD= 1.199). This implies that the participants experienced intense PTSD symptoms following diagnosis with breast cancer. The total stress reported by the participants (Mean=56.69; SD 15.064) was above the cut off of 37 indicating severe stress level.

It was also important to examine traumatic stress with respect to each of the individual Impact of Event Scale item. Participants reported the highest scores on ' Pictures about my breast cancer condition popped into my mind' (Mean = 4.22; SD 1.1313) and 'Any reminder brought back feelings about my breast cancer condition' (Mean= 4.16; SD= 1.322). The symptom that was least experienced by most of the participants was 'I tried not to talk about it' (Mean= 3.22; SD =1.896). This is an indication intrusive/re-experiencing symptoms of PTSD were common among the participants. The results are presented in table 2 below.

Table 2: Traumatic Stress Symptoms

Item	N	Mean	Std. Deviation
1. I always thought about my breast cancer condition when I didn't mean to	60	3.75	1.218
2. I avoided letting myself get upset when I thought about or was reminded of my breast cancer condition	60	3.72	1.301
3. I tried to remove my breast cancer condition from my memory	60	3.81	1.575
4. I had trouble falling asleep or staying asleep because of pictures or thoughts about my breast cancer condition came into my mind	60	3.75	1.320
5. I had waves of strong feelings about my breast cancer condition	60	3.81	1.491
6. I had dreams about my breast cancer condition	60	3.84	1.568
7. I stayed away from reminders of my breast cancer condition	60	3.81	1.575
8. I felt as if my breast cancer condition wasn't real	60	3.38	1.773
9. I tried not to talk about it	60	3.22	1.896
10. Pictures about my breast cancer condition popped into my mind	60	4.16	1.322
11. Other things kept making me think about it	60	4.09	1.329
12. I had a lot of feelings about it, but I didn't deal with them	60	4.00	1.344
13. I tried not to think about it	60	4.00	1.503
14. Any reminder brought back feelings about my breast cancer condition	60	4.22	1.313
15. My feelings about it were kind of numb	60	3.13	1.862

PTSD Severity Distribution

Traumatic stress was further assessed in terms of severity of PTSD. According to the IES, PTSD severity would be measured on four levels depending on the range of total scores. A range of 0 - 8 indicated sub clinical severity PTSD, 9-25 mild PTSD, 26-43 moderate PTSD while score of 44 and above indicated severe PTSD. The results are presented in Fig. 1.

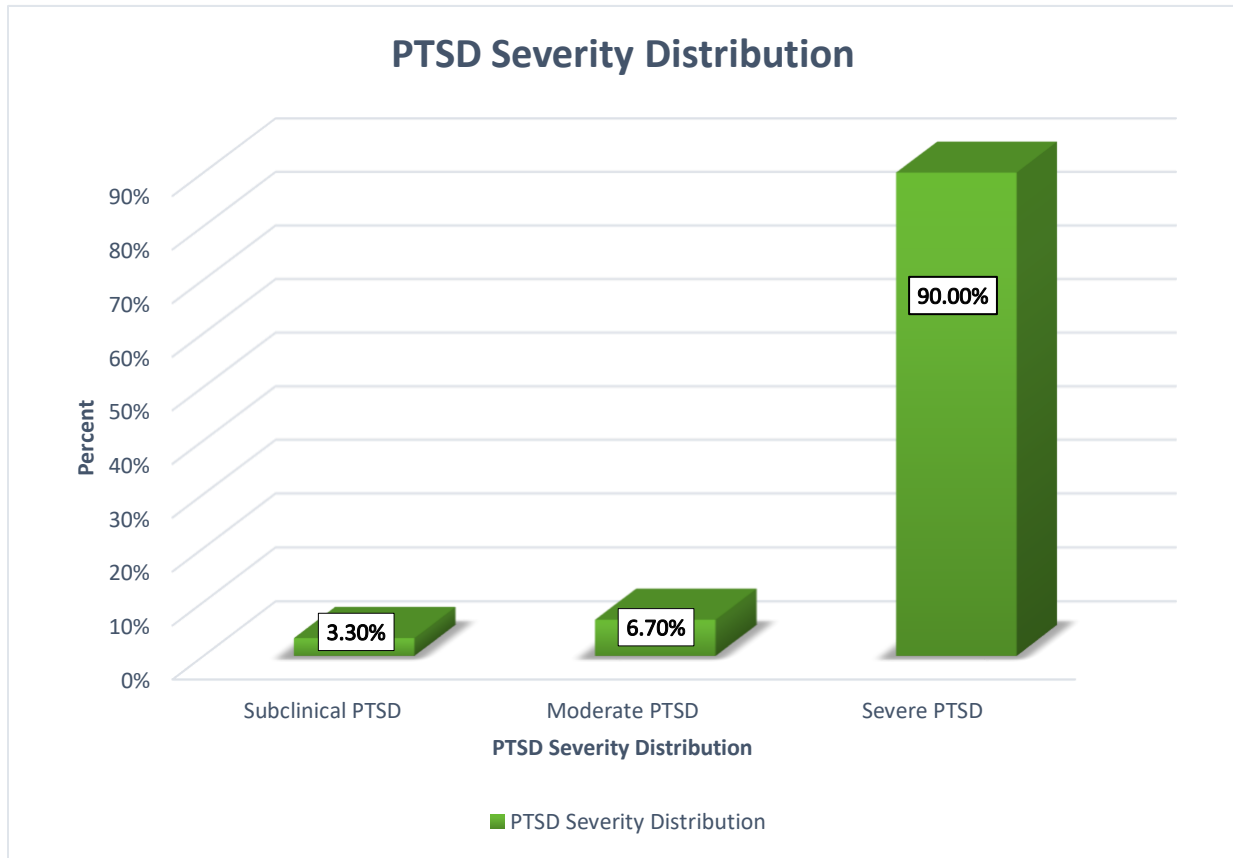


Figure 1: Distribution of PTSD Severity

From Figure 1, the results show that majority of the participants (90.00%) reported severe PTSD with 6.70% and 3.30% of participants reporting moderate and sub clinical PTSD respectively. The results indicate that diagnosis with breast cancer was highly traumatizing to the participants.

Qualitative Data from Interviews and Focus Group Discussions

This study further examined the various precipitators of trauma during the diagnosis, and treatment phases. Traumatic stress was assessed subjectively using interviews and focus group discussions. The main thematic areas in the study were cancer diagnosis, treatment side effects and the psychological impact of the same.

Traumatic stress associated with the diagnosis of Breast Cancer

In this thematic area, the study established the subjective experience of the diagnosis of breast cancer, how the diagnosis was made and whether there was pre-diagnosis counseling, as well as who offered the counseling. Additionally the thematic area further established whether significant others were present during breaking of the news of the diagnosis and how the same was communicated.

General perception of Cancer as a disease

The overall perception of what cancer is informed the participant's psychological health. For instance, cancer has been generally perceived as a killer disease and that featured in the focus group discussions. The participants reported that, having perceived cancer as a killer disease impacted greatly on their psychological health by making them fearful and anxious. A participant indicated,

“Before I used to listen to health talks especially TV but nowadays, I am careful what to watch or listen to. The media brings people who create fear to survivors. Some of them have no idea how much they damage the listeners especially relatives of cancer survivors. The period after the diagnosis was made, the media damaged me...they kept talking about cancer and the number of people it has killed...they seemed to confirm my worst fears that cancer is a killer (Participant 002, Personal communication)

Another participant said, *“To me, it was a complete death sentence. I did not know I would live to tell the story”* (Participant 004, personal communication).

The study noted that the negative messages about cancer purporting to inform the public could be fueling a lot of fear and anxiety among cancer patients which could undermine their psychological health and eventually affect their healing process. Participant 008 reported on change of her world view as a result of the constant negative awareness messages,

All through, I feared cancer...the thought of cancer would course a lot of fear in me. Truth be told! Cancer killed my mother and so many other people have died of the same disease. No one would have convinced me otherwise and that made it very difficult for

me. Waiting to die, even when I was not doing badly in the treatment...Personal communication

Doctor's mode of communication

At the diagnosis most participants described the diagnosis as very distressing. Much of the distress was as a result of how the results of the diagnosis were communicated. Some doctors were careful in ensuring that the client is psychologically stable at the time of giving the results. Such a case is as reported by participant 009

Dr. XYZ is a very good doctor. She kept assuring me that we are going to do tests for what appears like it could be cancer but we had to wait for the test results. In the meantime, she explained to me that breast cancer is one of the cancers with the best prognosis and especially when detected early like in my case. That kept me going...Personal communication

A participant reported,

"My problem began with the doctor who did the biopsy. She kept saying loudly, 'Oh I don't like what I am seeing. It is actually not good' that left me very traumatized. In fact I never thought I would make it to tell the story." (Participant 008, personal communication).

Another participant posited:-

"For me when the doctor told me I had cancer, I fell down in the doctor's clinic and started screaming telling the lady who had accompanied me to take care of my children. The doctor first dropped the bomb without caring whether I was going to handle it or not. To me, I was going to die the following day. The diagnosis was made in an unplanned way. It almost killed me." (Participant 005, Personal communication).

These findings show that the manner in which doctors relayed the diagnosis results had great impact on trauma load among various participants.

Traumatic Stress in Breast Cancer Treatment

This thematic area investigated the type of treatment the participant received and the treatment side effects that followed. Among the treatment approaches examined were mastectomy (surgical removal of the affected breast), chemotherapy (drug treatment meant to slow or cure the progression of cancer) and radiotherapy (treatment that uses high doses of radiation to kill cancer cells and shrink tumors). Treatment side effects examined were hair loss, weight loss/gain, skin color changes and how these side effects impacted on the patient's psychological wellbeing. Also examined was the general perception of cancer as a disease and whether that had psychological impact on the participants as well.

Whilst treatment was meant to help the participants recover, the processes involved generated a number of side effects that continued to negatively affect the psychological well-being of participants. Some of the themes that emerged in this phase included:

Breast Loss

Participants who underwent mastectomy reported experiencing distressing emotions related to breast loss. Majority of the participants reported that it was difficult to accept the reality of living without the breast. To many this appeared to generate feelings of separation from part of the self, others reported that they felt the loss of not being able to give birth again as a result of the mastectomy. In general, participants unanimously agreed that it was very difficult to lose a breast.

Participant 002 reported,

“Up to date, it is still a major loss because I would have wanted to give birth to other children. All the same with no choice, I have to accept.”(Personal communication).

The pain of losing the breast was intense at the beginning but time factor helped quite a number of participants deal with this pain.

“At the beginning I would cry so much and would not go to the mirror. It was difficult to begin with but I came to terms Nowadays I rarely remember the loss unless the doctor is checking on the other. I still feel that the loss was major but a new me has come and I

have to move on. After all, with a good prosthesis no one would know.” Said participant 007 (Personal communication).

Participant 12 reported

I would say that up to now, though I have moved on, breast loss is still so real. There is a scar and not a breast....that is a reality that I cannot run away from. I am a woman and you know what a breast means to us women... Said participant 012 (personal communication).

Treatment side effects

The treatment side effects also affected the participant’s mental wellbeing a great deal.

Chemotherapy was also reported to have generated a number of unusual physical reactions that kept the participants disturbed. Majority of the participants reported that dizziness, nausea, feeling sick, headaches and stomachache were common. Majority of participants reported these reactions though at varied intensity. The nausea associated with the treatment was the most mentioned side effect as it affected the patient’s food intake, yet food was a requirement for the healing process.

A participant reported,

“Chemotherapy which was another drama. Another story altogether. Nausea, vomiting, dizziness, low appetite yet the doctor had insisted I had to eat. I also had radiotherapy done; 25 sessions! But radio is easier than chemotherapy. I had to be admitted to hospital every three weeks to get the chemotherapy. (Participant 006, personal communication).

Another participant posited

“My problem started from the very beginning...the thought of having cancer by itself was difficult enough. Then followed the side effects...waking up after a chemo session with no energy yet I have to go to work really weighed heavily on me. I found myself crying a lot. (Participant 010, personal communication)

A participant stated

For me the side effects were so intense that I had to get admitted in hospital every time I was getting chemo. This was to ensure that I am under observation. It was difficult vomiting throughout and it would continue for 2 days after treatment. (Participant 002, Personal Communication)

Hair loss

Participants reported to have experienced hair loss as a result of chemotherapy. Most participants felt that the losses they underwent were ignored in the process of treatment yet this meant a lot to them. A number of them reported to have had a strong attachment to their hair and therefore felt very distressed watching the hair fall as chemotherapy progressed.

A participant reported that she slept one night with hair and woke up the following day with half of it fallen.

It was very difficult sleeping with my hair but waking up with it fallen. I had long hair...I had been told it might fall but the reality dawned when it had actually fallen. It was all on my pillow..(Participant 010. Personal communication)

Another participant state

Mwanamke ni nywele! Ata kama ilimea baada ya chemo, kupoteza nywele ni ngumu! Meaning hair is to a woman. Even though it grew after chemo, hair loss is just difficult. (Participant 014, Personal communication)

Weight Loss/gain

Another loss that participants experienced as a result of treatment was weight loss. This was reported by a section of the participants. The loss of weight caused much distress among participants as to some it was a reinforcement of an earlier belief that cancer is a killer disease.

Participant 008 said,

“In fact, for me it was not just weight loss but I became so frail that I did not want to leave the house.” (Personal communication)

Others said that they added weight while others said the change in weight was negligible. Participant 005 reported,

“In my case I added so much weight and when I asked the doctor, she explained that it was a result of steroid treatment that was meant to counter the chemotherapy side effects. It was not easy for me yet I could not exercise. (Personal communication)”

Altered self-concept

Altered self-concept was reported by majority of the participants. It can be noted that irrespective of the kind of treatment, participants’ body image was affected. This is because mastectomy which in itself is considered as a form of treatment affected the participants’ body image. Chemotherapy on the other hand resulted in side effects, e.g. hair fall, weight gain/loss among others, all which affected the participants’ body image. The reporting of avoidance of using the mirror showed how traumatizing it was to live without one or both breasts, the hair or even the normal body size. Participant 004 reported,

“For sure I developed low self-esteem due to the changes I experienced. The worst was hair fall that happened after the 3rd chemotherapy. I had braided my hair some lines. I woke up one day just to find some hair on the pillow. It was the worst for me. I went to the mirror and seeing my bald head made me scream!” (Personal communication)”

The change in body image was reported more among the married women. A number of them associated their body and hair with beauty and attachment to their husbands. Some feared that their husbands would leave them and get other beautiful women with hair and good body shape. Participant 003 said,

“I hated myself. I was not able to cope well with my family members. I would interpret everything negatively. I remember one day that my husband commented on my darkened skin and I interpreted it that he was excited about it. Today when I think about it, I realize what he said was a normal thing but my interpretation was the problem.”(Personal communication)”

The study also wanted to establish what the most difficult experience was. Varied experiences were reported with some participants reporting diagnosis as the most difficult while others reported the treatment experience as the most difficult.

A participant stated

“Chemotherapy was the hardest since the side effects of chemo are very tough and that time the hair so gone, I can remember the day I lost my hair I was going to a wedding and the hair remained in the water fortunately I had a wig. This hit me hard because I had not thought of this, sometimes you feel hot and you remove the wig and people start making comments that its HIV or poverty and you have to wear a hat and its hot, ‘Huyu naye amenyoa nywele yake mzuri (meaning...now why has this one shaved her hair and the way she had beautiful hair?)’ and it hits you hard”. (Participant 005 personal communication)

Another participant said

“Diagnosis ndio ilikua shida sana kwangu. Nilikua peke yangu na ata waleo nakumbuka hiyo uzito wa kuambiwa niko na cancer. Imagine those words are still clear in my ears. Ilikua ngumu sana” (Participant 014, personal communication)

Discussion

Despite the increased survival rates, being diagnosed with breast cancer is often accompanied by high levels of distress (Vickberg, Bovbjerg, DuHamel, Currie, & Redd, 2000; Zabora, Brintzenhofeszoc, Curbow, Hooker, & Piantadosi, 2001), a feeling of helplessness (Watson et al., 1991), uncertainty (Oxlad, Wade, Hallsworth, & Koczwara, 2008), and mortal fear (Waring, 2000). In their study, Hermelink and Voigt (2015) examined a group of 166 patients who had been newly diagnosed with breast cancer. During the interval between diagnosis of cancer and the initiation of treatment, 82.5% of all patients were found to exhibit symptoms of PTSD, such as recurrent and intrusive reminders of the experiences associated with cancer, feelings of detachment and emotional numbness, increased arousal, sudden outbursts of anger and an exaggerated startle response. This is similar with the current study which reported high levels of

PTSD among the survivors of breast cancer with 90.63% of survivors presenting with severe PTSD.

The breaking of bad news related to cancer diagnosis is an emotive subject for both health professionals and patients. This study established that how news was delivered had implications on the mental health of the patient as well as how they adjusted. Consistent with these findings, Ptacek and Ellison (2000) assert that physicians and nurses believe that the way in which bad news is broken influences the patient's subsequent psychosocial adjustment. There is definitely a need to establish which communication practices optimize patients' experiences in order to ensure psychological integration of the diagnosis. Additionally, in their study of psychological responses of patients receiving a diagnosis of cancer, Schofield et al (2002), established that both patients' satisfaction with communication and their psychological morbidity were found to be associated with particular communication practices. For instance, practices linked with lower levels of depression included using the word 'cancer'; discussing the severity of the situation, life expectancy and how the cancer might affect other aspects of life; and encouraging the patient to be involved in treatment decisions.

Diagnosis of BC in most cases is followed by loss of breast(s). This is despite the fact that breasts of women serve several purposes including nourishment for their offspring, an erotic organ in a relationship, and a symbol of being feminine (Tetteh, 2017). Mastectomy is in some cases considered as part of treatment of BC. This procedure involves a permanent change to the appearance of the woman. It is an undisputable fact cross culturally that the breast is considered a part of a woman's identity that represents femininity, sexuality, beauty, motherhood, and feeding infants (Cebeci, Yangın & Tekeli, 2011). The perceived loss of any of these attributes may lead to psychopathology associated to the change in body image. What is clear is that breast cancer diagnosis and subsequent breast loss can be greatly overwhelming to the patient. Findings of this study showed high distress levels among the breast cancer survivors who had undergone mastectomy.

While still reeling from the diagnosis and breast loss, starting chemotherapy can intensify the sense of vulnerability to one's already weakened coping reserves. The treatment is associated with short and long term side effects on the patient which can have significant changes in the patients. The effects may include but are not limited to nausea, vomiting and general body

weakness. The treatment has also been associated with hair loss, facial discoloration, and loss of previous glow. These body changes can greatly affect the individual's body image. Body image is defined as the mental picture of one's body, an attitude about the physical self, appearance, and state of health, wholeness, normal function, and sexuality (Forbair et al., 2006). For some individuals, a change in appearance can lead to a negative body image and several psychosocial difficulties while on the extreme can lead to psychopathology. The participants in this study reported the overwhelming nature of the changes in the body. In line with this study is a study of body image and sexual problems in young women with breast cancer, Fobair et al (2006). The study found that negative body image among breast cancer survivors includes dissatisfaction with appearance, perceived loss of femininity and body integrity, reluctance to look at one's self naked, feeling less sexually attractive, self-consciousness about appearance, and dissatisfaction with surgical scars. Additionally, relevant literature emphasizes that patients with breast cancer can experience changes in body image, self-concept, emotions, behavior, family dynamics, and the roles of the patient and her family (Özbaş, 2007). From the findings, it is important to note that the survivors of breast cancer exhibited similar symptoms of distress and PTSD irrespective of their geographical location. The findings imply that patients diagnosed with breast cancer require psychosocial support, as part of their treatment plan in order to manage the distress and trauma associated with various stages of the disease.

Conclusion

This study examined traumatic stress associated with diagnosis of breast cancer among female survivors in Nairobi County. The study established that majority of the participants (90.63%) reported severe PTSD with only 6.25% and 3.13% of participants reporting moderate and sub clinical PTSD respectively. The study further established that diagnosis of BC and how the same was communicated impacted greatly on the individual's mental wellbeing. Other precipitators of traumatic stress included breast loss as a result of mastectomy, hair loss and other body changes which impacted on the self-concept (self-esteem and body image) as well as feeling sick due to chemotherapy side effects. These findings may be relevant in designing future interventions that combine physical and mental health of breast cancer survivors, in order to alleviate the traumatic stress associated with diagnosis and treatment.

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