Stigmatization among Breast Cancer Patients, Egypt

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Abstract

Cancer stigma is a critical social issue in cancer care that reduces communication and deprives the patients from health services leading to poor health outcomes. Aim of the study was to determine the patients' stigmatization and related factors. A cross-sectional study was conducted among 57 breast cancer patients attending outpatient clinic in Minia Oncology Center, Egypt. Results: 47.4% of cancer patients had <30 years of age, 56.1% of cancer patients had receiving chemotherapy. About two-third of cases diagnosed with breast cancer less than one year and with early cancer stage. 87.7% of cancer patients were stigmatized with more than half of them of fair degree (58%). Stigmatization higher in cases were in young age, rural and married patients with low education and unemployed and those receiving chemotherapy. Cancer stigma with fair degree was more prevalent among breast cancer patients. Comprehensive health education messages for community for raising awareness about the associated stigma and its impact among cancer survivors which affect cancer control programs. Highlighting the importance of peer support and counseling in health facilities for tailoring stigma-resilience interventions.

1. Introduction

Cancer is a major public health concern worldwide and is becoming the most significant barrier to increase life expectancy (Siegel et al., 2020). As estimated by Global Cancer Observatory in 2020, the breast cancer was the most commonly experienced cancer by women worldwide (11.7%) (Ferlay et al., 2020). In Egypt 2020, the most prevalent cancers among females were breast (32.4%) and was considered a leading cause of death (GLOBOCAN, 2020). According to cancer records from Minia university hospital, Minia oncology center and Minia health insurance hospital in 2014, breast cancer accounting for more than quarter of all types of cancer occurred in females (37.4%) (Emam et al., 2020). The higher rates of breast cancer had increased because of aging, delaying in first pregnancy, declining in breastfeeding and shifting to high-calorie western diets (Hassan et al., 2017). There is a rising concern about the stigmatization for cancer condition, whereas it may serve as an interpersonal psychological stressor and a potential barrier for preventive health decisions despite availability of cancer screening and preventive measures (Amini-Tehrani et al., 2021). Apart from being a medical condition, cancer is considered a stigmatized condition in many cultures compared to other diseases which have numerous health implications and hinder healthy coping (Watt et al., 2023).

Stigma is one of the psychosocial challenges in cancer. It refers to the feeling of isolation, rejection, and criticism during personal experience that results from a reasonable expectation of adverse social judgment for cancer patient or groups with influencing physical, psychological and social adjustment outcomes (Sun et al., 2021). Stigma theorists have proposed a set of terms and dimensions for negative attitude that include enacted (ie, actual discrimination based on their condition) or perceived (ie, an anticipation of being discriminated against) and internalized (self-blame) stigma. While internalized stigma means the effect of perceived stigma on patients via guilt, shame and self-blame (Rose et al., 2018). Experiencing cancer stigma can be more difficult and even more unbearable than cancer itself and its treatments. It affected the individuals in four keyways: (1) mental health distress, (2) impediments to care engagement especially in low- and middle-income countries to keep secret cancer to avoid negative experiences result in so poor quality of life, (3) lack of cancer disclosure and (4) self-isolation (Ohlsson-Nevo et al., 2020; Watt et al., 2023). Stigmatization from breast cancer cases is due to shame feeling as a result of surgical scars, lymphatic oedema, hair loss from chemotherapy and skin lesions such as erythema and peeling skin from radiation therapy (Kang et al., 2020). Furthermore, women eventually diagnosed with breast cancer had a delayed diagnosis seeking because of fear of social exclusion (Rajasooriyar et al., 2021). Arab women

with breast cancer in the Middle Eastern societies experience health-related stigma as fears of divorce and also reported that their breast cancer might prevent their daughters or sisters from getting married (Dewan et al., 2020).

Research methodology

Study design and population:

A cross-sectional study was carried out on 57 breast cancer cases clinically stable >18 years attending outpatient clinic in Minia Oncology Center. Data were collected after explaining the nature and aim of the study and obtaining written consent from cases. Patients were asked about demographic data, disease-specific characteristics and validated questionnaire of Stigma Scale for Chronic Illnesses-Short Form. Stigma Scale for Chronic Illnesses-Short Form (SSCI-8) was used to assess experienced stigmatizations with two forms of enacted and internalized stigma within a unidimensional construct (Molina et al., 2013). The items were scored based on a five-point Likert scale from "never" to "always". The raw summed score range was 8–40: un-stigmatized: if scale's score = 8 while stigmatized: if scale's score $\geq$ 9; fairly stigmatized if score $\leq$ 10 or heavily stigmatized if score $\geq$ 11) (Daryaafzoon et al., 2020).

Ethical consideration:

An ethical permission was taken by the Research Ethical Committee of the Faculty of Medicine at Minia University in addition to formal acceptance was obtained from the ethical committee and the director of Minia Oncology Center. Written consent was obtained from all female patients after providing comprehensive information about the aim and the nature of the study.

Data statistical analysis:

The data were computerized and statistically using the Statistical Package of Social Science (SPSS), version 20. Results were expressed as mean $\pm$ SD and range for continuous variables while frequencies (percentages) for categorical variables. Categorical variables were compared by Chi-square or Fisher's exact test "if >20% of cells had expected count less than 5". The P value of less than 0.05 was used as a cut-off point for all significant tests and all statistical tests were two-tailed.2. Materials and Methods

3. Results and discussion

As shown in table (1), 47.4% of cancer patients had <30 years of age and more than half of them were reside in rural areas, were married and unemployed. The majority of patients had low educational level. The table 2 showed that 56.1% of cancer patients had receiving chemotherapy. About two-third of cases diagnosed with breast cancer less than one year and with early cancer stage. The overall mean stigma score was 11.25 $\pm$ 2.57 among the studied patients with the mean score of internalized stigma was 5.53 $\pm$ 1.83

while the mean score of enacted stigma was 5.71 $\pm$ 0.96. 87.7% of cancer patients were stigmatized with more than half of them of fair degree (Table 3). This table showed that 54% of stigmatized cases were in young age compared to un stigmatized with significant difference observed (p= 0.01). Rural and married cases were more likely significantly to be stigmatized than other. Patients with low education and unemployed had significantly higher stigma compared to other. Patients had receiving chemotherapy had a higher stigmatization than other therapy (Table 4). The current study was a cross-sectional study conducted in outpatient clinic in Minia Oncology Center, Minia, Egypt to determine the patients' stigmatization and related factors. In the present study, 47.4% of cancer patients had <30 years of age and more than half of them were reside in rural areas while the majority of patients had low educational level (Table 1). These findings were approximate to a study patients admitted to the Affiliated Cancer Hospital of Xiangya School of Medicine for breast cancer treatment in China reported that 49.5% of them <40 years of age. The majority of patients had secondary or below educational level and were reside in rural areas (Bu et al., 2022). Regarding the clinical data findings in this study, 56.1% of cancer patients had receiving chemotherapy. About two-third of cases diagnosed with breast cancer early stage (Table 2). These results similar to a cross-sectional study included 223 breast cancer patients in Iran reported 61.4% received chemotherapy (Zamanian et al., 2022). While 71.5% of cases with early cancer stage (Bu et al., 2022).

Regarding stigma characterization, this study showed that the overall mean stigma score was 11.25 $\pm$ 2.57 among the studied patients with the mean score of internalized stigma was 5.53 $\pm$ 1.83 while the mean score of enacted stigma was 5.71 $\pm$ 0.96 (Table 3). Nearly similar results were found in a cross-sectional study on Iranian breast cancer patients reported that the overall mean stigma score was 11.75 $\pm$ 5.56 according to the SSCI-8 scale while mean scores for enacted was 6.99 $\pm$ 3.44 and internalized stigma was 4.77 $\pm$ 2.63 (Zamanian et al., 2022). In this study, 87.7% of cancer patients were stigmatized with more than half of them of fair degree (Table 3). This was in line with the stigmatized patients (79%) among 200 advanced cancer patients (Pham et al., 2021). In the current study, 54% of stigmatized cases were in young age. Patients with low education and unemployed had significantly higher stigma compared to other. Patients had receiving chemotherapy had a higher stigmatization than other therapy (Table 4). These findings were similar to Badihian et al. (2017) found that younger people had a more negative attitude toward cancer enhancement; due to the linkage between younger people and health-related media`s negative reports on the incidence and mortality of cancer. The higher education is associated with a lower score for the stigma (Shiri etal., 2018). This could be justified by the higher-educated people were more likely to seek the right information or to become aware of the illness or to have access to information sources such as the Internet.

Table (1): Baseline characteristics of the studied cancer patients

Characteristics	Cases (n=57) N (%)
Age (years) <30 years 30-50 years >50 years	 27 (47.4%) 21 (36.8%) 9 (15.8%)
Residence Urban Rural	 24 (42.1%) 33 (57.9%)
Marital Status Unmarried Married	 23 (40.4%) 34 (59.6%)
Education Low level High level	 43 (75.4 %) 14 (24.6%)
Occupation Un employed Employed	 33 (57.9%) 24 (42.1%)

Table (2): Clinical data findings among the studied cancer patients

	Cancer patients (n=57) N (%)
Family history of cancer No Yes	 29 (50.9%) 28 (49.1%)
Time since diagnosis < one year >one year	 35 (61.4%) 22 (38.6%)
Cancer Stage Early Advanced	 35 (61.4%) 22 (38.6%)
Cancer therapy Chemotherapy Radiotherapy Chemoradiotherapy Surgery Combined	 32 (56.1%) 2 (3.5%) 4 (7.0%) 6 (10.5%) 13 (22.8%)
Metastatic occurrence No Yes	 34 (59.6%) 23 (40.4%)

Table (3): Stigma characteristics among the studied cancer cases according to Stigma Scale for Chronic Illnesses 8-Item

Stigma characteristics	Cancer cases (n=57)
	Mean ± SD **Range**
Overall stigma score	11.25 ± 2.57 (8 – 16)
Forms of stigma Internalized stigma	5.53 ± 1.83 (3 -9)
Enacted stigma	5.71 ± 0.96 (5 -7)
Stigmatization Un stigmatized Stigmatized	**N (%)** 7 (12.3%) 50 (87.7%)
Grades of stigma (n=50) Fairly Heavily	**N (%)** 29 (58%) 21 (42%)

Table (4): Comparison of various characteristics between the studied groups regarding stigmatization

	Unstigmatized cases (n=7) N (%)	Stigmatized cases (n=50) N (%)	P value
Age (years)			
<30 years	0	27 (54%)	0.01*
30-50 years	6 (85.7%)	15 (30%)	
>50 years	1 (14.3%)	8 (16%)	
Residence			
Urban	0	24 (48%)	0.02*
Rural	7 (100%)	26 (52%)	
Marital Status			
Unmarried	0	23 (46%)	0.02*
Married	7 (100%)	27 (54%)	
Education			
Low level	5 (71.4%)	38 (76%)	0.79
High level	2 (28.6%)	12 (24%)	
Occupation			
Un employed	5 (71.4%)	28 (56%)	0.69
Employed	2 (28.6%)	22 (44%)	
Family history of cancer			
No	1 (14.3%)	28 (56%)	0.04*
Yes	6 (85.7%)	22 (44%)	
Time since diagnosis			
< one year	2 (28.6%)	33 (66%)	0.09
>one year	5 (71.4%)	17 (34%)	
Cancer Stage			
Early	3 (42.9%)	32 (64%)	0.41
Advanced	4 (57.1%)	18 (36%)	
Cancer therapy			
Chemotherapy	1 (14.3%)	31 (62%)	
Radiotherapy	0	2 (4%)	0.02*
Chemoradiotherapy	1 (14.3%)	3 (6%)	
Surgery	0	6 (12%)	
Combined	5 (71.4%)	8 (16%)	
Metastatic condition			
No	2 (28.6%)	32 (64%)	0.11
Yes	5 (71.4%)	18 (36%)	

4. Conclusions

The higher stigmatization level among those received chemotherapy could justified through exacerbation changes in physical appearance.

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