

Determination of the Association between Perceived Stigma and Delay in Help-Seeking Behavior of Women with Breast Cancer

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ABSTRACT

Background: One of the leading causes of death in patients with breast cancer is delays in help-seeking, which is influenced by various factors, including social factors such as cancer stigma.

Objectives: This study aimed to determine the relationship between perceived stigma and delay in seeking help for women with breast cancer.

Methods: In this cross-sectional study, 140 women with breast cancer referred to Besat Clinic in Rasht, Iran, were included. The data gathering tools included a demographic questionnaire, a cancer stigma questionnaire and a delay questionnaire completed through interviews with patients. Data analysis was performed using SPSS software V.21 and the descriptive and inferential statistics were performed using correlation coefficient, chi-square test, logistic regression, Mann-Whitney U-test, and Kruskal-Wallis test.

Results: In this study, 72.1% of patients were aged between 39 and 57 years, with a mean age of 47.99 ± 8.03 years; 34.3% and 16.4% of patients delayed seeking help between 30 and 90 days, and more than 90 days (with mean \pm SD of 75.35 ± 165.19), respectively. Breast cancer stigma was present in 45% of patients. Delay in seeking help based on stigma was significant ($P < 0.001$). Due to multiple logistic regression, the association between stigma and delayed relief was significant ($P < 0.01$), so that in women suffering from breast cancer with stigma, the chance of delaying seeking help was 5.7 times (OR 5/706, CI 95% 1.381-23.572) higher than women without stigma.

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Conclusions: Stigma may be a factor in delaying the screening of women with breast cancer. Therefore, it is recommended that the health care team considers stigma as one of the most important psychological aspects of breast cancer, which may have an impact on patients' delay in seeking help. It should also be considered in the process of diagnosis, treatment counseling, and patient follow-up.

Keywords: : social stigma, help-seeking behavior, breast cancer, women.

BACKGROUND

Breast cancer is three times more common in developed countries than developing ones, even though the incidence rate is higher in developed countries, and the mortality rate is more significant in developing countries (1). In Iran, breast cancer is the most common malignancy in women, with 5,000 new cases known annually, and a number of new breast cancer cases in 2030 estimated to exceed 15,000 (2, 3).

Among the leading causes of mortality in patients with cancer, delayed help-seeking and delayed consultation are mentioned (4, 5). In this regard, general concepts of patient delay include: A) delay in assessment, when symptoms and disease are detected; B) patient's delay; the interval between inferring a disease and deciding to seek medical help; C) delay in taking action; the time interval between decision to seek medical help and taking action to enforce their decision to seek medical help.

The time interval between a patient's initial symptoms and the date when the first visit to a clinic is made is defined as the delay in seeking patient help (6). The suggested time period varies to define the delay time in help-seeking, and some described this interval above 30 days since the observation of symptoms till the patients' help-seeking time, while others pointed out a period above 90 days (6, 7). Also, some classify the elapsed time less than one month as "normal," 30-90 days as "delay," and more than 90 days as "long-term-delay" (8, 9).

Regarding the delay of patients seeking help in the literature, Attari's study found 52.5% of all investigated women with a delay of more than three months, and Dianatinasab's study 23.4% (4, 10). In Mirfarhadi's study, 53% of women reported a delay of more than one month, and in 31% of them, a delay of more than three months

(11). Moreover, in Mujar's study, a delay of more than three months was reported in 35% of patients (12). Also in Alam Khan's study, 30.01% of patients were delayed (13).

Scientists have speculated different etiologies regarding delay in patients' help-seeking (14). Many factors, including personal causes as well as socio-cultural and economic factors, are involved in delay (15, 16). Furthermore, women's supportive behavior is affected by complex psycho-social, environmental, cultural, and cognitive causes (6).

Labeling or stigma is claimed to be an influential social determinant, which causes some patients' refusal of cancer screening, follow-up, and treatment (17, 18). Stigma is when the stigmatized person is discredited and blemished in his/her environment due to physical and mental distinctions. The term "stigma" is used for a feature or attribution which is considered extraordinarily notorious and disgraceful (19).

Cancer-related stigma is a significant socio-mental issue that cancer patients may face within diagnosis and treatment. It can influence patients' daily life and is followed by various clinical outcomes and social consequences (20, 21).

The perception of stigma and its experience may be followed by treatment disobedience, feeling isolated, avoiding visiting health service providers, and low quality of life (21, 22). Dey *et al* state that "Stigma from breast cancer reflects a bad personality on women and makes them hide the symptoms of cancer" (23). Moreover, patients who are suffering from cancer may misperceive being stigmatized due to cancer. Fear and anxiety or avoiding patients with cancer can exacerbate the negative attitudes toward cancer (24). Fear and concern regarding the maintenance of personal privacy, stigma, and strict social taboo about cancer may strongly influence patients' tendency for seeking health information and willingness for receiving emotion-

al support; even these concerns may deprive them of receiving emotional support, hence rendering them to feel socially isolated (22). Not only does breast-cancer-related stigma create a delay in the cooperation of women for treatment courses, but it also prevents the continuation and completion of treatment (25). The rate of stigma caused by breast cancer has been reported in various studies, including Cho *et al* stated that 30% of women with colorectal breast and gastric cancers experienced stigma in Korea (24). About a quarter of patients experienced high levels of stigma in India (26).

Delay in help-seeking of patients with cancer gives rise to numerous outcomes for them. Although studies regarding the causes of delay in cancer patients' help-seeking are widely extensive, the role of stigma in cancer (especially breast cancer) patients' delay has been explored to a lesser extent. The current study has been conducted for the same reason. □

METHODS

This analytical cross-sectional study has been conducted on women with breast cancer who referred to or visited Be'sat Subspecialty Center for chemotherapy during 2018 in Rasht city, Iran.

The statistical criteria required for our population, allowing them to be eligible for the study, included Iranian nationality, presence of breast cancer (confirmed by mammography and biopsy), not having any other cancer, no cancer recurrence, and no metastasis, all of which being investigated according to the recorded documents and patients' statements.

Available sampling was performed between the 2nd of May and June 3, 2018, according to the study of Carter Harris *et al* (17), and considering the Pearson coefficient $r=0.27$, confidence coefficient of 95%, statistical test power of 90% and based on the formula; finally, the research selected a total number of 140 women after obtaining their written consent for participation. Questionnaires were filled out by interviewing each patient.

Data were collected from questionnaires, including the researcher's demographic questionnaire, composed of one part concerning socio-individual information and another one regarding family and individual cancer-related history, and

the delay questionnaire (and its causes), retrieved from the study of Mirfarhadi *et al* (11), with questions about how a breast disease can be realized, what is the earliest symptom observed by the patient, the time of first suspected symptom of breast disease, elapsed time between the realization of breast cancer symptoms and the first visit to a healthcare practitioner, the first healthcare provider whom the patient visited, usage of other treatment approaches (before visiting a physician) and type of supplemental therapy. An interval of more than one month between patients' detection of first symptoms and the first medical consultation was regarded as a patient delay. The relevant items related to delay causes include the following 10 questions: financial restraints, time restrictions, fear of having severe diseases in the breast, fear of getting once specimen collected, no sense of urgency for a visit, fear of incurability of cancer, belief in predestination, fear of the treatments side effects, reassurance from others of the insignificance of the issue, and family's objections on treatment method and health center.

Initially, Cho J. *et al* (24) codified the cancer stigma scale (patient's version); later, Yilmaz assessed its validity and reliability in Turkey (21) and granted permission to us to use the questionnaire in the current study. The questionnaire is composed of 12 items in three domains: impossibilities of recovery (items 1-4), stereotypes of a cancer patient (items 5-8), and experience of social discrimination (items 9-12). The answers are designed based on a 4-point Likert scale and given a score of 1 to 4 as follows: 1. Strongly disagree 2. Disagree 3. Agree 4. Strongly agree. The final stigma score was evaluated according to summed scores and their mean calculation through which the interpretation became possible. If the average of acquired scores (in all domains) was above or equal to 2.5, it represented a negative attitude towards cancer and stigma. The Cronbach's alpha value of the scale was 0.79 in Cho's study and 0.88 in Ilmaz's study.

For scientific validity and reliability of both Cancer stigma questionnaire and Delay in help-seeking questionnaire (and its causes), the "content validity" method has been used. Hence, upon permission clearance from the author, the cancer stigma questionnaire was translated to Persian and then retranslated to English in the light of Lawshe's developed table. To measure

content validity, the content validity index (CVI) and content validity ratio (CVR) were discussed by asking ideas from 10 professors. The mean CVR across the cancer stigma items and the causes of delay as another tool yielded a range of 0.8-1 and 0.7-0.8, respectively. "Test-retest reliability" was employed to assess the reliability of both causes of delay in help-seeking and stigma questionnaires. The questionnaires of 20 participants were filled out in two stages: first through a face-to-face interview, then confirmed after 10 days via phone call with the same subjects. Pearson (r) correlation coefficient of both stages was $r=0.902$ ($P<0.0001$) across the causes of delay items and $r=0.847$ ($P<0.0001$) across the stigma questionnaire items, representing statistical significance. Not to forget that the reliability coefficient for causes of delay in help-seeking as one of our tools and stigma tool obtained 99.2%, 99.8%; therefore, in terms of reliability, the engaged tools pass the credentials of trustworthiness for the study group.

Ethical considerations

All participants were informed about the research objectives. In addition to receiving informed written consent, they were assured that all their information was confidential, without including their names and personal details, unless the relevant authorities of the research environment wish to provide the study results.

Statistical analysis

In the present study, frequency distribution with a 95% confidence interval was used to determine the stigma level and delay in help-seeking. Also, to assess perceived stigma related to breast cancer and delay in help-seeking, contingency

coefficient and Chi-square test were employed to compare the variables (socio-individual history and cancer histories) with delay status; we used Mann Whitney U test and Kruskal-Wallis H test. Furthermore, the logistic regression model was applied in our multivariate analysis to associate delay with a stigma that balanced the socio-individual variables. Similarly, we utilized the logistic regression model to determine the predicting factors of delay. Statistical significance was considered when $P<0.05$. □

RESULTS

One hundred forty women with breast cancer with a mean age of 47.99 ± 8.03 (range 26–70 years) were included. The highest frequency in variables was for married women (82.9%), educational level of "illiterate" or "knows reading & writing" (52.9%), and "housewife" status (61.4%); while only 2.9% of subjects had an education profile related to medicine. Similarly, the most frequent choices for items of husband's education and occupation were "knows reading & writing" (44%) and "self-employment" (55.2%), respectively. The majority of respondents reported "As much as needed" (53.6%) for monthly income, "3-5 members" (72.9%) for the number of supported members by family income, and "owning a house" (75.7%) for homeownership item. Unfortunately, 53.6% of subjects did not have complimentary insurance.

Most participants did not report any history of complications in their breasts (92.1%) and any family history of developing breast cancer (75.7%). Among those who presented a family history of cancer (24.3%), 44.1% died due to breast cancer. Note that 67% of patients repor-

Domains of stigma		N (%)	95% CI	
			Lower	Upper
Impossibility of recovery	Yes	65 (46.4)	38.3	54.7
	No	75 (53.6)	45.3	61.7
Stereotypes of cancer patients	Yes	120 (85.7)	79.2	90.8
	No	20 (14.3)	9.2	20.8
Experience of social discrimination by patient	Yes	28 (20)	14	27.2
	No	112(80)	72.8	86
Perceived stigma	Yes	63 (45)	36.9	53.3
	No	20(14.3)	46.7	63.1

TABLE 1. Perceived stigma and its domains in the studied subjects

TABLE 2. Comparison of the frequency distribution of delay time in help-seeking of the studied participants since the observation of symptom according to the status of stigma domains.

Status of stigma domains			Delay time in help-seeking of studied subjects since the observation of symptom				
			0-29 days	30-90 days	More than 90 days	Sum	P value
Impossibility of recovery	Yes*	n (%)	27 (41.5)	23 (35.4)	15 (23.1)	65 (100)	0.092
	NO	n (%)	42 (56)	25 (33.3)	8 (10.7)	75 (100)	
Stereotypes of cancer patients	Yes	n (%)	53 (44.2)	45 (37.5)	22 (18.3)	120 (100)	0.012
	NO	n (%)	16 (80)	3 (15)	1 (5)	20 (100)	
Experience of social discrimination by patient	Yes	n (%)	12 (42.9)	11 (39.3)	5 (17.9)	28 (100)	0.744
	NO	n (%)	57 (50.9)	37 (33)	18 (16.1)	112 (100)	
Perceived stigma	Yes	n (%)	18 (28.6)	29 (46)	16 (25.4)	63 (100)	0.001
	NO	n (%)	51 (66.2)	19 (24.7)	7 (9.1)	77 (100)	
	Total	n (%)	69 (49.3)	48 (34.3)	23 (16.4)	140 (100)	

*Mean of scoring of 2.5 and above has been considered as an indicator of stigma presence

ted no family history of other cancers in their maternal and paternal families. The majority of women had no history of mammography (78.6%) or breast-sonography (90.7%), with 70% of subjects having not visited a physician for breast examinations. Besides, the majority (84.3%) came to know about the occurrence of a complication in their breast accidentally, and the feeling of a lump in their breast (53.6%) was the chief symptom that convinced them to visit an specialist for further investigation. Other symptoms such as skin stretch (5.7%), nipple retraction (4.3%), and breast ulceration (3.6%) were reported to a lesser extent. Regarding the first doctor visited by participants, 30.7% of women visited a gynecologist, 24.3% a general surgeon, 19.3% a general physician, and 17.9% a midwife. Also, most women (93.6%) had not undergone any other therapy procedure.

Regarding the perceived stigma, 45% of all studied cases presented breast-cancer-related stigma (Table 1). The results represented the frequency distribution of perceived stigma according to individual and social variables; primary diagnostic methods were not statistically significant.

Regarding the days of delay in help-seeking since the observation of the first symptom, 49.3% of respondents reported a delay of "less than

30 days", 34.3% a delay of "30-90 days," and only few (16.4%) more than 90 days. Also, to understand how statistics changes in items of socio-individual variable, cancer histories compare to delay status, we concluded that only the variables represented by "possessing complementary insurance" (P=0.033), "the presence of ulceration in the breast" (P=0.011) and the first referred person being a health care practitioner (P=0.012) were statistically significant.

From one perspective, "30-90 days" of delays was more common among women with stigma (46%) than those without stigma (9.1%) (Table 2). Also, delay in help-seeking due to stigma has been seen in 71.4% of participants (P=0.001).

With respect to predicting factors being effective on delay in help-seeking, the following causes are presented with statistical significance in both groups of women with and without delay: I was afraid of specimen collection (P=0.001); I did not sense the urgency to do it (P=0.001); I was afraid that my diseases be incurable, and I did not refer (P=0.001); I was afraid of the side effects of the treatment (P=0.001); and others ensured me that there is no severe problem (P=0.031).

The association of stigma with delay in help-seeking after controlling the individual and social variables with statistical significance less than

TABLE 3. Regression coefficient and relative estimated chance of stigma effects on a delay time exceeding 30 days after balancing the effect of individual socio-individual variables and cancer histories, in the logistic regression model

Socio-individual variables		Regression coefficient	SE	P value	Relative chance	95% CI	
						Lower	Upper
Value primary model	Age	-0.176	0.168	0.294	0.838	0.603	1.165
	Family history of developing breast cancer	0.603	0.92	0.512	1.828	0.301	11.094
	Possessing a history of developing other cancers in the maternal and paternal families	1.449	0.838	0.084	4.258	0.824	21.993
	Breast mass/lump	-0.228	0.314	0.780	0.796	0.161	3.929
	Age at the onset of the menstrual cycle	0.025	0.301	0.933	1.026	0.569	1.849
	Number of pregnancies	0.025	0.488	0.959	1.026	0.394	2.672
	Number of deliveries	0.202	0.5	0.686	1.224	0.459	3.263
	The elapsed time since the end of menopause (years)	0.017	0.086	0.839	1.018	0.860	1.204
	Stigma	1.948	0.815	0.017	7.017	1.420	34.683
	Constant number	6.489	8.691	0.455	657.989		
Final model	History of developing other cancers in the maternal or paternal families	1.435	0.722	0.047	4.201	1.019	17.311
	Stigma	1.742	0.724	0.016	5.706	1.381	23.572
	Constant number	-1.303	0.653	0.046	0.272		

0.25 in univariate analysis was again with $P=0.016$ statistically significant (OR 5.706, CI 95% 1.38–23.57), and the likelihood of delay in help-seeking cancer women with stigma was 5.7 times greater than those without stigma. Besides, there was an estimated 4.2 times increase in the chance of delay when there was no history of developing other cancers in maternal and paternal families (OR 4.201, CI 95% 1.019–17.311) (Table 3).

Similarly, logistic regression model based multifold analysis of causes of delay in help-seeking, fear of sampling ($P=0.021$), lack of realization of urgency ($P=0.001$), and belief in unavoidable predestination and determinism ($P=0.41$) were considered the three most important causes of delay in help-seeking. In other

words, with increased scores of "fear of sampling" and "lack of realization of urgency in punctual visit", there was an elevated chance of delay, and by each increased score, the relative delay due to fear of specimen collection and no sense of urgency in the on-time visit was "OR 1.15, CI 95% 1.021–1.298" and "OR 1.695, CI 95% 1.403–2.049", respectively. □

DISCUSSION

This study investigated the relationship between perceived stigma and delay in help-seeking behavior among women with breast cancer. The results showed that the delay in seeking help from patients was associated with stigma, and the chance of delay in seeking help from women with stigma breast cancer was hi-

gher than those without stigma. In line with the present study results, Meacham *et al* described a relationship between understanding breast cancer stigma with delay in seeking help, patient interaction with breast and cervical cancer, completion, and continuation of treatment (25). Steiness *et al* also stated that fear and stigma were among the most commonly seen beliefs and attitudes of breast cancer patients, and represented an obstacle to receiving timely health care. These ideas affected the delay in patient's decision as well as the family's beliefs and attitudes (27). The high level of perceived cancer stigma was associated with increasing the number of days seeking help following the onset of symptoms (17). Scott's study found that understanding stigma was a barrier to seeking patient help and delaying the diagnosis and treatment of cancer (28). Evaluating the early symptoms and seeking help behavior, it can be inferred that cultural and social beliefs play a significant role in the sanitary behavior of cancer patients. Stigma, taboo, and fear of women toward adverse conduct of society could influence delay time in seeking help and lead to delayed help-seeking in women.

The results of the present study showed that 45% of respondents had a stigma. Also, in a study from Thailand, women with breast cancer reported stigma due to the nature of the disease and its treatment and complications (29). Cho has reported that patients with breast cancer and concomitant stomach, colorectal or genital cancers have all had a stigma and negative attitudes toward cancer (24). A study from India and Africa also reported stigma in breast cancer patients (26, 30). Moreover, other studies based on studied subjects (cancer patients and patients with other diseases) and the type of utilized tools also reported different degrees of perceived stigma. This is to the extent that negative attitude and stigma among community individuals was observable toward cancer patients (31). Thus, stigma was reported in patients with either cervical cancer and HIV (Rosser's study on Kenyan women) (32), or chronic diseases (in patients from Cambodia, Malaya, and Vietnam) (33). The mixed study results could be derived from the type, quality, and severity of the disease, research tools, cultural and social differences, development of a society, knowledge level, and awareness.

The findings of the current study show that 34.73% of participants delayed their help-seeking by 30-90 days and 16.4% more than 90 days. Although the rate of delay in our study was lower than that reported by Mirfarhadi (more than 30 days and more than 90 days, 53% and 31%, respectively) (11), our latency was higher than in other countries; thus, in Turkey, a delay by more than 30 days (16.7%) and more than 90 days (5.3%) was reported (8), and in Estonia by more than three months (17%) (7). The difference in type, quality, and severity of the diseases across studies, time of conducting the study, practical definition of "delay time" in the study, level of public awareness of the society in the study, and degree of accessibility of health-care experts for patients are among the reasons influencing the different results of delay in help-seeking.

The results showed that among individual and social variables and cancer records, lack of supplementary insurance was associated with a delay in seeking help from women, as found by other studies too (6, 11, 34). It seems that insurance support for cancer patients is necessary for the early referral of these patients. Our findings have also shown that the first symptoms of breast cancer (perceived by a patient) had a significant relationship with the patient's delay in seeking help, so that patients with breast ulcers, on average, had more delay in seeking help than other symptoms. In the Innos's study, a lack of breast mass was associated with patient's delay in seeking help (7). Macleod *et al* reported that unspecific and vague symptoms might have increased the risk of delay in seeking help (35). Similarly, Meechan *et al* stated that the delay period to seek help was shorter in the women who felt a breast lump than that those with other symptoms (36). Regarding this association, it can be inferred that the more commonly seen symptoms, including feeling pain and lump in the breast, are more alarming for women to doubt about breast cancer, and more unspecific symptoms draw less attention, and if considered to be necessary, it leads to an increase in the period of delay in seeking help.

The above study results showed that women referred to an internal medicine specialist on their first visit had a long delay seeking help. According to Shieh S-H *et al*, patients preferred to be examined by well-known physicians, which

explained why patients' delay time prolongs (37), while Brinton reported that seeking help from people other than specialists and nurses prolonged delays in help-seeking (38). Regarding the underlying causes, causes like unawareness of patients to refer to the related physician, inaccessibility to a general surgeon, gynecologist, or midwife could be argued.

In multiple analyses, the three most important causes of delay in seeking help included fear of sampling, lack of urgency to see a doctor, belief in lack of change of fate, and appreciation. Higher scores of items represented by fear and no sense of urgency in the on-time visit meant that the chance of delay rose, while higher scores in the belief of predestination and determinism were translated in a reduced chance of delay in seeking help. In the study of Mirfahadi, it has been mentioned that the most important causes of delay more than one month in seeking help according to patients' estimation, are as follow: no sense of urgency in referring and urgent visiting by a physician, fear of disease and cancer diagnosis and financial problems (11). Among the mentioned causes, the current study has not identified the "financial problem" to be statistically significant. Due to health policy improvements in our country, all participants were 100% covered by insurance, whereas, when Mirfarhadi *et al* were conducting their study, full coverage of insurance was not available. In Gözüml's study, fear and anxiety, shame, refusal, and inattention to symptoms of breast cancer delayed seeking help from patients with breast cancer (8). O'Mahony has also determined the fear as a contributing factor and a cause for delay in help-seeking of women (39). Fear of cancer diagnosis, fear of losing breasts, and fear of radiotherapy were either obstacles toward breast cancer screening in a group of women or contributor factors in another group (40). In the current study, higher scores in predestination and determinism have reduced the chance of delay.

Contrary to our study, Gözüml reported that beliefs in predestination and determinism had led to delay in seeking help (8). Likewise, Gullatet *et al* found no association between practicing a religion and beliefs in predestination and determinism, on one hand, and timing of help-seeking behavior, on the other hand (41). The association of "belief in the destination (and destiny)" with a delay has been differently re-

ported by Gözüml and Gullate and by us in the current study. The underlying cause could be attributed to the type of beliefs, cultural and even religious differences of explored societies.

Also, in the present study, in logistic regression, the absence of a history of other cancers in maternal or paternal family increased the chances of delaying seeking help, whereas Gangane (5) and Gözüml (8) declared that family history of developing other cancers did not play any role in women's help-seeking behavior. Moreover, Aleem Khan (6) and Gueye (42) argued that lack of family history of developing breast cancer regarding delay had a statistical significance, and a delay followed it in seeking help. On the contrary, in the studies of Gözüml(8) and Odongo (43) as well as the current study, there was no evidence of an association between these two. Generally, it seems that insufficient knowledge of patients about contributing factors to breast cancer and lack of history of inheritance of other cancers in the family may form false confidence in immunity to cancer and increases patients' delay in seeking help.

Study limitations

In this study, sampling was based on only 140 patients referred to a government center, which cannot be generalized to all patients with breast cancer. It is better to do multicenter studies with a larger sample size on patients in private centers. The present study was quantitative. The questionnaire completion enabled the researcher to learn that interviewing and conducting a qualitative study was a better solution in the effort to obtain respondents' correct answer to questions; also, many of patients' conversations and feelings during the completion of the questionnaire could not be expressed in quantitative questions, which lead to the conclusion that it would be better to conduct a qualitative study on these patients. □

CONCLUSION

The perception of stigma related to breast cancer and other causes can lead to patients' delay in seeking help. Concerns in the association of breast cancer with its high stigma could negatively influence various aspects of patients' life and health behaviors to a wide extent. Those who have breast cancer ignore their early symp-

toms due to stigmatization concerns, hence the delay in seeking help trying to hide their disease. Patients' delay could have adverse effects on their prognosis, treatment, and even surveillance. Therefore, the results of this study can not only help providing more information and awareness to healthcare suppliers, but also draw their attention towards the essential psychological dimension of breast cancer and presence of stigma, which they may consider in offering clinical and counseling services to women. Also, presenting the results of this study to managers and policymakers of health services by emphasizing this dimension and its effect on early referral of breast cancer patients in the development

of training and counseling programs for the health team and clients can be helpful. □

Conflicts of interest: none declared.

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