

# Assessment on Awareness of Nurses as Support Group for Women with Breast Cancer: Importance of Caregiver Role

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**Abstract**--Being diagnosed with breast cancer has emotional and psychological effects on the patients. Thus, support group play a significant role in providing emotional and moral support to the patients. Thus, this work has evaluated the role of nurses as support group for breast cancer patients in Saudi Arabia. Through assessing 80 primary healthcare nurses at Al-Amoudi Breast Cancer Center and attending cancer support group sessions at the International Medical Center, this work has been able to identify psychological factors that impact the patients' treatment outcome, with the husband as a supporter coming on top, along with the family's support and the willingness of the patient to recover taking second place. The responses pinpointed the reactions most frequently occurring were seeking treatment, engaging in prayer and religious rituals, searching for information about the disease as well as finding support from loved ones. In addition to that, results showed that the most important support system after families were the nurses support group.

CCS Concepts • Information systems

**Keywords**--Nurses; support group; breast cancer; awareness; women;

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## I. INTRODUCTION

One of the phenomena constantly related to death and existence is breast cancer, a medical condition classified by a class of diseases characterized by out-of-control abnormal cell growth [1]. Breast cancer occurrence rates are promptly rising in most low and middle income countries than in areas where the rates are already high. It is estimated that almost a 50% increase in breast cancer global incidence and deaths between 2002 and 2020, merely as a consequence of the aging of current global populations [2].

Breast cancer is a disease that transports significant pressure to the diagnosed; it also leads to psychological stress and a deprived sense of worth to the life one lives [3]. Encountering the criteria for mood, anxiety and/or adjustment disorders is a common theme for breast cancer patients. In some situations that involve recurrence of the disease, not only depression may be provoked, but also a state of hopelessness [4].

Any type of cancer has psychological burdens on the patient; however, having it in the breast causes additional pain and anguish, because society often relates women's breasts with femininity, motherhood, womanhood and charm, therefore, the surgical procedure of removing the breast can naturally threaten a woman's self image [5]. The majority of the patients are to be treated by surgery, and others are expected to obtain directions

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to seek another form of treatment, intended to seize, reverse and avoid a recurrence of abnormal cell growth in the breast or the spreading to other organs in the body [6]. Such treatment is comprised of radiation therapy, chemotherapy and hormonal therapy, though, in due course, the patients are affirmed healthy and are sent home [7].

Regardless of those who end up recovering both physical and psychological symptoms, a small number of women suffer enduring dysfunctional psychological problems following the diagnosis [8]. Thus, to encounter this, the women are exposed to breast cancer support group that mostly occur after or during the last period of treatment continuously [9].

Thus, the role of breast cancer support group is very significant as reported by several previous studies. Sillence [10] investigated the manners by which peers trade guidance in online breast cancer support group and found sharing of message and consoling support were based on feedback received from the patient. Han et al. [11] investigated on how mental qualities anticipate the level of commitment with breast cancer support group and found that commitment with the care group varied according to the patients' attributes. Yoo et al. [12] examined statement of passionate help in bosom malignant growth support group and found that communicating enthusiastic help changed accordingly to each cases. Casellas-Grau et al. [13] reviewed the effect of support given by breast cancer support group and found that patients experienced enhance comfort and mental stability due to the support given. Attai et al. [14] examined the viability of social media as a care group for bosom malignant growth patient, and found that patients' apparent information on the disease increases and it reduced their apprehension. Bredal et al. [15] exhibited a work on care group involvement in patients with early stage of breast malignancy and found that patients experienced emotional improvement and adapting after certain period. Vlahovic et al. [16] examined the effect of breast cancer support group on patients benefits and found that patients are more satisfied after receiving the need emotional support. Drageset et al. [17] inspected the encounters of patients with breast cancer support group after medical procedure and found that it patients experienced enhanced mental support and stability. Salakari et al. [18] examined perceived social support received by patients during breast cancer and found that social support was significant during the convalescence stage.

The role of breast cancer support group usually comes into play during or after treatment. Nevertheless, the first phase of diagnosis and those who would be most supportive during that period are also critical concerns when taking a holistic perspective at the functioning of a beneficial support group. Thus, this is where breast cancer nurses have been found to present a fundamental role for breast cancer patients and within the multi-disciplinary team [19]. Services that may not otherwise be offered by other healthcare professionals are offered by breast cancer nurses (BCNs). These services include, proposing advice and support in relation to breast cancer diagnosis that is not restricted to the patients, but to their families as well [20].

Therefore this work was done to analyze the role of the nurse as a primary caregiver in the treatment of breast cancer patients in Saudi Arabia. In addition, the health care support group's contribution to the treatment of breast cancer patients in Saudi Arabia was also investigated.

## II. METHODOLOGY

This work was done at Al-Amoudi Breast Cancer Center, at King Abdul-Aziz University in the city of Jeddah. This work was done based on mixed method, which quantitative technique and observation technique. Questionnaires were developed for data collection. The questionnaires were distributed to the health care providers who work at health care centers in the city of Jeddah had attended the weekly workshop at the Breast Cancer Center of Excellence. The numbers of respondents of this work were 80 health personals. The questionnaire comprised of demographic questions, nurses psychological background questions and patients emotional well being. The collected data were analyzed using statistical analysis SPSS software and diagrams. The overall method flow of this work is shown in Figure 1.

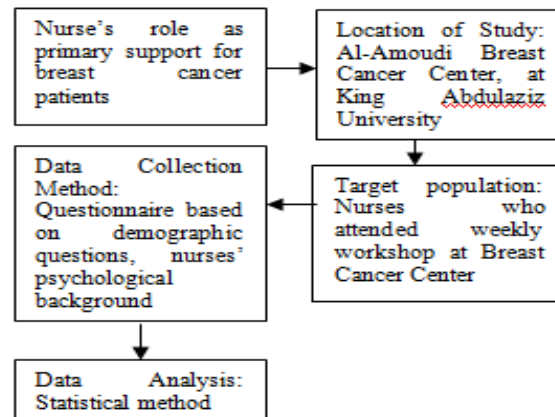
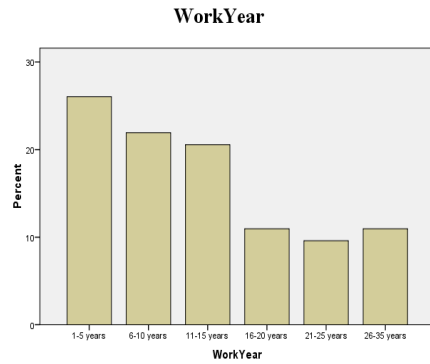


Figure 1: Method flow of this work

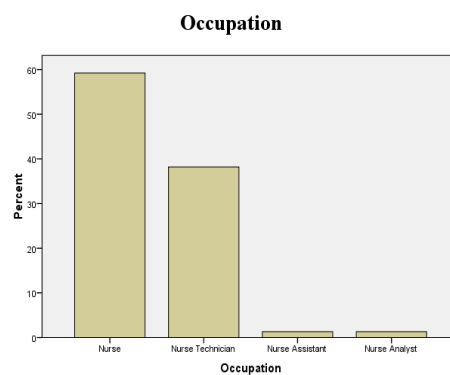
## III. RESULT AND DISCUSSION

### Demographic Characteristics

The health care providers who were chosen to participate in this study and who work at health care centers in the city of Jeddah had been scheduled to attend a workshop at the Breast Cancer Center of Excellence, where they were given the surveys to fill. They ranged between 20-53 years old, with more than 70% of them being married and less than 30% single. Based on Figure 2, with that being said, about 25% of them had been working for more than one year, 20% of them had between 6-10 years of working experience and similarly, 20% between 11-15 of work. However, only 10% of the nurses had a work experience that lasted between 16-20 years, another 10% between 21-25 and finally a 10% between 26-35 of work experience. Based on Figure 3, while most of the participants were nurses, around 40% of them were nurse technicians and only a trivial number of them were non-Saudi having English as their spoken language in the Kingdom of Saudi Arabia.



**Figure 2:**Participants work year



**Figure 3:**Participants occupation category

### Nurses' Psychological Background

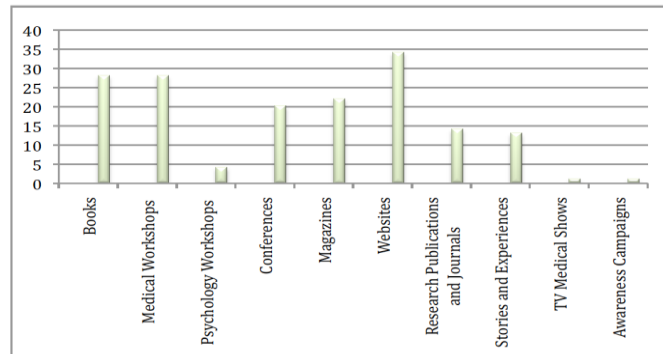
Based on Table 1, the participants were asked to choose whether they actively search for resources to increase their information about dealing with breast cancer patients, and 64% of them answered yes, however the remaining 15% said no. Those who answered with a yes were asked to mention the methods they usually use to increase their knowledge about dealing with the patients.

**Table 1:**Search for resources

		Frequency	Percent	Valid Percent	Cumulative Percent
<b>Valid</b>	Yes	64	80.0	81.0	81.0
	No	15	18.8	19.0	100.0
	Total	79	98.8	100.0	
<b>Missing</b>	System	1	1.2		
<b>Total</b>		80	100.0		

Based on Figure 4, 39% chose books as their resources, 41% selected medical workshops, however, with it being among the least used, only 14% attended psychology workshops to enrich their level of knowledge.

Conferences were used from 24% of the nurses, similarly, 26% have chose reading magazines. Similar to medical workshops, there were 40% of the responses that indicated using the web, however, 32% referred to publications and journals in doing so. 21% of them depended on stories of people and experiences to expand their information, in addition to only 1% who used doctor’s expertise and another 1% that took advantage of medical TV shows that addressed the breast cancer topic.



**Figure 4:**Resources for information

### Patients’ Emotional Wellbeing

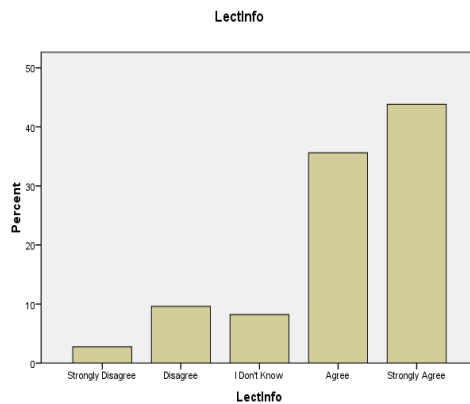
Based on Table 2, the frequency of factor selection was computed, which presented the lowest occurrence being the maintenance of a regular family routine with a mean of 4.10 and friends’ support with a mean of 4.24, which followed it from the bottom up. On the other hand, a mean of 4.80 referred to the highest occurrence, which pointed out the husbands’ support as being the primary factor in bringing about a positive treatment outcome. Moreover, a mean of 4.77 was given to family’s support along with a minor difference being given to the willingness of the patient to recover with a mean of 4.76. The items having the closest scores indicate the items with the highest correlation, therefore; in this case, the overall psychological wellbeing of the patient was significantly associated with the knowledge of the doctor providing the treatment. Similarly, the amount of exercise a breast cancer patient engages in has shown a considerable relation to an adequate diet. The family along with the husband’s support has also portrayed a similarity in their scoring. On the other hand, the husband’s support has also correlated extensively with the willingness of the patient to recover. It is furthermore noticeable to see the correlation between the maintenance of a regular family routine and the friend’s support, putting in mind, that both of these variables have had the lowest frequency scoring in the aforesaid item statistics table. In addition to friends being correlated to routine, friends’ support has also been interlined to breast cancer support groups and with the support delivered by the family. Meeting a breast cancer survivor have coupled itself with the willingness of the patient to recover, however, finally, the willingness have joined a closer score to the husband’s support.

**Table 2:**Item Statistics

	Mean	Std. Deviation	N
KnowDoc	4.61	.906	70
Exercise	4.27	1.048	70

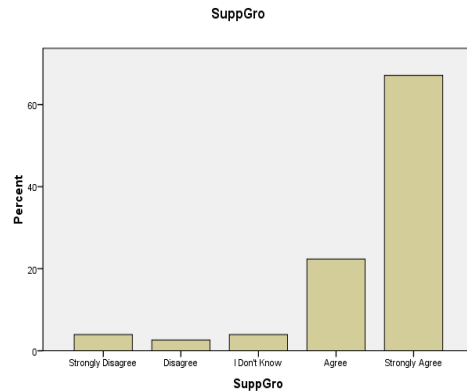
Diet	4.50	.944	70
GoodPsy	4.70	.645	70
FamilyS	4.77	.641	70
HusbandS	4.80	.628	70
Routine	4.10	1.065	70
FriendS	4.24	.908	70
SupportG	4.54	.674	70
Survivor	4.60	.750	70
Willing	4.76	.711	70

Following the items aiming to gauge the factors' impact on the patients' recovery outcome, the participants were asked to evaluate the effectiveness of the breast cancer workshops provided to them, through assessing whether the psychological content of those workshops is adequate. Based on Figure 5, the nurses have demonstrated a great degree of satisfaction with the amount of psychological content included in the workshops, through which they attend to enhance their experiences with breast cancer patients. 40% of them have strongly agreed with the proposed statement, 32% have agreed, 9% have disagreed with the content being enough, 7% have no knowledge about that and only 2% have shown strong disagreement.



**Figure 5:**Effectiveness of workshop

In addition, the survey questions took account of the support group intervention and asked the nurses to rate the importance of support groups in bringing about a positive recovery outcome. Based on Figure 6, substantial agreement with a 64% score strongly encouraged the magnitude of support groups and 21% also showed agreement. However, 4% strongly disagreed that support groups is a good strategy in bringing about a positive impact and 2% disagreed too, leaving only 4% with a little background on the issue to state an opinion.



**Figure 6:**Importance of support group

Table 3 presents the set of expected reactions taken by the patients after receiving the breast cancer diagnosis news as predicted by the nurses. In which the first row shows the most frequently occurring choices, following the second highest frequency then the third occurring. Based on Table 3, the survey results have indicated that contacting a doctor for further treatment was the highest reaction. Next, prayer and becoming religious is the second expected reaction to occur among those who receive the breast cancer diagnosis. While Saudi Arabia is the origin of Islam and home of Muslims with the two holy places in Mecca and Medina, the culture of this country is chiefly shaped by its religion.

**Table 3:**Reactions of patients

Steps	First	Second	Third
Blame the doctor for a mistake	9	1	1
Feel lonely, angry and distressed	15	6	2
Contact the doctor to begin treatment	27	16	15
Find support from a love done	4	11	11
Search for breast cancer information	4	11	16
Pray and start becoming religious	17	19	14
Meet a breast cancer survivor	1	5	12

**The nurse as a health caregiver**

Based on Table 4, The nurses perceived themselves as the second most important caregivers to the patients, with 17% of the responses being for most important, parallel to that is another 17% given to the often-important option. However, a 27% was for little importance and a 25% of least importance.

**Table 4:**Nurse as caregivers

		<b>Frequency</b>	<b>Percent</b>	<b>Valid Percent</b>	<b>Cumulative percent</b>
Valid	Most Important	14	17.5	20.0	20.0
	Often Important	14	17.5	20.0	40.0
	A Little important	22	27.5	31.4	71.4
	Least Important	20	25.0	28.6	100.0
	Total	70	87.5	100.0	
Missing	System	10	12.5		
Total		80	100.0		

Based on Table 5, the family as a support system came with the highest scores among the other provided options. The family was given 51% for the most important support system, 21% being often important, 7% for little importance and only 1% for the least important support group.

**Table 5:**Family as support

		<b>Frequency</b>	<b>Percent</b>	<b>Valid Percent</b>	<b>Cumulative percent</b>
Valid	Most Important	41	51.2	63.1	63.1
	Often Important	17	21.2	26.2	89.2
	A Little important	6	7.5	9.2	98.5
	Least Important	1	1.2	1.5	100.0
	Total	65	81.2	100.0	
Missing	System	15	18.8		
Total		80	100.0		

**Overall discussion**

Thus overall, based on the key findings of this work, the results have shown that nurses role are significant as a support group for breast cancer patients in Saudi Arabia. Work done by Usta et al.[21] has also stated that for



breast cancer patients, the support group of nurses is very influential as they are the main point of reference after the doctors. The nurses are more often in contact and dealing with the patients. Ussher et al.[22] also confirmed that nurses and health personals play a key role in providing moral and emotional support to the breast cancer patients. De Leeuw et al.[23] also stated that for cancer patients, the nurses lead the support group to provide all the needed care and attention by the patients. A study by Giese-Davis et al. [24] has also stated that patients feel more secured on their medical well being due to the constant support received from the nurses during diagnosis and treatment process.

#### IV. CONCLUSION

The role of the nurse as a primary caregiver in the treatment of breast cancer patients in Saudi Arabia was examined in this work. The analysis was carried out using survey method. The participants were nurses who attended the workshop at Breast Cancer Center of Excellence. The key findings of this work have shown that nurses were one among many significant support systems that influence the patients' psychological wellbeing and recovery. For future work, the authors would like to recommend the scope of examination can take a new stance, whether it is the patient's viewpoint being studied, the family's experience or the husband's role as a supporter.

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