

## REVIEWS

# Traditional support groups for women with breast cancer: A review of the literature

Wafaa Shehada\*<sup>1,2</sup>, Kathleen Benjamin<sup>2</sup>, Sadia Munir<sup>2</sup>, Nima Ali<sup>1</sup>

<sup>1</sup>National Center for Cancer Care and Research (NCCCR), Hamad Medical Corporation, Qatar

<sup>2</sup>University of Calgary in Qatar, Qatar

**Received:** July 4, 2023

**Accepted:** August 2, 2023

**Online Published:** August 23, 2023

**DOI:** 10.5430/jnep.v13n12p27

**URL:** <https://doi.org/10.5430/jnep.v13n12p27>

## ABSTRACT

**Background and objective:** Breast cancer is the most common cancer among women worldwide and it is by far the most common cancer of women in Qatar. Nurses can play an important role in developing and implementing support groups for women with breast cancer. The main objective of this literature review was to identify the context of information to develop a support group to meet the needs of women with breast cancer in Qatar.

**Methods:** The following databases were searched: Cumulative Index to Nursing and Allied Health Literature (CINAHL), PubMed, MEDLINE, EMBASE, and PsycINFO. After applying the inclusion and exclusion criteria, 25 studies were retained for this review.

**Results:** The synthesis and integration of the literature revealed that traditional support groups can impact women with breast cancer across the physical, psychological, spiritual, and social domains. Various outcomes such as fatigue and anxiety were measured and several different types of interventions were used such as education, relaxation, and goal setting. Overall, the interventions had a positive impact on some of the outcomes.

**Conclusions:** This review highlights the need to develop and implement a support group program for women with breast cancer in Qatar.

**Key Words:** Breast cancer, Support, Group, Impact, Influence, Effect

## 1. INTRODUCTION

Breast cancer is the most common cancer among women worldwide.<sup>[1]</sup> It is also the most common cancer of women in Qatar, accounting for 31 percent of cancer cases in women.<sup>[2]</sup> In Qatar, the majority of women at the time of diagnosis are less than 60 years of age, and a high ratio presents with advanced stage disease.<sup>[3]</sup> Thirty to forty-five percent of women with breast cancer experience psychological morbidity in the first two years of survivorship.<sup>[4]</sup> This highlights the need for psychological support for women following a breast cancer diagnosis. Currently, there are no formal support group programs in the State of Qatar.

Past literature reviews have studied various aspects of supportive care for women with breast cancer. A 2016 integrative literature review to identify unmet supportive care needs for Arab people diagnosed with cancer, including women with breast cancer found that the unmet needs of Arabic cancer patients were related to physical, psychological, and information needs.<sup>[5]</sup>

A 2017 integrative literature review compared traditional versus online support groups for breast cancer survivors and found that both types of support groups have unique roles.<sup>[6]</sup> The authors suggested that individual needs and preferences

\*Correspondence: Wafaa Shehada; Email: wafaa\_ns86@hotmail.com; Address: National Center for Cancer Care and Research (NCCCR); Hamad Medical Corporation, Qatar.

must be considered when deciding the optimal type of support group.<sup>[6]</sup>

A study conducted in Qatar, investigated the importance of different types of support among cancer patients including patients with breast cancer.<sup>[7]</sup> More than one half (63.6%) of the participants reported a diagnosis of breast cancer and among these women, family support was the most important type of support reported (94%) followed by religious support (90%), support groups (83%), and physician referred support (77%).<sup>[7]</sup> The authors recommended the development and delivery of support groups for women with breast cancer in Qatar.<sup>[7]</sup>

Support groups can help patients to express their feelings regarding their disease,<sup>[8,9]</sup> improve communication skills, enhance coping, improve psychological well-being, improve QOL, minimize stress, and enhance cost-effective treatment.<sup>[10-12]</sup>

The objective of this review was to identify the context of information to develop a support group to meet the needs of

women with breast cancer in Qatar.

## 2. METHODOLOGY

The following databases were searched: Cumulative Index to Nursing and Allied Health Literature (CINAHL), PubMed, MEDLINE, EMBASE, and PsycINFO. The search terms were breast cancer, breast neoplasm\*, support\*, group\*, impact, influence, and effect\*. The initial search was limited to studies published in English between September 2007 and October 2017. Inclusion criteria were (a) primary studies, (b) peer-reviewed studies, (c) quantitative, qualitative, or mixed method studies, (d) studies that included women with breast cancer from Stage I to Stage III, (e) studies that included non-metastatic breast cancer, and (f) studies that explored traditional support groups. Exclusion criteria were (a) not primary sources studies, (b) non-peer-reviewed studies, (c) studies that included men with breast cancer or people with metastatic breast cancer, (d) studies that included patients with other types of cancer and chronic diseases, and (e) studies that focused on other types of support groups such a phone or internet support groups.

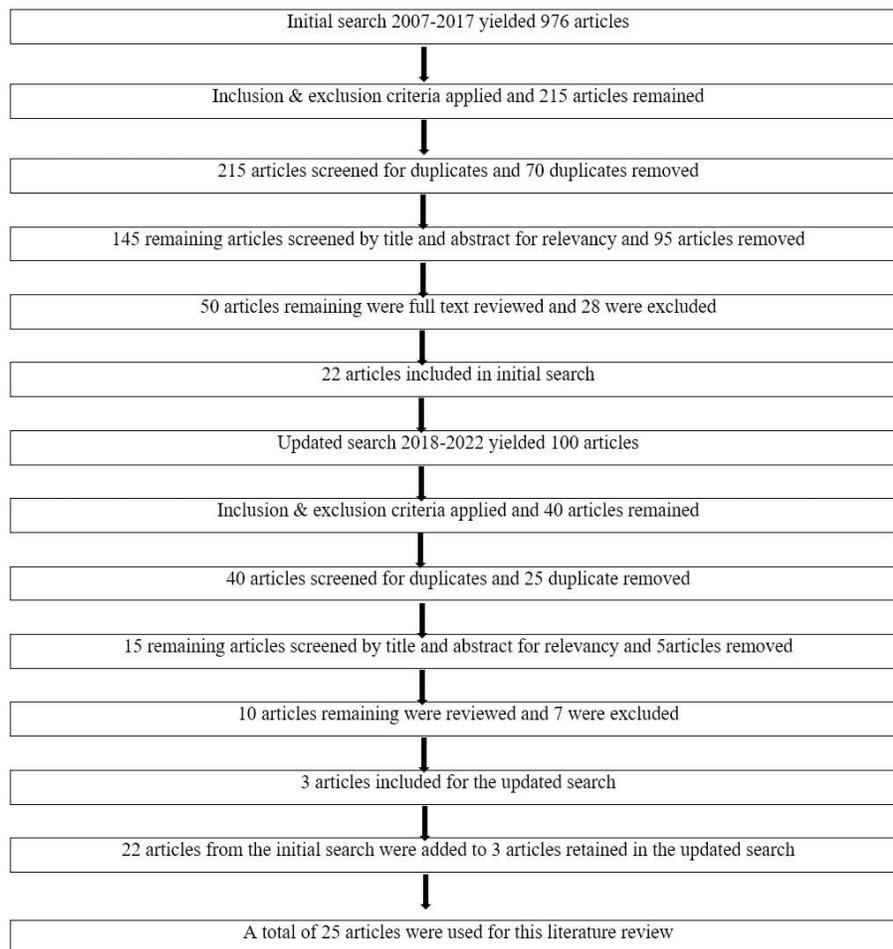


Figure 1. Flow chart database search

**Table 1.** Quantitative studies

Author(s), country,	Methodology Design, sample size, and major outcomes measured	Intervention(s) IG= intervention group, CG= control group.	Key Findings
Abu Kassim et al. 2015, Malaysia	Cross-sectional, N=248, Physical well-being (PWB), emotional well-being (EWB) & functional well-being (FWB).	IG: supportive-expressive group & self-help group CG: No support group	Influence of PWB & EWB on FWB well-being greater for IG (54%) vs CG (35%). Influence of PWB, EWB, and FWB on SWB is greater for IG (35%) vs CG (25%).
Björneklett Lindemalm, Ojutkangas et al. 2012, Sweden	RCT, N= 382 Fatigue, emotional & social function, body image, hair loss & sexual functioning.	IG: education, exercise, relaxation, massage, Qi-gong, mental visualization, communication & social activities. CG: routine care	Improvement in the functional & symptom scales. Decrease fatigue from baseline to 2 mths. Further improvement up to 12 mths in both groups but N/S.
Björneklett, Lindemalm, Rosenblad et al. 2012, Sweden	RCT, N= 382, Anxiety & depression.	IG: Same as Björneklett Lindemalm, Ojutkangas et al., 2012. CG: standard care	Sig. decrease in anxiety over time in IG, but depression unaffected in both groups.
Björneklett Rosenblad, et al. 2012, Sweden	RCT, N= 382, Fatigue, pain, emotional and cognitive functioning, body image & future perspective	IG: Same as Björneklett Lindemalm, Ojutkangas et al., 2012 CG: standard care	Sig. improvement in fatigue, cognitive functioning, pain, body image, and future perspective in IG vs CG. N/S differences in the proportion of women affected by high anxiety & depression
Björneklett et al. 2013, Sweden	RCT, N=382, Sick leave, medical visits health costs	IG: Same as Björneklett Lindemalm, Ojutkangas et al., 2012. CG: standard care	N/S differences in sick leave & medical visits. At 12 mths significantly higher health costs in IG vs CG.
Cameron et al. 2007, New Zealand	Quasi-experimental (3 groups), N=154 Emotional control and well-being, illness perceptions, anxiety, depression, coping.	IG: education, relaxation, meditation, goal setting, emotional disclosure, anger management, group discussion, manuals & relaxation tapes, imagery, meditation. Logs & instructions for home exercise. CG: Standard care. Decliner group: refused intervention	At 4 months, IG vs CG & decliners had a greater increase in the use of relaxation techniques, emotional well-being, coping efficacy, & greater decrease in perceived risk of recurrence, cancer worry & anxiety.
Capozzo et al. 2010 Italy	Feasibility study. N= 29 Hopelessness/helplessness, fighting spirit, anxious preoccupation, fatalism, & avoidance	IG: included psychological support information, stress management & awareness, & coping skills.	Sig. decrease in pre/post mean scores related to anxious preoccupation, but other outcomes N/S
Cousson-Géalie, et al. 2011, France	RCT (3 groups), N=65. Anxiety/depression, emotional distress, control, coping, social support.	IG: information & relaxation CG: psychological evaluation. Social group (SG): Received social support.	Psychological scores or QOL did not significantly change in IG. SG had poorer emotional QOL, use of internal causal attributions, & minimized illness vs CG.
Emilsson, Svensk, Tavelin 2012, Sweden	Non-randomized case-control, N=67, anxiety/depression, coping resources, feelings. (T1=time before radiation, T2=during last wk. of radiation, T3= 6 mths post radiation)	IG: communication, sharing of experiences, answering questionnaire, and written diary. CG: no intervention	Sig. group differences in the social domain (T2), & emotional domain (T3). IG significantly increased levels of coping resources for the emotional domain (T2) & coping resources. CG- Decrease in the emotional domain (T3). No difference between the groups related to anxiety & depression.
Pongtha-vornkamol et al. 2014 Thailand	Quasi-experimental, N= 59 QOL, Health promoting behaviours	IG: education; stress management, coping strategies & problem-solving, communication, relaxation; lifestyle adjustment, positive thinking, physical activity, nutrition & telephone support monthly CG: regular care	Sig. improvement in health-promoting behaviors & QOL in IG vs CG.
Tabrizi et al. 2016, Iran	RCT, N= 81, loneliness, hope, body image, fatigue, pain, social function. sexual function.	IG: supportive discussion groups, focused on social support including information & expressing feelings. CG: routine care	Sig. decrease in loneliness, promotion in total hope, enhancement of QOL in IG until 8 wks. Other outcomes were N/S
Tabrizi et al. 2020 Iran	Randomized clinical trial, N=60, the effectiveness of using the continuous care model on 6 dimensions of health-promoting lifestyle (HPL) (i.e. spiritual growth, health accountability, physical activity, interpersonal communication, nutritional habits, & stress management).	IG: 6 group-counseling sessions with 5-6 women & family member who was active in the women's care CG: routine care	Mean scores- significant increases in every dimension of health-promoting lifestyle were observed in the IG. Mean scores in the CG had slightly increased (NS) or were the same in all the dimensions.
Taleghani et al. 2012, Iran	The clinical trial, 4 cities; Tehran & Isfahan: two groups N=50 per group, Rasht & Babol, N=25 per group. Outcomes across the physical, mental, social, and spiritual domains, QOL	IG: Stage 1-volunteer training, Stage 2-volunteers met patients after surgery, then telephone or home visit. Volunteers provided only practical information & talked about their own experiences. CG: no intervention.	Differences in mean scores between IG & CG: <u>Physical domain</u> QOL: in Isfahan N/S both stages; in Tehran sig. differences in both stages/ <u>Mental domain</u> : in Isfahan N/S stage 1, Sig. stage 2. In Tehran, sig. both stages <u>Social domain</u> : In Isfahan N/S stage 1, Sig. stage 2; Tehran-sig. both stages <u>Spiritual domain</u> : In Isfahan, sig. differences stage 1, N/S stage 2. In Tehran, sig. differences in IG stage 1, but N/S stage 2
Tehrani et al. 2011, Iran	Pre/post N=68, QOL measures & checklist for adherence	IG: coping skills, self-awareness, mindfulness. CG: education sessions	Vitality score & mental health are significantly higher in IG vs CG. Sig. improvement in CG (pain, role-physical & emotional & social function). Sig. improvement in IG in role-physical, emotional, vitality, social function, & mental health.
Schou et al. 2008, Norway	Quasi-experimental, N=165. Emotional distress, anxiety	IG: information. CG: no intervention was provided	N/S differences in the prevalence of emotional distress. After 12 mths emotional distress was significantly less in IG vs CG. At 12 mths, the prevalence of anxiety is significantly less in IG. (19%) vs CG (34%).
Schou Bredal et al. 2014, Norway	RCT, N= 314, Emotional distress, coping, attitudes.	IG: education, stress management, problem-solving, psychological support. CG: routine hospital program	Sig. improvement in coping in IG vs. CG. Anxiety/depression decreased over time in both groups. Both groups showed improvement in emotional distress, but N/S at any time point.
Vos et al. 2007 Netherlands	Quasi-experimental, N= 67, Social function, sexual function, emotional distress, body image	IG: psychotherapy, education, relaxation, meditation exercise & discussion SG: semi-structured support group.	Positive changes IN body image & recreation in both groups. N/S change over time related to other outcomes.
Wang et al., 2021, China	Randomized clinical trial, N= 168, post traumatic growth, anxiety, depression, other dimensions measured were: personal strength, relating to others, appreciation of life & new possibilities & spiritual change.	IG: nurse-led support groups (included topics such as, "Being a Patient, Interpersonal Relationships, Journey for Recovery & Planning the Future." CG: health education, rehabilitation according to routine care	Sig. higher level of post-traumatic growth reduced anxiety & depression in the IG. Intervention sig promoted personal strength, relating to others, appreciation of life & new possibilities. No effect on spiritual change.
Weis et al., 2020, Germany	non-randomized control pilot study N=50, fear of progression/reoccurrence, self-efficacy, depression, and quality of life.	IG: psychoeducational group program (i.e., topic introduced, group discussion, working sheets, & exercises in guided imagery or relaxation. CG: usual care	Sig. reduction in the fear of progression/recurrence. Sig. increase in self-efficacy in IG. All other outcomes non-sig. changes over time

Note. N/S: non-significant, QOL= quality of life, Sig.= significant; N/S= not significant

The initial search yielded 976 articles (see Figure 1, flow chart database search). After applying the inclusion and exclusion criteria, 215 articles remained. Next, 70 duplicate articles were eliminated. The title and abstract of the remaining 145 articles were scanned for relevancy and 95 articles were excluded because they were not relevant. The remaining 50 articles were reviewed and based on the review of the full text, 28 were excluded because they were not relevant. Finally, 22 articles were retained.

To update this initial search another search was conducted using the same search terms and databases limited to studies published in English between January 2018 and October 2022. This search yielded 100 studies (see Figure 1, flow chart database search). After applying the inclusion and

exclusion criteria, 40 articles remained. Next, 25 duplicate articles were eliminated. The title and abstract of the remaining 15 articles were scanned for relevancy. Next, 5 articles were excluded because they were not relevant. The remaining three articles were added to the extraction table and incorporated into the findings of the review. Hence, 25 articles were retained for this review.

Ferrell and colleagues<sup>[13,14]</sup> studied the concept of quality of life (QOL) among women with breast cancer. Based on this work, the outcomes measured in the studies in this review were categorized and presented using these four domains: physical, psychological, spiritual, and social.

Data extraction tables were developed for this review (see Tables 1 and 2).

**Table 2.** Qualitative and mixed methods studies

Author(s), country,	Key Methods Sample, data collection & analyses	Key Findings (major themes)
Ashing-Giwa et al., 2012, USA	N= 62 African women; 5 Focus groups, thematic analysis.	1) Comfort & hope, 2) Belonging & companionship, 3) Health information & navigation, 4) Economic & functional relief, 5) Self-esteem & purposefulness.
Emilsson, Svensk, Olsson, et al. 2012, Sweden	N= 61, interviews, content analysis.	1) Positive Group Development 2) Inhibited Group Development, 3) The Individual Living with the Disease.
Frohlich et al. 2014, Brazil	N=10, interviews, content analysis	1) Reactions & feelings pre-diagnosis, 2) Perceptions, feelings & changes in lifestyle post mastectomy, 3) Physical & emotional symptoms arising from chemotherapy & radiotherapy, 4) Actions to minimize stress.
Pinheiro et al. 2008, Brazil	N=30, interviews, thematic analysis.	1) Support groups as a mechanism to cope, 2) The socialization of the experiences facilitated the search for assistance in the support groups, since sharing the problems with women who had a mastectomy was a way to preserve high self-esteem, have faith and overcome some difficulties, 3) Support group provided well-being & differentiated care for breast cancer patients, understanding the disease & facilitating the socialization of ideas.
Power & Hegarty (2010), Ireland	N=8, Focus groups, content analysis.	Pre-program themes 1) The need for mutual identification, 2) Post treatment isolation, 3) Help with moving on & getting back to normal, 4) Support for hair loss. Post program themes: 1) Consolidation of information, 2) Empowerment, 3) The importance of the cancer survivor, 4) Mutual sharing.
Kwok and Ho, (2011), Australia	Mixed methods; N= 29; semi structured discussion descriptive statistics & content analysis	Quantitative findings:1) 62.5% strongly agreed & 37% agreed that support group program helped them to manage their condition, 2) 58.3% strongly agreed & 41.7% agreed that program increased their ability to cope with breast cancer. Qualitative findings: 1) Feedback, 2) Informational impact of the program, and 3) Psychosocial impact of the program.

### 3. RESULTS

#### 3.1 General characteristics of the studies

The 25 studies included 19 quantitative studies, 5 qualitative studies, and 1 mixed methods study. Studies were conducted in the following countries: Sweden (n = 6), Iran (n = 4), Norway (n = 2), Brazil (n = 2), and one in each of the following countries: New Zealand, Malaysia, USA, Thailand, Australia, France, Italy, Netherlands, China, Germany, and Ireland. Most of the support programs provided multiple

interventions (e.g., social activities, information classes, relaxation).

#### 3.2 Outcome measured: Physical domain

Three RCT measured fatigue. One study revealed a significant effect on physical, mental and total fatigue in the intervention group compared to the control group.<sup>[15]</sup> Another study reported a statistically non-significant decrease in fatigue in both groups,<sup>[16]</sup> while the last study reported

little effect size (ES = 0.27) based on statistically significant pre/post-differences.<sup>[17]</sup>

Three studies measured pain. One study reported a significant improvement in pain in the intervention group.<sup>[15]</sup> Another study reported significant improvement in body pain in the control group,<sup>[17]</sup> while the last study reported a non-significant decrease in the intensity of pain in both groups.<sup>[18]</sup>

Some studies measured dimensions of physical functioning and/or physical well-being (PWB). One study found that PWB was a significant predictor of functional well-being (FWB) in both groups, and it had a positive indirect effect on social well-being (SWB). However, the influence of PWB on FWB was greater for the intervention group (54%) versus the control group (35%) and the influence of PWB on SWB was greater for the intervention group (35%) versus the control group (25%).<sup>[19]</sup> Another two-staged multiple cities (Isfahan & Tehran) study conducted in Iran reported no significant differences in the mean scores between the two groups related to the physical dimensions of QOL in Isfahan, but significant differences were found in Tehran in both stages of the study.<sup>[20]</sup> Another study reported a significant improvement in role limitations due to physical functioning in both groups.<sup>[17]</sup>

Three studies measured sexual functioning. One study found a time dependent effect on sexual functioning in both groups<sup>[16]</sup> while another reported a small effect size related to sexual functioning.<sup>[18]</sup> The remaining study found no significant changes over time in sexual functioning in both groups.<sup>[21]</sup>

One study tested the effectiveness of the Continuous Model of Care (CMC) by measuring changes in 6 dimensions of health promoting lifestyles which included physical activity, and nutritional habits. The group counseling intervention resulted in significant increases in the mean scores related to physical activity and nutritional habits.<sup>[22]</sup>

### 3.3 Outcomes measured: Psychological domain

Several different psychological outcomes were measured such as anxiety, depression, coping, emotional distress and self-efficacy. Two studies reported significant decreases in anxiety in the intervention group.<sup>[23,24]</sup> One of these studies reported a significant reduction in depression scores<sup>[24]</sup> and the other reported a non-significant decrease in depression scores over time in both groups.<sup>[23]</sup> Another study reported non-significant group differences in anxiety.<sup>[25]</sup> An RCT (three groups) found no significant change in psychological test scores, anxiety, and depression in the intervention group after the intervention (i.e. information and relaxation).<sup>[26]</sup> One study reported significant increases in self efficacy and

reduced fear of recurrence in the intervention group but non-significant changes over time in measures of depression, and quality of life.<sup>[27]</sup>

With respect to emotional distress, one study reported a significantly lower prevalence of emotional distress in the intervention group compared to the control group,<sup>[28]</sup> while another study reported a non-significant improvement in both groups.<sup>[29]</sup> Two studies found no significant group differences in emotional distress.<sup>[21,28]</sup> Participants in a qualitative study discussed how support groups helped to reduce stress.<sup>[30]</sup>

Seven studies measured various “coping” outcomes. One study (3 groups) reported an increase in coping efficacy in the intervention group compared to the CG or decliners.<sup>[23]</sup> No significant group differences in coping strategies were reported in another study.<sup>[31]</sup> while no statistically significant differences in the mean scores on coping measures were found between the intervention group and the other two groups.<sup>[26]</sup> Another study reported improvement in coping resources in the social and emotional domain in the intervention group versus the control group.<sup>[32]</sup> and another study reported significant improvement in coping scores in the intervention group compared to the control group.<sup>[29]</sup> Another study reported significant increases in the mean scores in the intervention group related to stress management.<sup>[22]</sup>

Lastly, results of a mixed methods study revealed that all support group participants agreed that the program increased their ability to cope with breast cancer.<sup>[33]</sup>

Three studies measured one or more of the following outcomes: attitudes, helplessness, hopelessness, and loneliness. One study reported significant improvement in attitudes at 2 and 6 months and less helplessness and hopelessness at 2 months in the intervention group versus the control group, but these differences were non-significant at 12 months.<sup>[29]</sup> Another study reported that nurse-led support groups significantly promoted personal strength, ability to relate to others, appreciation of life and new possibilities in the intervention group.<sup>[24]</sup>

Another study reported no significant differences in helplessness and hopelessness,<sup>[31]</sup> while the remaining study reported a significant reduction in loneliness scores in the intervention group.<sup>[18]</sup>

Some studies measured body image. Two studies found no significant differences in measures of body image between groups.<sup>[16,18]</sup> Another study reported that overall participants had a more positive body image at the end of their study and women who had breast-conserving therapy had a more positive body image than women who had mastectomies.<sup>[21]</sup>

Three studies measured emotional upset related to hair loss. One study reported significantly less emotional upset related to hair loss in the control group compared to the intervention group with long term follow-up,<sup>[15]</sup> while two other studies reported no significant group differences.<sup>[16,18]</sup> Findings of a qualitative study where six of the eight participants experienced hair loss, the need for support for treatment-induced hair loss emerged as a significant theme and participants suggested that more support from health care providers would be helpful.<sup>[34]</sup>

Two qualitative studies explored participants' feelings related to support groups. One study reported that participants felt that the support group helped them in a positive way,<sup>[30]</sup> while another study commented that support group participants felt empowered to make important decisions in their lives.<sup>[34]</sup>

Three studies measured emotional and/or cognitive functioning. One study reported a significant effect over time on emotional functioning in both groups,<sup>[16]</sup> while another study reported a significantly greater improvement in emotional functioning among the intervention group when comparing values at baseline with long-term follow-up.<sup>[15]</sup> Another study reported positive changes among their intervention group related to emotional functioning (ES = 0.35).<sup>[18]</sup> With respect to cognitive functioning, one study reported significant improvement in the intervention group.<sup>[15]</sup>

Two studies measured one or more of the following outcomes: Emotional well-being (EWB), functional well-being (FWB) and social well-being (SWB).<sup>[19,25]</sup> One study reported that the influence of EWB on FWB and SWB was greater for the intervention group versus the control group and EWB was a significant predictor of FWB for both groups.<sup>[19]</sup> In addition, EWB had a significant positive indirect effect on SWB.<sup>[19]</sup> Another study reported greater improvement in EWB in the intervention group versus the control and the decliner group.<sup>[25]</sup>

### 3.4 Outcomes measured: Spiritual domain

Various aspects of QOL related to the spiritual domain were studied. The results of a two-stage study in four cities in Iran revealed significant group differences in the mean scores related to the spiritual dimensions of QOL.<sup>[17]</sup> Another study reported an improvement in the promotion of total hope in the intervention group but not in the control group.<sup>[18]</sup> Another study showed a significant increase in the means scores related to spiritual growth such as a sense of tranquility, hope, positive attitude, and belief in a purposeful life in the intervention group following group counseling sessions.<sup>[22]</sup> Another study did not find any significant effect

on spiritual change in the intervention group following a nurse-led support group.<sup>[24]</sup> Lastly, a qualitative study reported that support groups provided great comfort and hope for participants when sharing their survival experiences.<sup>[35]</sup>

### 3.5 Outcomes measured: Social domain

One study reported a trend towards longer sick leave, more health care utilization, and at 12 months significantly higher health care costs in the intervention group compared to the control group.<sup>[36]</sup> With respect to social functioning, one study reported a statistically significant effect over time on the social functioning subscale among the intervention group,<sup>[26]</sup> and another reported significant improvement in social functioning in both groups.<sup>[17]</sup> Another study reported improvement in social functioning scores in the intervention group versus the control group.<sup>[18]</sup> A two staged study that sampled from various cities in Iran reported significant group differences in the mean scores with respect to the social dimensions of QOL in Stage 2 in Isfahan, but not in Stage 1, but significant group differences were found at both stages in Tehran.<sup>[20]</sup> Lastly, in a qualitative study participants commented that they received social support from each other such as assistance with transportation and financial concerns that included food, gas, utility bills, and medical expenses.<sup>[35]</sup>

## 4. DISCUSSION

The purpose of this review was to identify articles that focused on traditional support groups and to determine the outcomes measured, the type of interventions, and the results in order to inform the development of a support group for women with breast cancer in Qatar. A major finding of this review suggests that the physical, psychological, spiritual, and social domains should be addressed when developing support programs for women with breast cancer. Although there are similarities regarding the needs of women with breast cancer worldwide, cultural differences have been reported.<sup>[37]</sup> This highlights the need to conduct a needs assessment prior to developing interventions for support groups.

Fatigue is a common complaint among women with breast cancer. Three studies in this review found that participation in a multiple intervention support group which included exercise may help to reduce fatigue among women with breast cancer. Similarly, results of a Cochrane review found that exercise was effective in reducing cancer related fatigue among adults.<sup>[38]</sup> However, although exercise is beneficial for cancer related fatigue as well as other outcomes, other interventions could be considered based on the results of a needs assessment or feasibility study with women with breast cancer in Qatar. For example, results of an RCT that tested the effectiveness of a brief behaviorally oriented intervention

(i.e. coping strategies, written diaries, education) in reducing cancer related fatigue among 60 patients with different types of cancer, found that the intervention significantly reduced fatigue among the intervention group compared to the control groups.<sup>[39]</sup>

Women with breast cancer can experience body pain related to breast cancer treatments. The results of the studies in this review that measured the impact of support group interventions on pain were inconsistent. This may be partly related to the use of different measurement tools. The use of a standardized tool to measure pain would allow comparisons across studies. Various factors can influence pain among breast cancer survivors (BCS). For example, BCS with lower social support experienced higher levels of pain over time than BCS with greater social support.<sup>[40]</sup> This highlights the need to consider providing support group interventions that promote social support and interaction.

Women with breast cancer who undergo mastectomies may experience reduced physical functioning due to the side effects of treatments, especially reduced arm function due to lymphedema. Although there is a lymphedema clinic in Qatar that provides physiotherapy and exercises, women are typically only referred to this clinic one-month post-surgery. There is a need to provide education about lymphedema and this can be done in support groups.

Breast cancer treatments can alter a women's body image. In Qatar, women tend to be diagnosed at a more advanced stage of breast cancer and at a younger age.<sup>[3]</sup> Due to the more advanced stage at diagnosis, they typically require more invasive surgical treatment (i.e. mastectomy versus lumpectomy). Participation in a support group can be especially beneficial in terms of body image for women who had more invasive treatments versus those who had less invasive treatments.<sup>[15]</sup>

Anxiety and depression were common outcomes measured in the studies reviewed. Results of a study conducted in Qatar found that depression was the most common psychological problem in patients with breast cancer.<sup>[41]</sup> Evidence suggests that support groups can help to reduce depression among women with breast cancer. Nurses can play a vital role in the screening and assessment of anxiety and depression, and they can also ensure that appropriate and culturally sensitive interventions are provided.

Receiving a breast cancer diagnosis is not only a stressful time for patients but also for their families, who may experience denial, guilt, helplessness, and fear.<sup>[42]</sup> In Qatar, family relations are important, and families typically make treatment decisions together. Results of a study in Qatar found that women with breast cancer rated family support as the

most important type of social support.<sup>[41]</sup> This highlights the need to consider support groups for both patients and their families. However, due to cultural and religious beliefs in Qatar, separate gender specific support groups for men and women would be needed.

Cancer-related stigma can have negative impacts on cancer patients, for example, a qualitative study conducted in Pakistan among Muslim women revealed that a diagnosis of breast cancer can reduce marriage opportunities for single women.<sup>[43]</sup> Stigma may prevent women from informing relatives, neighbors, and friends of their illness.<sup>[44]</sup> National public awareness campaigns in Qatar may help to reduce cancer related stigma.

Having positive attitudes about one's sexuality is important for women with breast cancer. Young married women with breast cancer may have problems related to sexual function due to treatment interventions, such as chemotherapy, surgery, and hormonal therapy.<sup>[45]</sup> Support groups are one possible avenue to address these issues.

Lastly, Qatar is a multicultural society. A great proportion of the population is made up of expats from countries such as India, Pakistan, and the Philippines. Although the greatest proportion of the population is Muslim, there are also Christians and Buddhists. This highlights the need to consider developing support groups or interventions that fulfill the cultural and religious diversity of the population in Qatar.

### Limitations

To the authors' best knowledge, no research on support groups for breast cancer patients has been conducted in Qatar which has created a gap in knowledge. This literature review was limited to only traditional support groups, which limits our understanding of other types of support groups such as online support groups. The search was limited to only English publications and some articles for Non-English publications may be relevant to this review. Lastly, the key terms used to search for articles may not have been comprehensive and some articles may have been missed.

## 5. CONCLUSION

Support groups can help address issues with pain, fatigue, anxiety, depression, decreased physical function, changes in body image, and promote positive attitudes related to sexuality and stress. The results suggest that support groups for women with breast cancer could be beneficial in terms of improving their overall QOL and illness trajectory. Prior to the development of support groups for women with breast cancer in Qatar, a needs assessment is recommended. The results of this assessment can then be used to develop tailored

and culturally sensitive support group interventions. Tailored support group interventions should include the physical, psychological, spiritual, and social domains. Nurses can play a vital role in the development, implementation, and evaluation of the first support group for women with breast cancer in Qatar.

#### ACKNOWLEDGEMENTS

Not applicable.

#### AUTHORS CONTRIBUTIONS

Not applicable.

#### FUNDING

Not applicable.

#### CONFLICTS OF INTEREST DISCLOSURE

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

#### INFORMED CONSENT

Obtained.

#### ETHICS APPROVAL

The Publication Ethics Committee of the Sciedu Press. The journal's policies adhere to the Core Practices established by the Committee on Publication Ethics (COPE).

#### PROVENANCE AND PEER REVIEW

Not commissioned; externally double-blind peer reviewed.

#### DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

#### DATA SHARING STATEMENT

No additional data are available.

#### OPEN ACCESS

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).

#### COPYRIGHTS

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

#### REFERENCES

- [1] World Health Organization. Breast cancer. 2022. Available from: <https://www.who.int/news-room/fact-sheets/detail/cancer>
- [2] Qatar National Cancer Registry, Ministry of Public Health, Qatar Cancer Incidence Report, 2018. Printed in Qatar, 2022. Available from: <https://www.moph.gov.qa>
- [3] Qatar National Cancer Program. Management of breast cancer V1.2015.pdf, (2017) [online document]. Available from: <http://www.ncp.qa/Pages/CategoryDetail.aspx?pid=18>
- [4] Montazeri A, Jarvandi S, Haghighat S, et al. Anxiety and depression in breast cancer patients before and after participation in a cancer Support group. *Patient Education and Counseling*. 2001; 45(3): 195-198. PMID:11722855 [https://doi.org/10.1016/S0738-3991\(01\)00121-5](https://doi.org/10.1016/S0738-3991(01)00121-5)
- [5] Alananzeh I, Levesque J, Kwok C, et al. Integrative review of the supportive care needs of Arab people affected by cancer. *Asia-Pacific Journal of Oncology Nursing*. 2016; 3(2): 148-156. PMID:27981153 <https://doi.org/10.4103/2347-5625.177396>
- [6] Houlihan MC & Tariman JD. Comparison of outcome measures for traditional and online support groups for breast cancer patients: An integrative literature review. *Journal of the Advanced Practitioner in Oncology*. 2017; 8(4). <https://doi.org/10.6004/jadpro.2017.8.4.4>
- [7] Alagraa R, Abujaber A, Chandra P, et al. Evaluating psychosocial support needs of female cancer patients in the State of Qatar. *Qatar Medical Journal*. 2015.
- [8] Beck SJ, Keyton J. Facilitating social support. *Cancer Nursing*. 2014; 37(1): E36-E43. PMID:24316603 <https://doi.org/10.1097/NCC.0b013e3182813829>
- [9] Erol Ursavas F, Karayurt O. Experience with a support group intervention offered to breast cancer women. *Journal of Breast Health*. 2017; 13(2): 54-61. PMID:31244530 <https://doi.org/10.5152/tjhb.2017.3350>
- [10] Docherty A. Experience, functions and benefits of a cancer support group. *Patient Education and Counseling*. 2004; 55(1): 87-93. PMID:15476994 <https://doi.org/10.1016/j.pec.2003.08.002>
- [11] Lindemalm C, Strang P, Lekander M. Support group for cancer patients. Does it improve their physical and psychological wellbeing? A pilot study. *Supportive Care in Cancer*. 2005; 13(8): 652-657.
- [12] Suwankhong D, Liamputtong P. Social support and women living with breast cancer in the south of Thailand. *Journal of Nursing Scholarship*. 2015; 48(1): 39-47. PMID:26580861 <https://doi.org/10.1111/jnu.12179>
- [13] Ferrell B, Grant M, Funk B, et al. Quality of life in breast cancer: Part I: Physical and social well-being. *Cancer Nursing*. 1997; 20(6): 398-408. PMID:9409061 <https://doi.org/10.1097/00002820-199712000-00003>
- [14] Ferrell B, Grant M, Funk B, et al. Quality of life in breast cancer: Part II: Psychological and spiritual well-being. *Cancer Nursing*. 1998; 21(1):1-9.
- [15] Björneklett HG, Rosenblad A, Lindemalm C, et al. (2012). Long-term follow-up of a randomized study of support group intervention in women with primary breast cancer. *Journal of Psychoso-*

- matic Research. 2012; 74(4): 346–353. PMID:23497838 <https://doi.org/10.1016/j.jpsychores.2012.11.005>
- [16] Björneklett HG, Lindemalm C, Ojutkangas ML, et al. A randomized controlled trial of a support group intervention on the quality of life and fatigue in women after primary treatment for early breast cancer. *Supportive Care in Cancer*. 2012; 20(12): 3325–3334.
- [17] Tehrani AM, Farajzadegan Z, Mokarian F, et al. Belonging to a peer support group enhance the quality of life and adherence rate in patients affected by breast cancer: A non randomized controlled clinical trial. *Journal of Research in Medical Sciences*. 2011; 16(5): 658–665.
- [18] Tabrizi FM, Radfar M, Tai Z. Effects of supportive-expressive discussion groups on loneliness, hope and quality of life in breast cancer survivors: a randomized control trial. *Psycho Oncology*. 2016; 25(9): 1057–1063.
- [19] Abu Kassim NL, Hanafiah KM, Samad-Cheung H, et al. Influence of support group intervention on quality of life of Malaysian breast cancer survivors. *Asia Pacific Journal of Public Health*. 2015; 27(2): NP495–NP505.
- [20] Taleghani F, Babazadeh S, Mosavi S, et al. The effects of peer support group on promoting quality of life in patients with breast cancer. *Iranian Journal of Nursing and Midwifery Research*. 2012; 17(2): 125–130. <https://doi.org/10.1075/ijnc.17.1.05ki1>
- [21] Vos PJ, Visser AP, Garssen B, et al. Effectiveness of group psychotherapy compared to social support groups in patients with primary, non metastatic breast cancer. *J Psychosoc Oncol*. 2007; 25(4): 37–60. PMID:18032264 [https://doi.org/10.1300/J077v25n04\\_03](https://doi.org/10.1300/J077v25n04_03)
- [22] Tabrizi FM, Rajabzadeh H, Eghtedar S. Effects of the Continuous Care Model on the Health-Promoting Lifestyle in Breast Cancer Survivors: A Randomized Clinical Trial. *Holistic Nursing Practice*. 2020; 34(4): 221–233. PMID:32404725 <https://doi.org/10.1097/HNP.0000000000000392>
- [23] Björneklett HG, Lindemalm C, Rosenblad A, et al. A randomised controlled trial of support group intervention after breast cancer treatment: Results on anxiety and depression. *Acta Oncologica*. 2012; 51(2): 198–207. PMID:21923569 <https://doi.org/10.3109/0284186X.2011.610352>
- [24] Wang G, Li Z, Luo X, et al. Effects of nurse-led supportive-expressive group intervention for post-traumatic growth among breast cancer survivors: A randomized clinical trial. *Journal of Nursing Scholarship*. 2022; 54(4): 434–444. PMID:34898001 <https://doi.org/10.1111/jnu.12752>
- [25] Cameron LD, Booth R, Schlatter M, et al. Changes in emotion regulation and psychological adjustment following use of a group psychosocial support program for women recently diagnosed with breast cancer. *Psycho-Oncology*. 2007; 16(3): 171–180. PMID:16858670 <https://doi.org/10.1002/pon.1050>
- [26] Cousson-Géalie F, Bruchon-Schweitzer M, Atzeni T, et al. Evaluation of a psychosocial intervention on social support perceived control, coping strategies, emotional distress, and quality of life of breast cancer patients. *Psychological Reports*. 2011; 108(3): 923–942. PMID:21879639 <https://doi.org/10.2466/02.07.15.20.PR0.108.3.923-942>
- [27] Weis JB, Gschwendtner K, Giesler JM, et al. Psychoeducational group intervention for breast cancer survivors: a non-randomized multi-center pilot study. *Supportive Care in Cancer*. 2019; 27(10).
- [28] Schou I, Ekeberg O, Karesen R, et al. Psychosocial intervention as a component of routine breast cancer care-who participates, and does it help? *Psycho-Oncology*. 2008; 17(7): 716–720.
- [29] Schou Bredal I, Kåresen R, Smeby NA, et al. Effects of a psychoeducational versus a support group intervention in patients with early-stage breast cancer. *Cancer Nursing*. 2014; 37(3): 198–207. PMID:23782517 <https://doi.org/10.1097/NCC.0b013e31829879a3>
- [30] Frohlich M, Benetti ERR, Stumm EMF. Experiences of women with breast cancer and actions to reduce stress. *Journal of Nursing UFPE*. 2014; 8(3): 537–544.
- [31] Capozzo MA, Martinis E, Pellis G, et al. An early structured psychoeducational intervention in patients with breast cancer. *Cancer Nursing*. 2010; 33(3): 228–234. PMID:20357661 <https://doi.org/10.1097/NCC.0b013e3181c1acd6>
- [32] Emilsson S, Svensk AC, Tavelin B, et al. Support group participation during the post-operative radiotherapy period increases levels of coping resources among women with breast cancer. *European Journal of Cancer Care*. 2012; 21(5): 591–598. PMID:22487421 <https://doi.org/10.1111/j.1365-2354.2012.01343.x>
- [33] Kwok C, Ho M. Development and evaluation of a culturally sensitive support group program for Chinese-Australian women with breast cancer: A pilot study. *European Journal of Cancer Care*. 2011; 20(6): 795–802. PMID:21771132 <https://doi.org/10.1111/j.1365-2354.2011.01266.x>
- [34] Power S, Hegarty J. Facilitated peer support in breast cancer. *Cancer Nursing*. 2010; 33(2): E9–E16. PMID:20142745 <https://doi.org/10.1097/NCC.0b013e3181ba9296>
- [35] Ashing-Giwa K, Tapp C, Rosales M, et al. (2012). Peer-based models of supportive care: The impact of peer support groups in African American breast cancer survivors. *Oncology Nursing Forum*. 2012; 39(6): 585–591.
- [36] Björneklett HG, Rosenblad A, Lindemalm C, et al. A randomized controlled trial of support group intervention after breast cancer treatment: Results on sick leave, health care utilization and health economy. *Acta Oncologica*. 2013; 52(1): 38–47.
- [37] Findik UY. The Information Needs of Women Who Have Undergone Breast Cancer Surgery in the West of Turkey. *Journal of Cancer Education*. 2015; 32(3): 432–437. PMID:26691514 <https://doi.org/10.1007/s13187-015-0965-2>
- [38] Cramp F, Byron-Daniel J. Exercise for the management of cancer-related fatigue in adults. *Cochrane Database of Systematic Reviews*. 2012; (11): 1–95.
- [39] Armes J, Chalder T, Addington-Hall J, et al. A randomized controlled trial to evaluate the effectiveness of a brief, behaviorally oriented intervention for cancer-related fatigue. *Cancer*. 2007; 1385–1395.
- [40] Hughes S, Jaremka LM, Alfano CM, et al. Social support predicts inflammation, pain, and depressive symptoms: Longitudinal relationships among breast cancer survivors. *Psycho Neuroendocrinology*. 2014; 42: 38–44.
- [41] Bener A, Alsulaiman R, Doodson L, et al. Depression, hopelessness and social support among breast cancer patients: In highly endogenous population. *Asian Pacific Journal of Cancer Prevention*. 2017; 18(7): 1889–1896.
- [42] Woźniak K, Izycki D. Cancer: a family at risk. *Menopausal Review*. 2014; 253 261. PMID:26327863 <https://doi.org/10.5114/pm.2014.45002>
- [43] Banning M, Hafeez H, Faisal S, et al. The impact of culture and sociological and psychological issues on Muslim patients with breast cancer in Pakistan. *Cancer Nursing*. 2009; 32(4): 317–324. PMID:19444089 <https://doi.org/10.1097/NCC.0b013e31819b240f>
- [44] Daher M. Cultural beliefs and values in cancer patients. *Annals of Oncology*. 2012; 23(3): 66–69.
- [45] Pinto CA. Sexuality and breast cancer: prime time for young patients. *Journal Thoracic Disease*. 2013; 5(1): S81–S86.