Is Peer Education an Effective Method on Breast Cancers’ Patient?
A Systematic Review

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Abstract: There is increasing interest regarding peer education in healthcare. Peer education is a process of communication, information and education conducted by peers are among groups, fellow colleagues professions, gender. The purpose of this study was to determine the effect of peer education in improving quality of life and knowledge among breast cancer patients. We identified articles through databases searching: Sage, Proquest, Science Direct and EbscoHost, published between (2006-2016). The ten articles were analyzed and selected from 1540. The studied evaluated that peer education is recommended for the breast cancer patients to increase their quality of life and knowledge. Peer education is suitable method to increase quality of life and knowledge among breast cancer patients. However many of these studied still lacked of method, so we suggest to the next research using more RCT to get better results.

1 BACKGROUND

Breast cancer is the most prevalent cancer in woman (Stanton 2005). World Health Organization showed that 12 million people around the world had breast cancer and 7.6 million of them death. In Indonesia the prevalence of breast cancer increase about 100 patients from 100,000 people each year. The data from Sistem Informasi Rumah Sakit (SIRS), 2007 showed that breast cancer is the most disease in inpatient ward in hospital (16,8%). Dharmas hospital noted that breast cancer became the most desease occur in 5 years late (32%). In Indonesia, the most prevalence of breast cancer happen in west java and east java.

Based on National Cancer Institute, physic and psychology condition of patients examined at the first diagnoses till the end of her life. Research by (Heydarnejad 2009). This study evaluate 200 breast cancers’ patients post chemotherapy, the data showed that 11% patients had a good quality of life, 66% in a imidiate and 23% others in a less QOL (Heydarnejad 2009). A research showed that breast cancer and colorectal cancer survivors had limited knowledge of their diagnosis and cancer treatment (Malak, 2009).

2 METHODS

We identified articles through databases searching: Sage, Proquest, Science Direct and EbscoHost, published between (2006-2016). Search terms include “Peer education”, “Breast Cancer”, “Quality of Life”, “Knowledge”. We found ten articles that suitable with our Inclusion Criteria. Our inclusion criteria are all of the study of peer education for breast cancers’ patient that given an impact on QOL and knowledge. We excluded the Articles if the target population focused on other than breast cancer.
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<td>1.</td>
<td>Long-Term Effects of Educational and Peer Discussion Group Intervention on Adjustment to Breast Cancer (Vicki S. sheldon cohen dan Richard Schul 2006)</td>
<td>Randomized Controlled trial</td>
<td>Sample: 312 respondent s (education group (n=79), peer education group (n=74), kelompok education plus peer education group (n=82) and control group (n=77))</td>
<td>Independent Variables: Education &amp; peer education</td>
<td>Dependent Variables: Quality of life</td>
<td>SF-36 Health survey A Repeated-measures analysis of variance</td>
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<td>2.</td>
<td>Exploring The Effects of Being A Peer Educator on African American Breast Cancer survivors (Melanie J, 2013)</td>
<td>Qualitative research design with grounded theory design</td>
<td>Sample: 35 respondent s (breast cancer patients)</td>
<td>Independent Variables: Peer education</td>
<td>Dependent Variables: 1. Healthy behaviour 2. Healthcare utilization 3. QOL</td>
<td>Statistik deskriptif, a grounded theory methodolog y</td>
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<td>3.</td>
<td>The Effect of Peer-led Education on The Life Quality of Mastectomy Patients Referred to Breast Cancer Clinics in Shira, Iran 2009 (Farkhonde</td>
<td>Pre post test with control design</td>
<td>Sample: 99 respondent s</td>
<td>Independent Variables: Peer-led education</td>
<td>Dependent Variables: QOL</td>
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<td>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 (Afsaneh Melekpour, Iba Farajadegan and Ahmad Rea amani, 2011)</td>
<td>Clinical Controlled Trial</td>
<td>68 respondent s</td>
<td>Peer support group</td>
<td>QOL, Adherance</td>
<td>SF 36 questionnaire, Chi Square test, paired t-test, Independent t-test, MANCOVA and Wilcoxon Signed Rank Test</td>
<td>Providing support to breast cancer patients with explanatory sessions in peer group support methods can improve their quality of life (p &lt;0.001).</td>
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<td>Peer-Based Models of Supportive Care: The Impact of Peer support Groups in African American Breast Cancer Survivors (kimlin ashing-giwa, Carolyn Tapp, Monica rosales et al. 2012)</td>
<td>A qualitative research study</td>
<td>62 respondent s</td>
<td>Peer support group</td>
<td>Demographics, Medical story, Support group impact, Adherance</td>
<td>Questionnaire, Descriptive and univariate statistics</td>
<td>Survivors recognize that cultural-based learning with peers comes from the spiritual, linguistic, experiential and historical aspects. Peer-based support groups offer many benefits to emotional, social, spiritual, information and cultural support.</td>
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<td>Group Support Interventions for Women with Breast Cancer: Who Benefits From What? (Vicki S, Sheldon Cohen, Richard Schul, Joyce Yasko, 2006)</td>
<td>Randomized Controlled trial</td>
<td>Sample: 230 respondent s</td>
<td><strong>Independent Variables:</strong> 1. Peer Education 2. Peer discussion group</td>
<td><strong>Dependent Variables:</strong> 1. Emotional support 2. Negative interaction 3. Support information about cancer 4. Self resources</td>
<td>SF-36 questionnaire</td>
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<td>6.</td>
<td>The effect of breast cancer educational intervention on knowledge and health beliefs of woman 40 years and older, Isfahan, Iran (Mohsen Rezaeian, Gholamreza Sharifird, Firoozeh Mostafavi et al, 2014)</td>
<td>Randomized controlled trial</td>
<td>Sample: 290 respondent s (145 intervention group and 145 control group)</td>
<td><strong>Independent Variables:</strong> Breast cancer educational intervention</td>
<td><strong>Dependent Variables:</strong> 1. Knowledge 2. Health belief</td>
<td>Champion’s health belief model scale (CHBMS)</td>
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<td>7.</td>
<td>Effectiveness of Peer Education for Breast Cancer Screening and Health Beliefs in Eastern Turkey (Sebahat Gozum,</td>
<td>Randomized controlled trial</td>
<td>Sample: 5000 respondent s</td>
<td><strong>Independent Variables:</strong> Peer education</td>
<td><strong>Dependent Variables:</strong> 1. Knowledge 2. Health belief 3. Practice</td>
<td>Champion’s health belief model scale (CHBMS) &amp; Cancer Early Diagnosis ans Screening Centers Data for Mammography Practice</td>
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<td>No.</td>
<td>Effects of Peer Education on The Knowledge of Breast Cancer and Practice of Breast Self-Examination Among Mansoura University Female Students (Heba Salama, Nahed Elsebai, Fardos Abdelfatah et al, 2013)</td>
<td>Quasy experimental design</td>
<td>Sample: 150 respondents</td>
<td>Independent Variables: Peer education</td>
<td>Dependent Variables Knowledge of breast cancer and BSE form &amp; Breast self-examination performance checklist</td>
<td>t-test</td>
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<td>10.</td>
<td>Effects of Peer education, Social Support and Self Esteem on breast Self Examinatio n Performanc e and Knowledge Level (Arzu Tuna M, Murat Bektash, Ayshe San T et al, 2009)</td>
<td>Quasy experimental design</td>
<td>Sample: 65 respondents</td>
<td>Independent Variables: Peer education, social support and self esteem</td>
<td>Dependent Variables Knowledge</td>
<td>Paired t test, McNemar test and Pearson</td>
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3 RESULTS

Articles reviewed include: 5 Randomized Controlled Trial, 2 Qualitative research, 2 Quasy Experiment, and 1 pre post with control design. According to the level of evidence, 10 articles are in 1-6 levels from 7 level of evidence, level 1 (5 articles), level 3 (3 articles) & level 6 (2 articles). Study reviewed deriving from 3 countries; USA (5 studies), Iran (4 studies), and Carolina (1 study).

Ten articles that have been collected, analyzed and scored, obtained the following results. Research conducted by (Helgeson, 2006) aimed to follow up the effects of 8 week support group intervention on the QOL of woman in early stage breast cancer. On the results obtained that the benefits of this intervention remained over a 3 year period (Helgeson, 2006). In the meantime research conducted by Boyd (2013) was to determine the effects of being a peer educator, the results of the research show that participants in the intervention group had a positive influence of their quality of life, health behaviours and healthcare utiliation.

A study found to evaluate the effect of peer-led education on the QOL of mastectomy patients, the research showed that statistically significant increasing in all aspects of QOL and decrease the symptom (p<0.001) (Sharif, 2010).

The study by Tehrani (2011) Aims to see the effect of peer support and educational program on QOL in breast cancer patients. The results showed that intervention group was significantly higher than that of the control group (p < 0.001). Research by Ashing-giwa (2012) aims to evaluate the effect of support group on African American breast cancer survivors. The result showed that the survivors underscored that cultural based groups are rooted in the linguistic , spiritual, experiential, and historical. The peer based support groups had many functions, such as social, emotional, spiritual, informational, and financial support.

Research conducted by Helgeson (2006) aimed to evaluate the impact of an educational group and peer discussion group on the physical and mental functioning of breast cancers’ patients. The data showed that peer discussion groups were helpful for woman who lacked support from their partners or physicians (p<0.001).

A research intended to know the effect of breast cancer screening education using HBM on knowledge and health beliefs. The results of the research showed that a significant differences in comparison between the experimental group with the control group after intervention (p ≤ 0.001) (Rezaeian, 2014).

Research by (Gozum, 2010) aimed to evaluate the efficacy of peer education in breast cancer screening and health beliefs. The results of the study showed a significant increase of knowledge, beliefs and practice on breast cancers’ patients (p < 0.001).

Research by Salama (2013) aimed to evaluate the peer education for breast cancer patient’s knowledge and practice of BSE. The data showed an increase in knowledge about their ill and practice of BSE (p=0.000).

Research of Nissen (2012) aims to know the difference efficacy of peer education, social support and self esteem on BSE and knowledge level. The data showed that there is a significant increase in knowledge level and BSE practice in peer support group (p<0.001).

4 DISCUSSION

The studies examined in this systematic review were about evaluation of the peer education on breast cancers’ patient. Research by Heydarnejad (2009), evaluate 200 breast cancers’ patients post chemotherapy, the data showed that 11% patients had a good quality of life, 66% in a immediate and 23% others in a less QOL. A study showed that breast and colorectal cancer survivors had limited knowledge on the details of their diagnosis and cancer treatment (Malak, 2009). In this case the role of nurse is important in primary, secondary and tertiary prevention to avoid complication. At the level of primary care nurse can implement health education intervention, one of them is peer education.

Breast cancer patient need a forum that is responsive to their physical, psychosocial, spiritual and information (Coward, 2005). Therefore, peer education can be attributed to the recognition of the breast cancer need. The peer education group member underscored that the groups were rooted in the essential experiential, linguistic, spiritual.

Peer support is important for the breast cancer patient during the treatment, postdiagnostic, emotional, and informational. Therefore, member felt they were in a comfort zone by being able to relate to other members with similar condition. A study identified that breast cancer support group members benefited from the therapeutic and were able to articulate their breast cancer journey by allowed an acceptance and strength in their goals. Therefore, their experience, support and practices are revealed in decreasing emotional and they have
given permission to share their cancer journey (Ashida, 2008).

5 CONCLUSIONS

This study evaluated the peer education on Breast Cancers’ Patient. The 10 studies reviewed, 5 indicate that the peer education effective to increase the QOL among breast cancers’ patient. The five other studies showed an increase in the knowledge.

Majority of ten studies showed significant positive effects on quality of life and knowledge. The journals research by Melanie (2013), showed that the peer education had a positive influence of quality of life, health behaviours and healthcare utilization. Future expected that RCT studies should continue to be done to find out the actual effect and to avoid bias.

REFERENCES


Rezaeian, Mohsen et al. 2014. “The Effects of Breast Cancer Educational Intervention on Knowledge and Health Beliefs of Women 40 Years and Older .” 3(April). https://doi.org/10.4103/2277-9531.131929


