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The effects of quantum psychological relaxation technique on self-acceptance in patients with breast cancer

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ABSTRACT

Background: Psychological, as well as physical effects of a disease, and side effects of medications can influence the self-acceptance of patients. Low self-acceptance can lead patients to drop out of their therapy schedule and return to the hospital several months later in much worse condition. This study aimed to investigate the effects of quantum psychological relaxation technique on self-acceptance in breast cancer patients.

Methods: This study used a pre-post quasi-experimental design with a control group. The sample included 64 respondents selected using a consecutive sampling technique and divided into two groups: intervention group (n=32) and control group (n=32). The quantum psychological relaxation technique was administered in two phases with three sessions for each phase. Six sessions were estimated at 90-120 minutes and 15–20 minutes for each. The data on patients' self-acceptance were collected using the Acceptance of Illness Scale (AIS) questionnaire and were statistically analyzed using t-test and Wilcoxon test.

Results: Self-acceptance in the intervention group increased after being given the intervention with a p-value <0.001. However, in the control group there was no significant increase in self-acceptance with a p-value >0.005

Conclusions: The quantum psychological relaxation technique had an effect on the self-acceptance of breast cancer patients.

Recommendation: Further studies of the effects of quantum psychological relaxation technique on depression and life quality of patients need to be conducted.

Key words: breast cancer, quantum psychological relaxation technique, self-acceptance

INTRODUCTION

Breast cancer is one of the deadly diseases in the world. It is a leading cause of death compared to other types of cancer and the number of breast cancer patients is increasing annually. The breast cancer accounted for 40% of the total cancer patients (Kementrian Kesehatan Republik Indonesia, 2015). One hundred fifty-two out of 231 breast cancer patients or 68% of patients treated in hospital experience low to moderate self-acceptance (Cipora, Koeczny & Sobieszczanski, 2018). Self-acceptance is a person's ability to cope with the current situation based on the past experience and maintain positive feelings about the current problems (Ryckman, 2008).

The breast cancer patients who experience the effects and side effects of the disease often find it difficult to accept their disease (Cipora et al., 2018; Czerw, Religioni, & Deptala, 2016). The physical problems due to breast cancer can be in the form of nausea, vomiting, alopecia, stomatitis, loss of body weight, fatigue, and changes in hematological status. These can cause psychological effects for patients (Black, 2008). The psychological problems experienced by patients are related to anxiety, depression, disease relapse, recovery anxiety, body parts mutilation, and also lengthy medication. All may influence the patient's self-acceptance. (Cipora, Koeczny & Sobieszczanski, 2018). In addition to psychological and physical factors that influence self-acceptance by the patient, there are also several factors such as socio-economy, the environment, and education that influence the self-acceptance of the breast cancer patients (Czerw, Religioni & Deptala, 2016).

Low self-acceptance because of a disease can lead the patient to drop out from the therapy designed to cure the disease. Often, when this happens, several months after dropping out from the therapy, the patient comes back to the hospital with much worse condition. Patients with low-self acceptance are also vulnerable to stress, lack of self-confidence, low pain management, and lack of motivation to fight the disease (Czerw, Religioni, Deptala & Walewska-Zielecka, 2016).

The impact of this low self-acceptance is debilitating for patients and thus they need intervention, especially from the caregivers, to increase their self-acceptance (Chen, Liu, Zhang & Li, 2017; Czerw, Religioni & Deptala, 2016; Dilworth, Higgins, Parker, Kelly & Turner, 2014; Mermer, Nazli & Ceber, 2016). One of the interventions that can be performed to deal with low self-acceptance is the quantum psychological relaxation technique.

Quantum psychological relaxation technique is a relaxation technique that is performed by instructing the patients to recall their psychological experiences during breast cancer diagnosis

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in the form of sadness, anger, and disappointment. This relaxation technique is given to the patients to explore their psychological experiences that establish self-awareness/self-acceptance regarding their disease (Oshins, 2013; Sari & Subandi, 2015). The quantum psychological relaxation technique is related to the development of self-awareness (Wolinsky, 2000).

Objectives

This study aimed to analyze the effects of quantum psychological relaxation technique on the self-acceptance of breast cancer patients.

Samples and Setting

The sample for this study included patients with breast cancer undergoing treatment in RSUD Tugurejo and RSUD Temanggung who met the inclusion criteria. Sixty-four patients were recruited and divided into two groups, the control and intervention groups, with 32 respondents each. The quantum psychological relaxation technique was given to the intervention group for six sessions; each consisted of two phases. The quantum psychological relaxation technique was adjusted with the patients' schedule of therapy regiment in hospital.

Methods and Variables

This study used a pre-post quasi-experimental design with a control group. The study was carried out after the researchers received an ethical approval from the Ethics Committee at the Faculty of Medicine, Universitas Diponegoro and also the Ethics Committee at Tugurejo Hospital and RSUD Temanggung in Indonesia.

The inclusion criteria in this study were patients with breast cancer undergoing treatment in hospital, receiving chemotherapy treatment, and being compos mentis. The patients were also able to communicate clearly and had no cognitive disability. Meanwhile, the exclusion criteria were patients with hearing disability and experienced other types of disease complication. Hearing disability was excluded because the intervention in this study used verbal instruction from the researcher.

In this study, the data were collected using two sets of questionnaires; one was related to demographic data such as age, marital status, education, jobs, level of cancer, duration of time to have been diagnosed with breast cancer, type of therapy administered, and the other one was related to self-acceptance [i.e., the Acceptance of Illness Scale (AIS) developed by Felton (Martins, Cunha, & Coelho, 2005)]. The AIS questionnaire consists of 8 items using the Likert scale of 1-5. The score is interpreted as 1=strongly agree, 2=agree, 3=no idea, 4=disagree, and 5=strongly disagree (Bien, Rzonca, Kanczugowska

& Iwanowicz-Palus, 2016; Hempel, Politynska, Danilewicz, Sierko & Wojtukiewicz, 2015; Zarzycka, Kobos, Czarnecka & Imiela, 2015). The validity test of the questionnaire in this study obtained $r = 0.604$ to 0.803 . The reliability test of this questionnaire revealed a Cronbach alpha score of 0.886 .

Self-acceptance was measured before and after the administration of the quantum psychological relaxation technique. The assessment was done after the patients signed the informed consent. Patients were informed of the objective of the study, the benefit of the relaxation technique, and the length of the session for the intervention. Before receiving the intervention, patients were given an explanation about psychological experiences in the form of sadness, disappointment, sorry, and anger because of the illness suffered.

The strategy for the quantum psychological relaxation technique was individually prepared. The procedure consisted of the preparation of the participants, implementation (i.e., inhaling while listening to music of alpha wave to help the patients relax). During the administration of the therapy, the patients were instructed to visualize their psychological experiences related to the disease that they have. Quantum psychological relaxation technique was given for 15 minutes for each session. Following the intervention, the researcher documented the clinical responses of the patients. The administration of quantum psychological relaxation was based on the following standard operating procedures:

First session: assessing and correcting self-weakness.

Second session: being honest to one-self

Third session: increasing self-confidence

Fourth session: respecting one-self

Fifth session: accepting and surrender

The sixth session: feeling comfortable with one-self.

Following the administration of quantum psychological relaxation technique, the patients' self-acceptance was measured with the similar questionnaire for pre and post-test. Data were analyzed using the t-test for the intervention group and Wilcoxon test for the control group.

RESULTS

Table 1 describes the mean of the respondents' age and the chemotherapy session using the mean, min-max, and standard deviation. Table 2 depicts the characteristics of the respondents based on their demographic data. Table 3 is the result of statistical tests to see the effect of quantum psychological relaxation techniques in the intervention and control groups.

The results show that in the control group, the mean value is lower than that in the intervention group. The self-acceptance score of the patients in the intervention group at the

Variable	Intervention group			Control group		
	mean	min-max	SD	mean	min-max	SD
Age	46.94	30-60	9.298	46.88	30-60	9.133
Chemo session	3.31	1-5	1.491	7.25	1-12	3.556

pretest shows a moderate level of self-acceptance, whereas following the intervention (posttest), the score shows an average of high self-acceptance. Meanwhile, in the control group, the pretest score shows that the patients have moderate self-acceptance, and the post-test score shows a decrease in the mean score and average self-acceptance score.

DISCUSSION

This study investigated the effects of quantum psychological relaxation on the self-acceptance of patients with breast cancer. Based on this study result, it can be implied that the quantum

psychological relaxation technique can influence the self-acceptance of breast cancer patients. This result supports the theory that the implementation of relaxation technique could increase self-acceptance of the patients by assisting the patients to calm their mind and manage the stress. (Roche Group, 2012). A study by Czerw et al. (2016) also revealed that breast cancer patients have a better coping mechanism following the intervention aimed to increase the mean score of self-acceptance (Czerw, Religioni, Deptala, & Walewska-Zielecka, 2016).

The self-acceptance of the breast cancer patients in the control group is generally moderate. The observation result

Table 2. Characteristics of Respondents in the Intervention and Control Groups (n=64)

Variable	Intervention group		Control group	
	f	%	f	%
Marital status				
Single	0	0%	0	0%
Widow/widower	6	18.8 %	6	18.8%
Married	26	81.2%	26	81.2%
Education				
No education	7	21.9%	8	25%
Elementary	9	28.1%	10	31.3%
Secondary school	8	25%	4	12.5%
High school	5	15.6%	6	18.8%
Higher education	3	9.4%	4	12.5%
Jobs				
Unemployed	21	65.6%	20	62.5%
Employed	11	34.4%	12	37.5%
Cancer Grade				
Grade 2	21	65.6%	21	65.6%
Grade 3	11	34.4%	11	34.4%
Length of disease				
< 1 year	20	62.5%	20	62.5%
1-2 year	12	37.5%	12	37.5%

Table 3. Self-acceptance of the breast cancer patients in the intervention and control groups before and after the administration of quantum, psychological relaxation technique (n=64)

Variable	Group	Stages	Mean	Min-max	SD	P
Self-acceptance	Control	Before	16.44	8-35	7.33	0.083
		After	16.38	8-35	7.31	
	Intervention	Before	17.69	8-39	7.83	0.001
		After	32.84	21-40	4.19	

revealed that the patients with low to moderate self-acceptance often expressed pain and showed no eagerness to carry out the chemotherapy and medication programs. Several respondents also looked sad, and some even cried and complained about their disease. This finding is also consistent with a previous study by Chen et al. (2017), which reported that breast cancer patients with low self-acceptance often experienced loss of self-confidence, and have low self-esteem and unwillingness to implement their chemotherapy program (Chen, Liu, Zhang, & Li, 2017).

The self-acceptance of the breast cancer patients in the intervention group increased following the quantum psychological relaxation technique. The test revealed that the mean score of self-acceptance in the intervention group on average was high; this observation showed that the patients in the intervention group were happier and had a motivation to recover. Breast cancer patients with high self-acceptance exhibit more positive views about themselves and are able to suppress frustration feelings due to their cancer (Ryckman, 2008). In addition, patients in the control group frequently mentioned their limitations due to this cancer and their inability to do things that they can usually do. A study by Grochans and colleagues (2009) reported that breast cancer patients need others to listen and to cheer them up when they are depressed (Grochans, Wieder-Huszla, Jurczak, Stanislawski, Janic & Szych, 2009) so that they would not have low self-acceptance in relation to their disease.

The increase of self-acceptance in the intervention group occurred after the patients were given the quantum psychological relaxation technique. This relaxation technique helps patients synchronize their mind, emotion, and soul; hence they become more aware of their condition (Adamski, 2008; Oshins, 2013, 1995). The relaxation therapy is administered in two stages. The first stage is divided into three sessions, wherein the first session, the patient is asked to see and assess her weakness. During the second session, the patient is asked to be honest with herself. The third session, focused on increasing the self-confidence of the patient. At the end of each relaxation technique, the researchers conduct an observation on clinical responses of the patient. In the first session, after the intervention, it was found that the patients stated they felt calmer and more comfortable. At the end of the second and third sessions, the patients reported that they were confident that they would recover. Several patients who had undergone radical mastectomy also reported that they were more comfortable with their current body condition. The first stage of the intervention, which consisted of three sessions, was aimed to help patients remember their past, and recognize their emotional capability and personal limitation based on the nursing outcomes classification to increase self-awareness (Moorhead, 2013).

The second stage of this psychological relaxation technique is administered to assist patients to see themselves as a whole and inspire their hopes related to their condition (Moorhead, 2013; Bulechek et al, 2013). This second stage also consists of three sessions. In the fourth session, the patient is asked to appreciate herself. The fifth session the patient is

asked to accept and surrender. Moreover, in the sixth session, the patient is asked to feel comfortable with herself. The documentation of the fourth session revealed the patients report that they are more relaxed and able to overcome the side effects of the medication when they are at home. Moreover, in the fifth and sixth sessions, the patients looked happier and shared more success stories about overcoming the side effect following the therapy regimen.

The clinical responses of the patients after following this quantum psychological relaxation technique are the increase in feelings of comfort and calm, and increased motivation to recover. These comfort and calm feelings, according to Kolcaba and colleagues (2009), can provide better opportunity to increase the patients' self-awareness regarding their disease (Kolcaba, Tilton & Drouin, 2009). The importance of the intervention in patients with poor prognosis (Tang et al., 2016) is that it is highly helpful for increasing motivation and happiness of the patients.

LIMITATION

Due to time constraint, this study did not follow up and ensure whether the patients, after the administration of quantum psychological relaxation technique, completed all their cancer therapy regimens in the hospital.

IMPLICATION FOR NURSING

There is an effect of quantum psychological relaxation therapy on the self-acceptance of the breast cancer patients. This relaxation technique can be used as an intervention to increase the self-acceptance of the breast cancer patients who undergo treatment in hospital, as well as used as palliative care for nursing practice. Nurses only need a text for a session on quantum psychology and music relaxation techniques with calming alpha waves.

IMPLICATION FOR EDUCATION

Quantum psychological relaxation technique is an innovation in nursing education. It can be a nursing intervention to improve patient self-acceptance. This technique has no side effects and is low cost, making it easy to apply.

IMPLICATION FOR RESEARCHER

Quantum psychological relaxation techniques have a positive impact for the researcher in treating breast cancer patients with low self-acceptance. However, there is a need for further research including:

- study the effects of quantum psychological therapy on depression experienced by the breast cancer patients
- study the effects of quantum psychological relaxation technique on the quality of life of breast cancer patients.

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REFERENCES

- Adamski, A. (2008). *Percepcja muzyki, jej wymiar w sztuce i psychologii kwantowej*. Bielsko-Biala: Compal.
- Bien, A., Rzonca, E., Kanczugowska, A., & Iwanowicz-Palus, G. (2016). Factors affecting the quality of life and the illness acceptance of pregnant women with diabetes. *International Journal of Environmental Research and Public Health*, 13(68), 1–13. <https://doi.org/10.3390/ijerph13010068>
- Black, J. M., & Hawks, J. H. (2008). *Medical surgical nursing clinical management for continuity of care* (8th ed.). Philadelphia: W.B. Saunders Company.
- Bulechek, G. M., Butcher, H. K., Dochterman, J. M., & Wagner, C. M. (2013). *Nursing Interventions Classification* (6th ed.). Singapore: Elsevier Ltd.
- Cancer Care. (2012). *Relaxation techniques and mind/body practices: How they can help you cope with cancer*. New York: Cancer Care.
- Chen, S. Q., Liu, J. E., Zhang, Z. X. & Li, Z. (2017). Self-acceptance and associated factors. *Journal of Clinical Nursing*, 11(12), 1516–1523. <https://doi.org/10.1111/jocn.13437>
- Cipora, E., Konieczny, M., & Sobieszczanski, J. (2018). Acceptance of illness by women with breast cancer. *Annals of Agricultural and Environmental Medicine*, 25(1), 167–171. <https://doi.org/10.26444/aem/75876>
- Czerw, A., Religioni, U., & Deptala, A. (2016). Assessment of pain, acceptance of illness, adjustment to life with cancer and coping strategies in breast cancer patients. *Breast Cancer*, 23(4), 654–661. <https://doi.org/10.1007/s12282-015-0620-0>
- Czerw, A. I., Religioni, U., Deptala, A., & Walewska-Zielecka, B. (2016). Assessment of pain, acceptance of illness, adjustment to life with cancer, and coping strategies in colorectal cancer patients. *Gastroenterology Rev*, 11(2), 96–103. <https://doi.org/10.5114/pg.2015.52561>
- Dilworth, S., Higgins, I., Parker, V., Kelly, B., & Turner, J. (2014). Patient and health professional's perceived barriers to the delivery of psychosocial care to adults with cancer: A systematic review. *Psycho-Oncology*, 23(6), 601–612. <https://doi.org/10.1002/pon.3474>
- Grochans, E., Wieder-Huszla, S., Jurczak, A., Stanislawski, M., Janic, E., & Szych, Z. (2009). Wsparcie emocjonalne jako wyznacznik jakości opieki pielęgniarskiej. *Probl Hig Epidemiol*, 90(2), 236–239.
- Hempel, D., Politynska, B., Danilewicz, A., Sierko, E., & Wojtukiewicz, M. Z. (2015). Psychological, physical, and social situation of patients with Hodgkin lymphoma undergoing radical chemoradiotherapy. *Prog Health Sci*, 5(2), 69–76.
- Kementrian Kesehatan Republik Indonesia. (2015). *Pusat Data dan Informasi Kesehatan*. Jakarta: Kementrian Kesehatan RI.
- Kolcaba, K., Tilton, C., & Drouin, C. (2009). Comfort theory: A unifying framework to enhance the practice environment. *Journal of Nursing Administration*, 36(11), 538–544. <https://doi.org/10.1097/00005110-200611000-00010>
- Martins, G., Cunha, S., & Coelho, R. (2005). Estudo da aceitacao incapacidade em doentes com insuficiencia renal crónica: comparacao de duas escalas. *Revista Portuguesa de Psicossomatica*, 7(1–2), 53–58.
- Mermer, G., Nazli, A., & Ceber, E. (2016). Social perceptions of breast cancer by women still undergoing or having completed therapy: A qualitative study. *Asian Pacific Journal of Cancer Prevention*, 17(2), 503–510. <https://doi.org/10.7314/apjcp.2016.17.2.503>
- Moorhead, S., Johnson, M., Maas, M. L., & Swanson, E. (2013). *Nursing outcomes classification* (5th ed.). Jakarta: Elsevier Inc.
- Oshins, E. (1995). Quantum psychology and the metalogic of second order change. In Chapter 21 of *Propagations: Thirty years of influence from the Mental Research Institute* (pp. 253–276). New York: The Haworth Press.
- Oshins, E. (2013). *What is quantum psychology*. New York: Quantum Psychology Institute.
- Ryckman, R. M. (2008). *Theories of personality* (9th ed.). USA: Thomson Wadsworth.
- Sari, A. D. K., & Subandi. (2015). Pelatihan teknik relaksasi untuk menurunkan kecemasan pada primary caregiver penderita kanker payudara. *Gajah Mada Journal of Professional Psychology*, 1(3), 173–192.
- Tang, S. T., Chang, W. C., Chen, J. S., Chou, W. C., Hsieh, C. H., & Chen, C. H. (2016). Associations of prognostic awareness/ acceptance with psychological distress, existential suffering, and quality of life in terminally ill cancer patients' last year of life. *Psycho-Oncology*, 462(25), 455–462. <https://doi.org/10.1002/pon.3943>
- Wolinsky, S. (2000). *The beginner's guide to quantum psychology*. California: Cordon Art BV.
- Zarzycka, J., Kobos, E., Czarnicka, J., & Imiela, J. (2015). Social support and the acceptance of illness among patients with a tracheostomy tube. *Journal of Public Health, Nursing and Medical Rescue*, 1(1), 17–25.