Spiritual Well-Being as a Predictor of Quality of Life Among Breast Cancer Patients in Indonesia

Fellianti Muzdalifah[1*], Mira Ariyani[1], Rahmadianty Gazadinda[1], Tsalitsaturrajbiyah[1]

[1]*Fakultas Pendidikan Psikologi, Universitas Negeri Jakarta, 12980, Indonesia*
Corresponding author's email: f_muzdalifah@unj.ac.id

ABSTRACT
Breast cancer patients arise significantly in Indonesia. Due to the sickness, their quality of life is assumed to be affected. Cancer is often related to religiosity issue, but Indonesian people is known having strong religiosity belief. Previous study found spiritual well-being as one of the factors of quality of life. This study aims to explore the impact of spiritual well-being to breast cancer patient's quality of life in Indonesia. A cross-sectional study with quantitative approach is applied in this study. There are 102 females included in this study. Spiritual well-being is measured by the Functional Assessment of Chronic Illness Therapy (FACIT-Sp-12) and quality of life is measured by the European Organization for Research and Treatment of Cancer-Quality of Life Questionnaire Core-30 (EORTC QLQ-C-30). This study found a significant impact between spiritual well-being towards every dimension of quality of life among breast cancer patients. The finding implies that breast cancer patients might need an intervention which support their spiritual well-being after being diagnosed with cancer.

Keywords: *Breast Cancer; Patient; Quality of Life; Spiritual Well-Being*

1. INTRODUCTION

Cancer is one of the top leading causes of death which decreasing the life expectancy in the world [1]. According to global mortality data in 2019, more than one-third of the death among individuals at the ages of 30-70 years in 127 countries is caused by cancer [2]. Although cardiovascular diseases showed the same high risk of death in high human development index countries nowadays, cancer is still a burden for population in developmental country.

Breast cancer is highlighted as a global public health problem. According to Global Cancer Statistics in 2020, breast cancer is the most frequently diagnosed cancer especially in women [3]. The mortality rates of breast cancer is also as high as its incident rates [4]. The incidence rates of breast cancer keep rising in many countries nowadays, including in the Southeast Asian region [3], [5].

In Indonesia, the rising number of breast cancer has been concerned these past years. Breast cancer is found as the second highest cause of death due to cancer in Indonesia after lung cancer [1], [5], [6]. According to the Health Ministry of Indonesia, the high incidents of breast cancer and its mortality rates are caused by the lack of screening program and poor access to treatment [7].

The percentage of death among breast cancer patients in Indonesia are quite high even though breast cancer tends to` have a good prognosis. Many breast cancer patients in Indonesia are often diagnosed at an advanced or late stage because of the delayed treatment [8]. Unfortunately, women with breast cancer who delay treating their cancer have lower chances of survival [9] because breast cancer tends to be successfully treated only if diagnosed at an early stage [1].

There are several reasons behind the breast cancer patient's decision to delay their treatment or check-up. Having poor knowledge on the early symptoms, financial strain, and less healthy concerned are common excuses to restrain breast cancer patients from getting early treatment [10], [11]. Unfortunately, several personal and cultural barriers also provoke breast cancer patients to delaying their cancer treatment, such as the embarrassment of the disease, the fear of discovering the cancer or its screening process [12], [13].

One of the unfortunate reasons which restrain breast cancer patients in getting early treatment is feeling ashamed of their diagnosis. Breast cancer has its stigma and misconception regarding their disease [8]. According

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to Grunfeld et al., breast cancer is stigmatized as the disease that could disabling and disfiguring the patients. The treatment of breast cancer is also believed to be ineffective and leads to severe side effects and poor aesthetic outcomes for women [10], [11]. These conditions are only leading to reduce the presentation of survival among breast cancer patients due to the longer delays of treatment and the risk of more advanced stages.

Breast cancer patients who receive the treatment also face challenges throughout their cancer journey. There are several procedures that are performed to breast cancer patients during the process of cancer detection, diagnosis, and the treatment. To diagnose the cancer, patients may experience physical and clinical breast exam, CT scan, MRI, mammography, ultrasound, or biopsy [14]. Several possible treatments are also given to patients following the cancer diagnosis, such as surgical procedure (lumpectomy or mastectomy), chemotherapy, radiation therapy, hormone therapy, and targeted therapy [14], [15]. Those procedures followed by several physical side effects, systemic problems, and also psychosocial problems as the consequences of diagnosis and treatments. [16], [17].

Women with breast cancer are experiencing trauma and stress in physical and psychological aspects during the cancer management process [16]. After being diagnosed with breast cancer, several psychological problems may arise among the patients, such as, depression, fear of recurrence, sleep disturbance, cognitive and sexual problems and many more [17]. Breast cancer treatments is not only giving side effects but also causing exhausted [16], [17]. Breast cancer patients tends to be restrained from their routines.

More than thirty-precent women with advanced-stage breast cancer are unable to manage their symptoms during their cancer journey [18]. Following the diagnosis and treatment, breast cancer patients are prone to feel pain and fatigue [17], [19], [20]. The side effects have reduced the ability of women with breast cancer to perform daily activities [21]. It is high likely breast cancer patients experience the most life-changing moment in their life.

Quality of life is defined as a multidimensional concept which includes individual's subjective evaluations regarding the positive and negative aspects of their life [22], [23]. Studies found that the quality of life among cancer patients are significantly affected after being diagnosed [19], [20], [24]. The unmanaged symptoms and pain during the cancer management process lead to the decreasing of patient's functionality and health-related quality of life [21], [25], [26]. Unfortunately, cancer patient's quality of life is one of the important personal aspects during the treatment process.

Cancer treatment is not only challenging but also time-consuming, so it is necessary for patients to maintain their quality of life during the process. For cancer patients, quality of life is considered as one of the important predictor of excellent prognosis [27], [28]. Previous studies found that breast cancer patients with good quality of life were more likely to have better survival chances during the cancer battling [28]–[30], meanwhile the helpless patients had lower disease-free survival rates [29]. Although the impact of quality of life to the rate of successful treatment is uncertain, it is necessary to maintain cancer patient's quality of life as a part of the palliative care.

Unlike non-cancer patients, we cannot neglect the health conditions in individuals with cancer. Patients undergoing chemotherapy, hormone therapy, or other types of therapy may experience appetite loss, constipation, diarrhea, fatigue, and other symptoms [31]. Breast cancer patients have different health condition which leads to lower degree of the quality of life than those without cancer [32], [33]. So, despite of focusing on subjective judgements, objective health factors should be included while exploring the quality of life among cancer patients [34]–[37].

Exploring health-related quality of life among breast cancer patients is more suitable to understand how individuals with cancer faces through their condition. Health-related quality of life is defined as how well someone perceived their functions and well-being without neglecting the physical, mental and social domains of their health condition [36]–[38]. To assess health-related quality of life among cancer patients, individuals are not only asked to evaluate their ability to carry out pre-defined activities, but also to evaluate their subjective feelings in the current condition.

Cancer is one of a life-threatening illness, so it is commonly associated to death. Although breast cancer is prone to have good prognosis, the patients are still battling with cancer. A study finds that cancer patients suffered from death anxiety after confronting the cancer [39]. According to Halstread & Hull, women with breast cancer struggle with a number of thoughts, such as the thought of having life-threaten condition, the possibility of cancer recurrence, or even asking about their belief to God. After being diagnosed, many of breast cancer patients suffer from the fears and uncertainties [40]–[42], so at some point they probably blame the God because of their condition.

Someone is more likely at their lowest point of life after being diagnosed with cancer, so that they may feel worried yet powerless. Individuals are prone to be more religious when dealing with illness [43], [44]. Cancer patients may need help to relate to God in order to deal with the fears of death and have a better perspective [42]. The uncertainty of the illness has led to the idea that

cancer patients need to lean on to the greater power during their cancer journey.

Religious persons are found using prayer to seek spiritual support as their coping strategies, so that they felt less pain and fatigue [45]. Being religious is also associated with better psychological well-being for the cancer patients [45]. Spirituality or religion is found as the agent to cope with the illness experience [40], [43], [46], [47]. These findings demonstrate that spirituality hold significant contributions for patients with chronic illness.

According to Burford et al. (1991), assessing quality of life among patients with terminal illness should include the factor of religiosity and spirituality. It is believed that spirituality helps to relief the pain and find the meaning of their existence among patients [50]. Moreover, previous study find a strong association between spirituality and quality of life [50]–[54]. These findings show that spirituality hold a significant contribution to quality of life.

Spirituality does not always affiliate with regular worship attendance. Spirituality differs from religiosity, which the main concern of spirituality is the beliefs, values, and practices [55]. Spirituality is broader than religious faith, that someone is striving for being connected to the essence of life, so that they are able to experience the meaning in life [55]–[57]. According to Puchalski et al., spirituality refers to the way a person seek and express meaning and purpose of life by experiencing the connectedness. In general, individuals will have their personal story regarding their spirituality because everyone has different experience to be connected.

The concept of spiritual well-being is closed to the concept of spirituality and well-being. Although spirituality and spiritual well-being are often mentioned interchangeably, yet spirituality is utilized in various contexts including spiritual well-being. According to Mickley et al., spiritual well-being is the clearest indicator of spirituality which described as the expression of individual's spiritual health. Spiritual well-being is known as someone's spirituality as "the state of affairs" [60], [61]. Spiritual well-being is the affirmation of individual's life in a relationship with God, self, community, and environment [62].

A study found that spiritual well-being is linked to the individual's ability in reaching their personal purpose of life [63]. Spiritual well-being reflects a sense of meaning in life, inner peace and faith [54]. Spiritual well-being is comprised of two faceted—vertical and horizontal [64]. The vertical dimension indicates a sense of well-being in relation to the great power like God, meanwhile the horizontal dimension indicates a sense of life purpose and satisfaction [65]. It is demonstrated the important role of spiritual well-being in cancer patients to help them discovering the meaning and purpose of their life.

Spiritual well-being holds an important role for cancer patients. Studies find that spiritual well-being is associated to quality of life [54], [65]–[67]. Spiritual well-being is found as a strong predictor to self-esteem and strategy coping [68]. Spiritual well-being provides the palliative care for the cancer patients, not only to relief the pain but also to help them finding the meaning of their existence [50].

Breast cancer patients also suffer from several psychological challenges due to the cancer diagnosis. Although there is high probability that their cancer is successfully treated, women with breast cancer have experienced the significant changes in their life. There is a high possibility that the quality of life among breast cancer patients are affected because of the cancer diagnosis.

Since cancer is strongly associated to death, many cancer patients tend to become more religious after being diagnosed. The helplessness of their condition leads them to build a closer relationship to God. However, the unpredicted diagnosis of cancer for the patients is prone to address God as the cause of their condition. For breast cancer patients, accepting the cancer diagnosis is a tough work. There is also a possibility that their trust to God falls apart after being diagnosed with cancer.

The present study is investigating the impact of spiritual well-being to quality of life among breast cancer patients in Indonesia. We would like to examine how spirituality well-being contributes to women with breast cancer's quality of life. Research on breast cancer patients will be very beneficial as it can provide the information how breast cancer patient's quality of life can be taken care.

2. METHOD

2.1. Materials

A cross-sectional study was applied in this study due to one specific time observational condition towards the population. Everyone who had got the diagnosis of breast cancer was invited in this study. The invitation of this study was broadcasted through social media and several breast cancer communities in Indonesia. All participants included in this study were voluntary based.

102 females with breast cancer diagnosis were included in this study. All participants in this study aged between 20 to 68 years old varied with breast cancer diagnosis from early stage to late stage. Few participants were diagnosed with breast cancer more than ten years ago, yet half of participants got the diagnosis within past five years.

2.2. Tools

The online questionnaire consisted of two main instruments and demographic questions was given to all participants. The demographic questions covered the information such as age, religion, occupation, education, marital status, and economic condition were asked. The instrument also covered the information of participant's cancer history including cancer stage, metastatic status, and cancer treatment. To assess spiritual well-being and quality of life, this study used the reliable and valid instrument which had been translated and adapted to Indonesian language.

The Functional Assessment of Chronic Illness Therapy (FACIT-Sp 12) was used in this study to evaluate participant's spiritual well-being. This instrument was designed by David Cella in 1999 to measure spiritual well-being among individuals with chronic disease [69]. The instrument consisted of 12 items which covered three domains of spiritual well-being—meaning, peace and faith. The FACIT-Sp 12 used a 5-point Likert scale, with 0 refers to "never" and 4 refers to "always". Total score was calculated from the three subscales to assess the spiritual well-being of participants; the higher score reflects the better spiritual well-being. This study used the Indonesian version of FACIT-Sp 12 that was provided by FACIT [70].

The European Organization for Research and Treatment of Cancer Quality of Life Questionnaires Core-30 (EORTC QLQ C-30) was used in this study to evaluate participant's quality of life. This instrument was developed by EORTC Quality of Life's team in 1987 to measure health-related quality of life [71]. The instrument consisted of 30 items which covered three domains of quality of life—functional dimension (physical, role, cognitive, emotional, and social), symptom dimension (fatigue, pain, nausea, and vomiting) and global health status. The EORTC QLQ C-30 used a 4-point Likert scale for functional and symptoms dimension, with 1 refers to "not at all" and 4 refers to "very much". Meanwhile, a 7-point Likert scale applied for global health dimension in the EORTC QLQ C-30, with 1 refers to "very poor" and 7 refers to "excellent". As stated in the manual scoring system from EORTC, the raw score should be transformed into standard score before interpretation [72]. Each domain of instrument should be calculated individually by using the manual scoring system [72]. The higher score in functional and global health domains reflect the better quality of life, whereas the higher score in symptom domain reflects the lower quality of life. This study used the Indonesian version of EORTC QLQ C-30 which had been adapted by Perwitasari et al.

2.3. Data Collection Procedures

Online data collection was carried out to gather more participants in Indonesia. Both the explanation of the study and informed consent were given to each participant before filling in the research instruments. Participants had the rights to ask or withdraw from this study.

The data were collected from March to July 2021. Previously, there were 104 participants who participated in this study, but two participants were excluded in due to the incomplete answer. Convenience sampling technique was applied during the recruitment process.

Descriptive statistics were carried out to examine participant's demographic data. Correlation analysis was first performed to assess the significance relationship between spiritual well-being to all quality of life's dimensions. As the following analysis, three times multiple regression analysis were executed to evaluate the significance impact of spiritual well-being to quality of life among breast cancer patients. Each analysis was performed using three different qualities of life's domain as the outcome variable—dimension functional, symptoms and general health. All statistical analysis procedure was accomplished using SPSS version 23 for Windows.

3. RESULT AND DISCUSSION

3.1. Result

102 female participant's data were analyzed in this study. As seen in table 1, the majority of participants were Muslim (90.2%) and others were Christian (7.8%) or Catholic (2.0%). One-third of participants in this study were housewife (34.3%) and the rest worked as civil servant, office employee, entrepreneur, students, etc.

There were only 9.8% participants who was either retired or not working. Most of participants were married (85.3%) and only one participant who was still single. Half of this participants had a good financial condition with income more than 10 million rupiahs a month (52%). More than half of participants in this study had good educational level which held bachelor's degree (54.9%) (see table 1).

In table 2, we could see that one-third participants in this study could consider as a survivor of breast cancer due to the status of "no cancer cell detected" in their body (35.3%). Other participants were at second stage (30.4%) and third stage (16.7%) of breast cancer. There were only 6.9% participants who were at late-stage and 10.8% who were at early-stage breast cancer. Almost all participants had no metastatic cancer (93.1%). Most of participants received medical treatment for their cancer—chemotherapy, mastectomy, lumpectomy, radiation therapy, hormonal therapy, targeted therapy, surgical

metastatic cancer, etc. Few participants selected alternative therapy such as using herbal medicine, acupuncture, meditation, etc. Ten percent of participants also tried the trial alternative therapy—Electro-Capacitive Cancer Therapy (ECCT). Only one participant who decided not to receive any treatment for their cancer.

Table 1 Demographic Data

Characteristic	N	Percentage (%)
a) Religion		
Moslem	92	90.2
Christian	8	7.8
Catholic	2	2.0
b) Occupation		
Housewife	35	34.3
Civil servant	16	15.7
Private employee	19	18.6
State-owned enterprise officer	3	2.9
Entrepreneur	11	10.8
Student	1	1.0
Others	7	6.9
Retired/Not working	10	9.8
c) Educational attainment		
High school or less	11	10.8
Diploma degree	20	19.6
Bachelor degree	56	54.9
Master degree	11	10.8
Doctoral degree	4	3.9
d) Marriage status		
Not married	1	1.0
Married	87	85.3
Divorce	7	6.9
Widow	7	6.9
e) Family income		
< Rp 1.500.000	3	2.9
Rp 1.500.000-3.000.000	11	10.8
Rp 3.000.000-5.000.000	10	9.8
Rp 5.000.000-10.000.000	25	24.5
> Rp 10.000.000	53	52.0

Table 2 Participant's Cancer History

Description		N	Percentage (%)
a) Cancer status	Clear	36	35.3
	Early stage	11	10.8
	2nd stage	31	30.4
	3rd stage	17	16.7
	Late stage	7	6.9
b) Metastatic cancer	Yes	7	6.9
	No	95	93.1
c) Received treatment	Chemotherapy	52	51.0
	Mastectomy	55	53.9
	Lumpectomy	27	26.5
	Radiation therapy	36	35.3
	Hormonal therapy	43	42.2
	Targeted therapy	20	19.6
	Alternative therapy	25	24.5
	Electro-Capacitive Cancer Therapy	11	10.8
	Sentinel Lymph Node Biopsy	9	8.8
	Surgical Metastatic Cancer	1	1.0
	None	1	1.0

Participant's spiritual well-being and quality of life were described using descriptive statistics. From 102 participants included in this study, the mean score of general spiritual well-being was 42.54 (SD = 5.073) with minimum score 0 and maximum score 48. The mean score of each dimension of spiritual well-being was listed –- dimension meaning (M = 14.68; SD = 1.868), dimension peace (M = 12.72; SD = 2.608), and dimension faith (M = 15.15; SD = 1.754) with minimum score 0 and maximum score 16. In instrument FACIT Sp-12, the higher score reflects the better spiritual well-being. This study showed that the participants of this study had good spiritual well-being either in general or in each specific dimension (see table 3).

Each dimension of quality of life was evaluated independently. According to table 3, the mean score of dimensions functional was 79.67 (SD = 16.498) and the mean score of dimension global health was 79.49 (SD = 22.455). As stated previously, higher score in dimension functional and global health reflects good quality of life. In dimension symptoms, the participants of this study were also identified having good quality of life since the mean score of this dimension was 19.31 (SD = 16.391). Higher score in dimension symptoms reflects the more physical symptoms experienced by individuals, so that it resulted in lower quality of life. This study showed the participants of this study had good quality of life in each dimension of quality of life (see table 3).

Table 3 Description of participant's spiritual well-being and quality of life

Description	Min	Max	Mean	SD
a) Spiritual well-being				
General spiritual well-being	0	48	42.54	5.073
Dimension meaning	0	16	14.68	1.868
Dimension peace	0	16	12.72	2.608
Dimension faith	0	16	15.15	1.754
b) Quality of life				
Dimension functional	0	100	79.67	16.498
Dimension global health	0	100	79.49	22.455
Dimension symptoms	0	100	19.31	16.391

Pearson correlation analysis was performed to assess the relationship of spiritual well-being to each dimension of quality of life (function, global health, and symptoms). Preliminary analyses were also performed to ensure no violation of the assumptions. The result demonstrated significant relationships between spiritual well-being to all dimensions of quality of life.

According to table 4, there was a significant relationship between spiritual well-being and all dimensions of quality of life. Spiritual well-being showed a significant positive correlation to both quality of life dimension function ($r = .335$; $p<0.01$) and quality of life dimension global health ($r = .328$; $p<0.01$). This finding indicated that the better participant's spiritual well-being, the better quality of life they would have, specifically in dimension function and global health. Meanwhile, there was a significant negative correlation between spiritual well-being and quality of life dimension symptoms ($r = -.380$; $p<0.01$). This result reflected the better spiritual well-being associated with lower dimension symptoms which indicated the better quality of life.

Table 4 Correlation between spiritual well-being and quality of life

Measures	1	2	3	4
1) Quality of life - Function	-			
2) Quality of life - Global health	.705**	-		
3) Quality of life - Symptoms	-.808**	-.742**	-	
4) Spiritual well-being	.335**	.328**	-.380**	-

* Correlation is significant at the 0.05 level ($p<0.05$)
** Correlation is significant at the 0.01 level ($p<0.01$)

Linear regression analysis was performed to investigate the impact of spiritual well-being to quality of life among breast cancer patients. This study examined the significant contribution of spiritual well-being towards all dimensions of quality of life—function, global health, and symptoms. Three times simple regression analyses were run in this study.

First simple regression analysis was executed to test the impact of spiritual well-being towards breast cancer patient's daily function as one of the dimensions of quality of life. The result showed a significant contribution of spiritual well-being in dimension function of quality-of-life $F (1, 102) = 12.614$; Sig .000; R Square .112. This finding indicated that 11.2% of quality-of-life dimension function was explained by spiritual well-

being, and the rest was explained by other factors (see table 5).

Table 5 Regression Analysis Spiritual Well-being and Quality of Life - Dimension Function

Variables	Unstandardized Coefficients		Standardized Coefficient	t	p
	B	SE	Beta (β)		
Spiritual well-being	1.088	.306	.335	3.552	.000

Notes: R^2 = .112; F = 12.614 (N = 102; p = .001)

Next simple regression analysis was carried out to investigate the impact of spiritual well-being towards breast cancer patient's global health condition as one of the dimensions of quality-of-life. The finding showed a significant contribution of spiritual well-being in dimension global health of quality-of-life F (1, 102) = 12.085; Sig .000; R Square .108. This result indicated that 10.8% of quality-of-life dimension global health was explained by spiritual well-being, and the rest was explained by other factors (see table 6).

Table 6 Regression Analysis Spiritual Well-being and Quality of Life - Dimension Global Health

Variables	Unstandardized Coefficients		Standardized Coefficient	t	p
	B	SE	Beta (β)		
Spiritual well-being	1.088	.306	.335	3.552	.000

Notes: R^2 = .108; F = 12.085 (N = 102; p = .001)

Last simple regression analysis was performed to examine the impact of spiritual well-being to the symptoms experienced by breast cancer patients which reflected one of the dimensions of quality of life. This study found a significant contribution of spiritual well-being in dimension symptoms of quality-of-life F (1, 102) = 16.860; Sig .000; R Square = .144. This result suggested that 14.4% quality of life dimension symptoms was explained by spiritual well-being and the rest was explained by other factors (see table 7).

Table 7. Regression Analysis Spiritual Well-being and Quality of Life - Dimension Symptoms

Variables	Unstandardized Coefficients		Standardized Coefficient	t	p
	B	SE	Beta (β)		
Spiritual well-being	-.1227	.299	-.380	-4.106	.000

Notes: R^2 = .144; F = 16.860 (N = 102; p = .000)

3.2. Discussion

The present study investigates the impact of spiritual well-being to quality of life among breast cancer patients in Indonesia. The first to evaluate in this study is the relationship between spiritual well-being to all dimensions of quality of life. The results show a moderate positive relationship between spiritual well-being to quality of life—dimension function (r = 0.335) and global health (r = 0.328). Meanwhile, a moderate negative relationship between spiritual well-being to quality-of-life dimension symptoms is also found (r = -0.380). This finding is similar to the results of previous studies [54], [66], [67].

The main analysis of this study is to evaluate the contribution of spiritual well-being to breast cancer patient's quality of life. This study reveals that there is a significant impact between spiritual well-being to all dimensions of quality of life in women with breast cancer. Spiritual well-being is found having significant positive contribution to dimension function and dimension global health of quality of life. On the other hand, spiritual well-being shows an inversely impact to quality of life—dimension symptoms. This study indicates that spiritual well-being is not only able to increase daily function and global health but also decrease the symptoms experiencing by breast cancer patients.

Previous studies find that spirituality has a strong relationship to quality of life [50]–[53]. Spirituality can help patients with terminal illness to relief the pain and find the meaning of their life [50]. As spiritual well-being is associated to spirituality, this study resemble the previous findings, that spiritual well-being significantly affect quality of life among cancer patients [54], [65]–[67].

In the present study, most of participants' quality of life scores in dimension function and global health were quite high, meanwhile their dimension symptom's score was low. This finding indicates that the participants of

this study—that all of them are breast cancer patients—have no significant trouble in their quality of life. This is an interesting finding because prior studies find that cancer patients' quality of life are prone to be affected after being diagnosed with cancer [19], [20], [24].

The astonished finding of this study, which reveals a good quality of life among participants, may be accounted by several attributes. In this study, there are 35% participants whose cancer cell is currently not found—or we can call it clear stage. Cancer patients in the clear stage is currently not receiving the massive cancer treatment, so they may feel less pain and less fatigue. The less pain and less fatigue lead to a better quality of life [21], [25].

Half of these participants have good financial condition. Cancer patients may have big expenses to support their cancer journey, so the better economic conditions lead to the better instrumental support they have. A good financial condition in cancer patients may affect their quality of life since it reduces their stress from financial strain. Additionally, most of participants in this study were married which indicates they have the support system during their cancer treatment. A good support system is strongly associated to patient's quality of life [74].

In this study, participants show high scores in dimension meaning and faith in their spiritual well-being. Meanwhile, participant's spiritual well-being in dimension peace is in moderate score. According to Yilmaz & Cengiz, the peace dimension reflects an affective dimension of spirituality which has a stronger relationship with mental health [67]. Based on this explanation, it is understandable that the peace dimension's score is lower than other spiritual well-being's dimensions because the participant's mental health may not in their best condition since being diagnosed with cancer.

The finding of this study reveals the contribution of spiritual well-being to three dimensions of quality of life are only between 10 to 14%. This contribution may not look as strong as expected, but the finding demonstrates a significant impact of spiritual well-being to breast cancer patient's quality of life. It is predicted the contribution of spiritual well-being will be stronger if it is combined with other factors.

This study has some limitations. This study only investigates spiritual well-being as the only variable contributing to quality of life, meanwhile it is acknowledged that quality of life is a complex construct which affected by many factors. Future study can include other psychological and demographic factors which may contribute to breast cancer patient's quality of life.

Next, this is a cross-sectional study which only evaluates the association between spiritual well-being and quality of life among breast cancer patients at one-time. There is no trend that can be identified through this study design. Longitudinal study would be able to provide better prediction between spiritual well-being to quality of life in women with breast cancer.

The limited number of participants also contribute to the result of this study. The small number of samples in this study is resulted due to the implementation of online data collection. Although using online questionnaire can help reaching out more areas in Indonesia, the control of data collection procedure is weak. Since the number of breast cancer patients in Indonesia are quite high, future study needs to recruit more participants and apply several participant's recruitment strategies during data collection process. It is expected that the more participants recruited in the study would give better description regarding the population of study.

4. CONCLUSION

This study demonstrates that spiritual well-being significantly contributes to the quality of life among breast cancer patients in Indonesia. Spiritual well-being shows positive contribution to quality of life—dimension function and global health, yet a negative contribution to dimension symptoms in quality of life. Spirituality and spiritual well-being are not limited to any specific religions or beliefs or practices. Spirituality helps cancer patients to face the fears of the illness and the side effects of treatment, meanwhile spiritual well-being provides the affirmations of individual's life in a relationship with God, self, and others. Spiritual well-being provides the palliative care for breast cancer patients, such as relief the pain or help finding the meaning of patient's existence. Future studies are needed to elucidate other factors associated with spiritual well-being in affecting quality of life among breast cancer patients in Indonesia.

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