Factors Affecting the Meaning of Life in Breast Cancer Patients at Malang City, Indonesia

Lilik Supriati¹a, Renny Nova¹b, Ahsan¹c, Muhammad Rodli²d, I Dewa Ayu Rismayanti³e, Rinik Eko Kapti³f

¹ Department of Nursing, Faculty of Health Sciences, Universitas Brawijaya, Malang, East Java, Indonesia
² Nurse Anesthesia Educational Programs, Institute of Technology, Science and Health Soepraoen, Malang, East Java, Indonesia
³ Doctor in Nursing, Nursing Program, Sekolah Tinggi Ilmu Kesehatan Buleleng, Denpasar, Bali, Indonesia

a Email address: liliks.83@ub.ac.id
b Email address: reva_fk.psik@ub.ac.id
c Email address: ahsanpsik_fk@ub.ac.id
d Email address: muhammadrodli77@gmail.com
e Email address: rismajegeg@gmail.com
f Email address: rinik.eko@ub.ac.id

Received: 7 August 2023 Revised: 27 September 2023 Accepted: 28 September 2023

Abstract

The meaning of life is considered to affect breast cancer patients positively. Finding meaning in life is key to improving well-being during and after experiencing a traumatic event such as cancer. Previous research was still rare to explore the factors affecting the meaning of life in breast cancer patients. The study aimed to analyze the factors influencing the meaning of life of breast cancer patients. This study was an analytical observational method with a cross-sectional design. The inclusion criteria of the respondents were breast cancer patients who had obtained at least one cycle of chemotherapy. We used purposive sampling, and the total sample in this study was 135 respondents. Questionnaires were used to collect the data. Data were analysed by multivariate test, namely a linear regression test with a significance level of p ≤ 0.05. The result showed only two variables affect the meaning of life, communication of health workers and spirituality, respectively. The strongest variable was the communication of health workers. The equation from the analysis showed that 11% explained the phenomenon. The spirituality and communication of health workers positively affected the meaning of life. Application of therapeutic communication as well as spiritual support are needed in nurses to patients while undergoing therapy. Therefore, nurses must pay attention to spirituality and good therapeutic communication when providing patient services.

Keywords: Spirituality, Communication, Breast Cancer, Meaning of Life.

*Corresponding Author:

Lilik Supriati
Department of Nursing, Faculty of Health Sciences, Universitas Brawijaya, Malang, East Java, Indonesia
Email: liliks.83@ub.ac.id

©The Author(s) 2023. This article is distributed under the terms of the Creative Commons Attribution 4.0 International License (http://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if changes were made. The Creative Commons Public Domain Dedication waiver (http://creativecommons.org/publicdomain/zero/1.0/) applies to the data made available in this article, unless otherwise stated.
INTRODUCTION

Breast cancer is the most common cancer in women worldwide (Aflakseir, Soltani, & Mollazadeh, 2018). It has become the 2nd most common type of cancer among women in the world, including in Turkey (Ozdemir & Tas Arslan, 2018) and the United States (Reiser, et al., 2019). In Indonesia, breast cancer is a cancer that is most often treated in hospitals (Komite Nasional Penanggulangan Kanker [KPKN], Kementerian Kesehatan Republik Indonesia, 2015). Global Cancer Observatory (2018), data from the World Health Organization showed that the most common cancer cases in Indonesia are breast cancer, which is 58,256 cases or 16.7% of the total 348,809 cancer cases (World Health Organization, 2018). Experiencing breast cancer is a traumatic experience that interferes with women’s lives in many aspects, including the context of their role as women and changes in their bodies (Martino & Freda, 2016). The trauma they experience interferes with their representation of the past and plans for the future. Breast cancer requires process of psychosocial adjustment to long cancer therapy and the. In the face of such a serious illness, things may lose their former meaning, and sense of stability (Loeffler, Poehlmann, & Hornemann, 2018).

Chronic diseases such as cancer can trigger a person to find out the meaning life (Xia, et al., 2018). The reason someone with cancer is looking for the meaning of life is because cancer is a serious disease with a high mortality rate and causes uncertainty in the patient's life. The meaning life is considered to have many positive effects for breast cancer patients. By finding the meaning of life, sufferers will be more enthusiastic about undergoing treatment and able to solve emotional problems and the uncertainty they feel (Martino & Freda, 2016). Patients must have good coping skills to overcome problems and achieve new life goals even living with breast cancer (Wang et al., 2020). The meaning of life will determine individual motivation to achieve life goals (Sajjadi, et al., 2016). Patients who find a positive meaning of illness will have higher psychological well-being and lower signs of anxiety and depression, and are more satisfied with life despite suffering from cancer.

The discovery of meaning life is a key element in improving well-being during and after experiencing a traumatic event such as cancer (Martino & Freda, 2016). Patients who are able to identify the benefits or meaning of the experience of cancer or believe cancer’s contribution to personal growth will show a better quality of life, exhibit lower depressive symptoms and higher well-being status (Guerrero-Torrelles, et al., 2017; Shin & Park, 2017).

Strong sensitivity to the meaning life is assumed to be a protective factor in fighting psychological distress and improving the well-being of cancer patients (Loeffler, Poehlmann, & Hornemann, 2018). Frakl’s theory says that the meaning of life is a basic human need that motivates in life. In cancer patients, individuals seek a certain meaning after experiencing a traumatic event to help overcome the difficulties caused by cancer. The meaning of life encourages individuals to achieve their life goals and fulfill personal values that will determine the patient’s coping behavior in overcoming problems due to suffering from cancer. Patients who have a positive meaning in life will have good psychological well-being and lower fatigue, depression and anxiety. Although the relationship of factors that influence meaning in life is still uncertain. However, the importance of the meaning of life is definitely a must for patients (Pintado, 2018). Many factors, such as individual character, severity of illness and aspects of spirituality influence the process of making meaning in life. Although previous research considers that there is no clarity about the process of finding meaning (Pintado, 2018). Research is still few to explore the factors that affect the meaning of life in breast cancer patients. This study aimed to analyze the factors influencing the meaning of life of breast cancer patients. They were age, spirituality, communication of health workers and the distance from the patient's home to chemotherapy services.
2. RESEARCH METHOD

This study used a cross-sectional design with an observational approach. Data were collected from October – December 2021. Total sample were 135 breast cancer patients who undergoing chemotherapy at the Army Hospital dr. Soepraeon Malang and Baptis Hospital, East Java, Indonesia. We used purposes sampling in accordance with the inclusion criteria. Inclusion criteria in this research were least had chemotherapy for 1 cycle, conscious, and does not have a mental disorder.

This study obtained ethical clearance number 2386-KEPK by the Institutional Review Board (IRB) Faculty of Nursing, Universitas Airlangga. This study begins with obtaining ethical clearance by complying with the strict Covid control protocol at the hospital. The study provided informed consent to each respondent who agreed to join in this study. Data were collected offline using self-report questionnaires that filled out by the respondents.

The demographic questionnaire asked the respondents in term of marital status, family history of cancer, symptom severity, and health insurance ownership. The questionnaire used was a modified questionnaire from Health Care Communication Questionnaire. This questionnaire was used to measure the health worker communication. It has 8 Items, using Likert scale consisting of : 1: strongly disagree, 2: disagree, 3: agree, 4: strongly agree. Spiritual Transcendence Scale for measuring spirituality which have 8 item questions. The data was analyzed using a multivariate test, namely linear regression test. The quality of the model equation, used ANOVA criteria. Statistically significant level was used with \( p \) value < 0.05. In addition, the correlation was more than 0.2 was satisfaction (Kline, 2015).

3. RESULTS AND DISCUSSION

Table 1 show the characteristics of the respondents. Table 1, it shows that the majority of respondents have no family history of cancer (73,3%); most of them have normal activity without hindrance (47,4); Majority do not work (50,4%), have level knowledge in moderate level (65,9%); have married (85,9%); and most of patients have low economic status (58,5%).

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Respondents (N)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family history of cancer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>36</td>
<td>26.7</td>
</tr>
<tr>
<td>No</td>
<td>99</td>
<td>73.3</td>
</tr>
<tr>
<td>Symptom severity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Normal activity without hindrance</td>
<td>64</td>
<td>47.4</td>
</tr>
<tr>
<td>Light activity. limited to strenuous activity. but ambulatory</td>
<td>52</td>
<td>38.5</td>
</tr>
<tr>
<td>Can do activities for himself</td>
<td>12</td>
<td>8.9</td>
</tr>
<tr>
<td>Can do activities for himself but certain activities</td>
<td>6</td>
<td>4.4</td>
</tr>
<tr>
<td>Really just lying in bed</td>
<td>1</td>
<td>0.7</td>
</tr>
<tr>
<td>Occupational</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td>67</td>
<td>49.6</td>
</tr>
<tr>
<td>Unemployed</td>
<td>68</td>
<td>50.4</td>
</tr>
<tr>
<td>Level of knowledge</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moderate</td>
<td>89</td>
<td>65.9</td>
</tr>
<tr>
<td>High</td>
<td>46</td>
<td>34.1</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>116</td>
<td>85.9</td>
</tr>
</tbody>
</table>
Table 2 shows that most of respondents have high level meaning life score which all of indicators in high level category. Age of respondents was mostly in the adult category, spirituality in the moderate category, mean of communication from health worker were on the high level and most of respondents have distance from their home to hospital was 33.83 kilometres. It can be seen from bivariate analysis that the variables which significantly related to meaning of life were spirituality, health worker communication and distance from patient’s home to chemotherapy services which $p$-value $< 0.05$. Spirituality and health worker communication can positively predict meaning life. It means that higher spirituality and higher health worker communication, higher meaning life in breast cancer woman. They were continued to multivariate analysed to determine the power of influence of factors.

Table 3 shows that factor affecting meaning life were spirituality $p$-value $0.014$ and health worker communication which $p$-value $0.015$, so it can be concluded that spirituality and health worker communication have significantly influence to meaning life in breast cancer patients. The greatest factor related to meaning life was spirituality with power ($B$) $= 0.199$, from the results of multivariate analysis, the equation can be arranged meaning life $= 29.521 + 0.108$ health worker communication $+ 0.199$ spirituality. The quality of the model equation, used ANOVA criteria that showed the result $p$ value $0.002 < 0.05$ so it can be concluded that the equation is eligible to used. Test showed the value of $R$ square is $0.11$, it means that the equation obtained is able to explain meaning life $11\%$ after controlled by others factors.

Table 2. Analysis of Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Indicator</th>
<th>n</th>
<th>Mean (SD)</th>
<th>Min- Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meaning life</td>
<td>Belief in disease</td>
<td>135</td>
<td>12.72 (1.26)</td>
<td>8-16</td>
</tr>
<tr>
<td></td>
<td>Motivation to be healthy</td>
<td>135</td>
<td>12.86 (1.24)</td>
<td>9-16</td>
</tr>
<tr>
<td></td>
<td>Desire to meaningful</td>
<td>135</td>
<td>12.87 (1.34)</td>
<td>8-17</td>
</tr>
<tr>
<td>Meaning life score</td>
<td></td>
<td>135</td>
<td>38.53 (3.07)</td>
<td>26-45</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Meaning Life</th>
<th>Mean (SD)</th>
<th>Min- Max</th>
<th>$r$</th>
<th>$p$-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>47.14 (6.36)</td>
<td>27-60</td>
<td>0.069</td>
<td>0.426</td>
</tr>
<tr>
<td>Spirituality</td>
<td>26.86 (5.80)</td>
<td>11-35</td>
<td>0.226</td>
<td>0.008</td>
</tr>
<tr>
<td>Health worker communication</td>
<td>27.52 (3.42)</td>
<td>15-34</td>
<td>0.207</td>
<td>0.016</td>
</tr>
<tr>
<td>Distance from patient’s home to chemotherapy services</td>
<td>33.83 (26.35)</td>
<td>4-100</td>
<td>0.198</td>
<td>0.022</td>
</tr>
</tbody>
</table>

Table 3. Multivariate Analysis Test Results for Meaning Life in Breast Cancer Woman

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>$t$</th>
<th>Sig.</th>
<th>$R$ Square</th>
<th>ANOVA test</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>29.521</td>
<td>2.405</td>
<td>12.276</td>
<td>.000</td>
<td>0.11</td>
<td>0.002</td>
</tr>
</tbody>
</table>
Health worker communication & .108 & .044 & .203 & 2.466 & .015 \\
Spirituality & .199 & .080 & .222 & 2.493 & .014 \\
Distance & .362 & .382 & .084 & .948 & .345 \\

Based on the results of the analysis, it is known that there are two factors related meaning life of breast cancer patient. They are spirituality and health worker community. The results of this study indicate that the most affecting meaning life in breast cancer woman was spirituality. The average spiritual value of respondents in the moderate or fairly high category. The findings in line with previous research in Iran that showed the breast cancer patients under study had average levels of spiritual health and quality of life (Mohebbifar et al., 2015). This is accordance with other research which says that patients with breast cancer have a tendency to change the spiritual aspect better when they are sick (Park, Waddington, & Abraham, 2018).

There have been many studies in literature suggesting that spirituality is one additional key factor that have a positive effect on those suffering from diseases, and facilitate easier coping. Spirituality has been shown to be important for many people in dealing with their cancer that may provide intrapersonal and interpersonal resources to manage distress and enhance adaptation skill. Spirituality also provide a meaning system that helps people cope with cancer and make the patients have a new goal n hope while undergoing cancer therapy (Park Waddington, & Abraham, 2018).

The broad conviction that one is performing a special function or purpose in life, in which one is able to live to his or her full potential as a human being, could be considered a more fundamental definition of meaning (Vos, 2015). People can change, create, or discover meaning. Cancer forces patients to face their physical limitations, such as a lack of energy and impending death. They suddenly discover that being alive actually entails being vulnerable and frequently out of control and that the universe is not always understandable, benign, or just, which may shatter the core assumptions they typically have about life (Vos, 2015). Spirituality, including religious beliefs or other spiritual practices, often serves as a source of emotional support for cancer patients. This can help them deal with feelings of anxiety, fear and stress that are often associated with cancer diagnosis and treatment. Previous research also proved that there was significant correlation between spiritual well-being and psychological adjustment especially in the context of a serious illness such as breast cancer (Rabitti et al., 2020). Spirituality can provide someone to make sense of her lives and feel whole, hopeful and feel peace event she has challenges. Spiritual well-being can be defined as feeling of having relationship with the others, having meaning and purpose in living and having belief and relation with exalted power (Chen et al., 2018).

All respondents in this study have been chemotherapy in hospital. 75% respondents said that one of big stressor was chemotherapy. The common systemic treatment for breast cancer is chemotherapy. It can increase the cure rate and decrease the risk of recurrence and metastasis. However, chemotherapy- also have serious side effects on the patient's body and mind, which are not conducive to the outcome of illness. Long-term of breast cancer chemotherapy make the patients must have high motivation, courage, and endurance (Li et al., 2021). This can be obtained by increasing their spirituality. Most of the respondents have tried to accept their illness, accept God's destiny, live more sincerely, forgiving and improving his relationship with God as well as human beings.

Hope among breast cancer patients can be effective coping strategy to increase motivation, overcome difficulties and helps to accept the reality of the disease, actively participate in treatment and improve the prognosis. A more inclusive definition of hope is a person's perceived likelihood of a positive result, and spirituality is a key facilitating component
of hope development. Significant correlations were reported between scores spirituality and life satisfaction (Mohebbifar et al., 2015). Hope also can trigger strength that keeps the patient full of energy to face adversity. It also establish positive goals and create resources that can assist them to respond the challenges. The results of this study showed that the most significant factor affecting meaning life in breast cancer was spirituality. It was in accordance with according to theorists, human beings have a will to. Meaning has been equated with purpose in life, life satisfaction, and positively valued life goals. meaning is the belief in a purposeful pattern of the universe, which, in turn, can be derived from religion and/or spirituality (Jim, et al., 2006). Spirituality provides a useful illustration in many ways of the global significance of influencing health in general. Spirituality includes belief in all aspects of global meaning such as (the nature of God, humanity, control, destiny and karma) and provides motivation and the main purpose for staying alive and making individual guidelines to achieve their life goals (Park Waddington, & Abraham, 2018).

Finding meaning in life will make individuals believe in their ability to achieve goals and be better prepared to face the healing process after medical procedures (Rush et al., 2021). The difficulties faced with breast cancer will usually make the patient experience an increase in post-traumatic well-being and growth when the patient is able to appreciate his life by finding positive meaning (Aflakseir et al., 2018; Kelly, et al., 2015; Lan, et al., 2019). Meaning life is important basis for adapting, integrating trauma, reducing symptoms and improving the well-being of breast cancer patients (Martino & Freda, 2016). This is in line with research in USA that showed additionally connected to enhanced quality of life, reduced burden disease when they have good making meaning (Ellis et al., 2017).

Meanings including beliefs, a sense of order, fairness and purpose, and the pursuit and fulfilment of worthwhile objectives in the realization of one’s life goals (Guerrero-Torrelles et al., 2017). In this study used 3 indicators of meaning life, they were believing in disease, motivation to be healthy and desire to meaningful. Believe in disease is the perception of the patient's perspective on breast cancer, the average score of them were in the good category. The patient's view of breast cancer is very important in helping well-being. respondents mostly based on the items in the questionnaire that were asked, they answered that breast cancer is not a punishment from God, but is a destiny that must be accepted gracefully. Other research also said that the meaning of life interpreted by patient’s cancer as a challenge, punishment and enemy will will determine how their well-being (Xia et al., 2018). There is a correlation between psychological well-being and meaning in cancer patients, breast cancer patients who can find positive meaning from cancer will show better emotional well-being.

Motivation to be healthy was other indicator of meaning life. The biggest challenge for nurses and health professionals is how to provide care in conditions of life-threatening illness, chronic conditions that require a search to stay healthy is to find the key to the motivation of the individual from giving up to fighting, and from despair to better behaviour (Büssing, Starck, & van Treeck, 2021). Most of respondents said that the biggest motivation of them was family, especially the children. They hope to be healthier so that they can always accompany their children to grow up and get married, see them succeed. This is line with other qualitative research that said “Almost all participating women reported gains in different aspects of meaning in life, often emphasising rather small changes such as the intensified ability to enjoy and appreciate small things in life that they used to take for granted, spending more time with family and “true” friends” (Loeffler, Poehlmann, & Hornemann, 2018). Goal-focused hope has been found to be an independent predictor of well-being (Iddon et al., 2019).

Results in this study on aspect of desire as meaning life indicator in this case most of them showed that they want to live better and useful life for others, want to be more obedient to worship, closer to God and try to become a better life every day. This was in line with
research in Italia that said the most important values from patients was orient their life to emerge values to be love for the family, be creative in work, and deal with disease in participate in positive changed and respect to others people (Buonaccorso, et al., 2019).

Second factor affecting the meaning life in breast cancer woman was communication from health worker, including doctor, nurse and dietician. Result showed that communication has average score in high category. It means from item questionnaire, health workers showed empathy communication consist of verbal and non-verbal which respecting and listening for patient complaints and problems. They also provide information and give support for them. It was line with other research in Chinese breast cancer woman that showed All the survivors said the support from their family was the main source of meaning in life. Physicians and nurses also the main source of support for breast cancer survivors especially to provide emotional support (Xia et al., 2018). Support from health care workers motivated them to fight against cancer, and they in return experienced more meaning in life when doing their best to help the patients (Xia et al., 2018). Breast cancer patients needs for relationship with the health care provider. It emphasizes how patient to be actively involved in carrying out the role of managing self-confidence in overcoming the problem of breast cancer after completing treatment. Patients need detailed information that must be done in managing physical, psychological and emotional problems after undergoing treatment (Kim et al., 2020). Other studies in Young African American breast cancer survivors also said that peer support was important to participants who needed assistance from multiple sources. In addition, some participants also reported that healthcare workers give positive support for them. Lack of information is form of lack of support and it was described as a barrier. Healthcare providers need to better understand and respond to individual survivorship concerns (Nolan, et al., 2018).

Breast cancer patient’s emotional reactions especially related to effect of chemotherapy involved pain on both a physical and a mental level. They needed to change their perspective on cancer utilizing various using healthy coping mechanisms like exercise to get through the pain resulting from chemotherapy. They also needed assistance from friends, medical professionals, and religion to adjust themselves to withstand the cancer treatment (Chen et al., 2016). They had to follow the guidelines provided by the medical professionals for treating their illness. This research show that nearly all of the participants stated that receiving support from others not only care from family and friends, but also the most important is support from medical professional (Chen et al., 2016).

4. **CONCLUSION**

Spirituality and communication of health workers contribute positively to the meaning of life, which means the higher the spirituality and the better the communication of health workers, the better the meaning of life for breast cancer patients. Therefore, it is important for nurses to provide spiritual support of breast cancer patients by always encouraging and reminding patients to always accept themselves, get closer to God and increase positive beliefs about their illness. Nurses should also always carry out therapeutic communication and involve good verbal and non-verbal, and involve emotional support when interacting with breast cancer patients. The research limitation was this study ignored treatments that patients had already received, such as mastectomy and radiotherapy, which can affect emotional responses and meaning of life.

**ACKNOWLEDGEMENTS**

We would like to thank BPPM FIKES Universitas Brawijaya for research and community service funding in 2022. We also like to thank panel experts both of the Department of Oncology Surgery and Department of Anaesthesiology and Intensive Therapy, especially dr. Sidho Hantoko, Sp. B (K) Onk for helping and providing a high contribution to this research.
REFERENCES


