

## ORIGINAL RESEARCH


### The coping process and acceptance among women with cervical cancer

Ummu Kulsum<sup>1</sup>, Dwi Izzati<sup>1</sup>\*, Eighty Mardiyana Kurniawati<sup>2</sup>, Sulistiawati<sup>3</sup>

<sup>1</sup>School of Midwifery, Faculty of Medicine, Universitas Airlangga, Surabaya, Indonesia.

<sup>2</sup>Department of Obstetrics and Gynecology, Faculty of Medicine, Dr. Soetomo General Academic Hospital, Surabaya, Indonesia.

<sup>3</sup>Faculty of Medicine, Universitas Airlangga, Surabaya, Indonesia.

Article Info	ABSTRACT
<p>Received Mar 18, 2022 Revised Jul 17, 2022 Accepted Aug 20, 2022 Published 1 Dec, 2022</p> <p><b>Corresponding author:</b> Dwi Izzati <a href="mailto:dwi_izzati@fk.unair.ac.id">dwi_izzati@fk.unair.ac.id</a></p> <p><b>Keywords:</b> Coping process Acceptance Cervical cancer</p> <p>This is an open access article under the CC BY-NC-SA license (<a href="https://creativecommons.org/licenses/by-nc-sa/4.0/">https://creativecommons.org/licenses/by-nc-sa/4.0/</a>)</p> 	<p><b>Objective:</b> To explore how the process of coping among women with cervical cancer.</p> <p><b>Materials and Methods:</b> This study used a qualitative method with phenomenological design. Data were obtained through in-depth interviews. The sampling technique used was purposive sampling. Seven participants were selected according to the inclusion and exclusion criteria. Data analysis techniques used were transcribing verbatim data, data coding, categorizing, developing thematic contexts, and interpreting data.</p> <p><b>Results:</b> The results of this study revealed that social support, hobbies, and spirituality helped women to cope with their illnesses. The results of this study have implications for health care providers to provide holistic care to women with cervical cancer.</p> <p><b>Conclusion:</b> The process of coping and acceptance of the condition was different among women with cervical cancer, which was influenced by social support, hobbies, and spirituality.</p>

Cite this as: Kulsum, U., Izzati, D., Kurniawati, E.M. & Sulistiawati (2022). The coping process and acceptance among women with cervical cancer. *Majalah Obstetri & Ginekologi*, 30(3), 108-115. <https://doi.org/10.20473/mog.V30I32022.108-115>.

## INTRODUCTION

Cervical cancer is the second most common cancer in women aged 15 to 44 years.<sup>1</sup> In Indonesia, more than 50% of cervical cancer cases resulted in death.<sup>2</sup> Cancer mortality is estimated to increase due to the tendency for patients to seek treatment at an advanced stage when treatment can no longer provide maximum results.<sup>3</sup> At Dr. Soetomo General Academic Hospital, Surabaya, Indonesia, the number of new cervical cancer cases is larger than other gynecologic cancers.<sup>4</sup>

Gynecologic cancer presents challenges associated with difficult treatment, adverse side effects, and poor prognosis.<sup>5</sup> In addition, diagnosis and treatment of

cervical cancer present psychological challenges.<sup>6</sup> Cancer-related stress may arise within multiple dimensions. They include physical, psychosocial, spiritual, existential,<sup>7</sup> and economic dimensions.<sup>8</sup> In early diagnosis, rejection from the patient often occurs.<sup>9</sup> The side effects of the treatment in the form of surgery, radiotherapy, or chemotherapy, usually result in health problems and psychologically lead to rejection.<sup>10</sup> At an advanced stage, often there is death concern as well as relationship changes with family or spouse that may cause stress and increase tension.<sup>7</sup> Naturally, various efforts will be taken by individuals to get through these stressful situations. The coping process is intended to make the body adapt efficiently to stressful experiences.<sup>11</sup> The coping process in cervical cancer

patients starts from the onset of abnormal symptoms, followed by diagnosis and treatment, and then subsequent acceptance of the condition.<sup>12</sup>

Research shows that the major focus of medical cancer is on the treatment with the indicators of success are only seen from the patient’s recovery, survival expectations, and complications, while the psychosocial effects of treatment such as spiritual needs tend to be neglected.<sup>13,14</sup> However, cancer survivors are looking for a holistic approach that sees them as individuals with unique attributes.<sup>15</sup> Therefore, the exploration of how women cope with cervical cancer is prominent to study. The purpose of this study was to explore the coping process of women with cervical cancer to the acceptance of the condition.

## MATERIALS AND METHODS

This qualitative study applied a phenomenological design to explore the coping process of women suffering from cervical cancer in Dr. Soetomo General Academic Hospital, Surabaya. Data were obtained through in-depth interviews. The sampling technique used was purposive sampling. Seven participants were selected based on the inclusion and exclusion criteria. The inclusion criteria were: a) cervical cancer patients who were undergoing treatment at Dr. Soetomo Hospital (outpatient and inpatient), b) cervical cancer

patients who were generally in good medical condition, and c) willing to be a participant in the study. Meanwhile, the exclusion criteria were cervical cancer patients with communication problems, either due to decreased physical condition or language barriers. The data analysis techniques used were transcribing verbatim data, coding, categorizing, developing thematic contexts, and interpreting data.

## RESULTS AND DISCUSSION

### Participants’ characteristics

The participants’ age ranged from 34 to 52 years old. There were four participants with the elementary school as their latest education levels. There was each one participant with the latest education level of junior high school, senior high school, and Bachelor’s degree. Their occupations vary such as housewife, trader, farmer, entrepreneur, and two participants worked as private employees. Six participants were married and one participant was divorced. All of them used BPJS. Three participants were diagnosed with stage IIB cervical cancer and the other four were diagnosed with stage IIIB cervical cancer. The length of time since the participants were first diagnosed with cervical cancer varied from 3 months to more than 1 year ([Table 1](#)).

Table 1. Overview of the participants of the study

Code	Age (years)	Education Level	Occupation	Marital Status	Health Insurance	Diagnosis	Cervical Cancer Diagnosis
P1	47	Elementary School	Housewife	Married	BPJS	Stage IIB Cervical Cancer Chemotherapy I	3 months
P2	35	Elementary School	Trader	Married	BPJS	Stage IIB Cervical Cancer Post Chemotherapy + Post ER 35 times	More than 1 year
P3	50	Elementary School	Farmer	Married	BPJS	Stage IIIB Cervical Cancer Pro Chemotherapy II	4 months
P4	34	Elementary School	Farmer	Widowed	BPJS	Stage IIB Cervical Cancer + Active Fluxus + Anemia + Pro Cito ER	3 months
P5	49	Junior High School	Employee	Married	BPJS	Stage IIIB Cervical Cancer + Pro Chemotherapy I + Pro ER	More than 1 year
P6	44	Senior High School	Employee	Married	BPJS	Stage IIIB Cervical Cancer + Anemia + Pro Chemotherapy I + Pro ER	3 months
P7	52	Bachelor’s Degree	Entrepreneur	Married	BPJS	Stage IIIB Cervical Cancer + Pro Chemotherapy IV + Pro ER	6 months

### Feelings during the early phase of being diagnosed with cervical cancer

It was found that the participants' feelings when initially diagnosed with cervical cancer were a shock, sadness, fear, and denial. Direct observation during the interview exposed different expressions shown by the seven participants. Participants P2, P3, and P6 were calmer and more relaxed in showing their feelings.

*"I was very sad. Why should this be? I've never been sick before." (P2)*

Meanwhile, participants P1, P4, P5, and P7 showed a more emotional expression (crying).

*"I was so shocked ... how come I suddenly got this illness. I have never been ill. I kept getting shocked (she started crying); I did not have a calm mind at home. I was sad..." (P1)*

### Social support

In this study, it was revealed that participants got social support from family, healthcare providers, peer groups, and their co-workers.

### Family support

All participants obtained support from their families. The support was in the form of emotional support, mentoring, attention, and assistance such as basic needs (food, mobilization), and financial support.

*"We want to be cured; money can be sought." (P1, P2, P3, P4)*

*"I went here with my husband" (P3, P5, P7).*

*"I am cheered up. All people, my family said 'you should have the chemotherapy, you must be healed'. Everyone asked me to do it (the chemotherapy). My mother-in-law said 'you should have chemotherapy...' 'You are not the only one that suffers from it. Please cheer up'. My family has been getting more attention since I was sick. Before going to work, they fed me since usually I didn't have an appetite" (P5)*

One participant thought that she had a lack of support from her husband. She said:

*"(My husband was) Impatient, I was peeved. It was not my illness that pissed me off, it was my husband" (P6)*

However, P6 got support from her big family, such as sisters, brothers, and parents-in-law.

*"My parents-in-law helped me. My children and their grandparents (parents-in-law). I do not cook often, my mother cooked for us. My sister stay with me here" (P6)*

Family factors motivated participants to fight the disease as expressed by participants P2, P4, P5, and P6. Their children were their best motivation for treatment.

*"My children are still young. I need to recover to be able to work again..." (P4).*

*"I pity my children and my children-in-law. They worked and drove for me. I pity them if my treatment got canceled" (P5)*

*"Family. And God." (P6)*

### Support from healthcare providers

Five participants said that health workers provided emotional support, information about treatment, and assistance. Emotional support and information about the treatment were perceived by participants P1, P2, P5, and P6.

*"The health workers (in the gynecology room) took me out for a walk and gave me pieces of advice. They advised me to be patient ... the doctors also gave me advice." (P1)*

Participant P5, who had postponed the chemotherapy about a year ago due to ignorance of the therapeutic procedure, at the time of this study, was prepared thanks to family support and information from health workers.

*"The doctor said 'cheer up' do not be afraid, do not listen to what people said ... the staff said I should take meal regularly" (P5)*

The assistance given by the health care providers is reflected from the statement of participant P7.

*"...The first time I registered, I got help, 'please write here, and write the data'; the workers took me to the locket, to POSA (one-stop oncology poly). They were really helpful" (P7)*

### Support from peer group

Support from other cervical cancer patients was very helpful for participants in coping with their illness as reflected from the statement of P1, P2, P3, and P5.

*“After I arrived here at the foundation, there were a lot of friends (cervical cancer patients). At the foundation, I was more relaxed. Many of them were in worse condition than me. I thank God.” (P1)*

*“They support me, ‘Do not be afraid. We can. There were friends being in chemotherapy, surgery. They said I should not fear chemotherapy, it is ok” (P3, P5).*

*“There was a group (WhatsApp group). A place we can share. Up until now. I am happy ... to communicate with them. They give me hope. If we are together I was not anxious. (P2)*

However, referring to participant P2, in the WhatsApp group of cancer survivors she was in, there were some friends who chose to leave the group when they heard the sad news about one of their group members’ deaths. The sad news scared the survivor.

*“There was a member who left the group (WhatsApp group). I asked, ‘why did you leave?’. “She said she was scared. My best friends were all dead”. “(P2)*

### **Social support from the workplace**

Participants also got support from their workplace. This is as expressed by participants P5 and P6. They are private employees.

*“My boss went to my house, his niece, too. ‘(if you want) continue working, do not force yourself, if you are tired just sit down, many of your friends will help’. However, in the end, I stopped working, it was difficult” (P5 cried). (P5)*

*“The HRD (staff) summoned me. There was a special policy. Since I need to have the chemotherapy, they would not make it difficult for me” (P6)*

### **Hobbies**

Some participants said that doing activities they like (hobbies) helps overcome negative feelings and helps them cope with their pain. This was revealed by the participants P5 and P7.

*“... I want a radio so I would not think about it (the illness). Sometimes, I was sad. I bought a radio. I asked my husband to buy the radio, to avoid confusion or boredom. To forget it, then I fell asleep” (P5)*

*“I went for a morning walk in front of my house. If I wanted, I cooked, made cookies, saw plants to avoid boredom. I feel happy whenever I see plants”(P7)*

### **Spiritual**

Most of the participants said that spirituality helps participants in coping with their illness, as stated by participants P1, P2, P3, P4, P6, and P7.

*“After sholat (praying), I feel relaxed” (P7)*

However, each patient has different interpretations of cervical cancer. Participants P1 and P2 believed that the cervical cancer was the test for them (P1, P2).

*“I have to face it; this is a test for me. I should accept this. I should be sincere. I should be courageous. This is the sign of God’s love to us” (P1)*

Participants P1, P3, and P6 felt that the pain was a chance to get closer to God.

*“It is the time for us to surrender, to be better. Illness can change people” (P6).*

Meanwhile, participants P5 expressed anger and neglect she felt towards God.

*“There was once I thought, ‘how come I was given a disease like that’. My child said, ‘What can we do? It is His decision.’” (P5)*

### **Acceptance**

The stages of cervical cancer acceptance are different for each participant. Participants P1, P2, P3, P4, P6, and P7 said they immediately accepted their condition and immediately sought medical treatment after being diagnosed with cervical cancer.

*“Slowly but surely I became courageous. After coming to the foundation, I felt relieved, I was not afraid to get treatment. I should get treatment. There was no fear, no sadness. There was a bit of sadness, but it disappeared. I did not really remember” (P1)*

Different experiences applied to participant P5 that she took longer to accept the condition. This participant had been diagnosed with cervical cancer about one year ago but was undergoing medical treatment when the study was conducted.

*“I was ready not long ago; I did not want to get treatment before”. (P5)*

In this study, participants got support from family, healthcare providers, peer groups, and the workplace. Participants got major support from their families. Based on the Family Caregiver Alliance in Wood et al. (2015),<sup>16</sup> families are the main caregivers, which takes up to 83% of all caregivers, who care for family members who got the illness, either physically or mentally. Family support is crucially needed by cervical cancer patients after cancer diagnosis and treatment. This support is either directly or indirectly. Direct care is carried out directly to patients, such as symptom management, emotional support, administering medication, and assistance for basic needs such as mobility, eating, and bathing. Indirect care such as medication, transportation, replacing patient duties, coordination, and control schedules, as well as helping with medical and financial bills.<sup>17</sup> Family support can be obtained from parents, spouses, siblings, or from other family members outside the nuclear family. Family support enables the family to function properly with full capabilities and resources to improve the adaptation and health of family members.<sup>18</sup> In this study, all participants received support from their family members. Although P6 felt that she did not get enough support from her husband, she received support from his parents and siblings. Participant P6 said that her husband showed more emotional responses than she did, such as fear, confusion, and crying. The patient and the family can experience denial or rejection. This is in accordance with a study by Wood et al.<sup>16</sup> that in addition to causing stress to patients, the diagnosis of cancer also causes stress for the family. A study by Kusumaningrum et al.<sup>19</sup> also yielded similar results that the diagnosis of cervical cancer has become a huge burden for both the patient and the family. Family members and the patients both struggle to fight cancer.<sup>20</sup>

Family factors, especially children, became the main motivation for most of the participants to face their illness, as conveyed by participants P2, P4, P5, and P6. This is in line with a study by Deshmukh et al. that close family members, especially children or mothers, are key motivators for patients to complete treatment.<sup>21</sup>

There were five participants who said that they received support from healthcare providers. The support was in the form of emotional support, information about treatment, and assistance. Every cancer patient or family has various desired information regarding the disease. Information about medical diagnosis and management is expected in the early stages of diagnosis of cancer.<sup>22</sup> Support from health professionals in the form of

counseling and motivation is important for patients to comply with and complete treatment.<sup>21</sup>

The peer group was one of the supporters of cervical cancer patients. Four participants got support from peer groups and two participants got support from the workplace. Humans are social beings. We definitely need interaction to achieve social adjustment. Social interaction is the relationship between individuals.<sup>23</sup> Participant P2 had a WhatsApp group consisting of fellow cervical cancer survivors. Through this media, survivors exchange experiences about the side effects of therapy, how to treat side effects, encourage each other, exchange information about control schedules and administrative processes. Meeting people who have had the same disease and have had similar experiences will be of great benefit and help to the patient.<sup>24</sup> Participants P1, P3 and P5 said meeting a group of fellow cancer survivors made them courageous to start treatment and helped them to cope with fears of the therapy. This is in line with a study by Weis,<sup>25</sup> that peer groups can help patients overcome the fear of the unknown and the fear of death by getting to know each other and sharing their experiences. However, not all survivors felt this way, based on the experience of participant P2, some cervical cancer survivors chose to leave the group because they were more stressed. Information about the sad news experienced by one cancer survivor scared the patients. As social beings, there is a reciprocal relationship that can influence individuals,<sup>23</sup> just as bad news also negatively affects the patient's psychological condition.

Thus, positive information and support from the cancer survivor community are essential for the patient's emotional and social well-being for enhancing short-term and long-term recovery.<sup>26</sup> Whereas bad news can cause additional stress for the patient.

Support from the workplace was described by participants P5 and P6 who worked as private employees. Cervical cancer patients encountered lost productive days due to the long duration of hospitalization.<sup>27</sup> Hence, the support from the workplace is very helpful to cope with their illness. According to Deshmukh et al.<sup>21</sup>, apart from family support and nutritional support, workplace support is one of the patient's motivations to complete treatment, especially if the patient is the breadwinner ([Figure 1](#)). Some patients with long duration of treatment struggle with financial issues and need support to fulfill daily expenses.

The findings in this study confirmed the study conducted by Deshmukh et al.<sup>21</sup> that in a long duration of treatment, patients need support from family members, peer groups, health care providers, and the workplace.

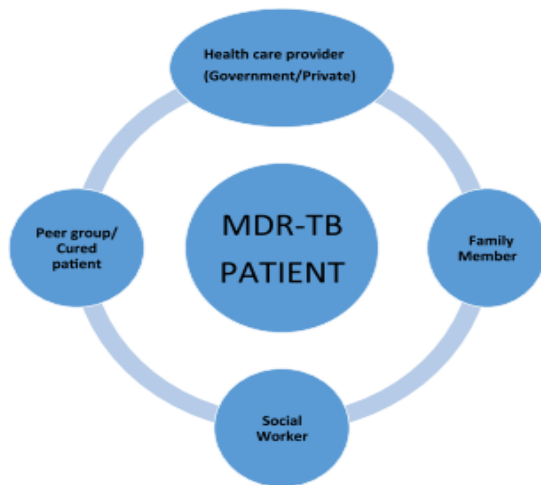


Figure 1. Patient's support group (Deshmukh, et al., 2018)

In addition to social support, some participants said that doing activities they like (hobbies) can overcome negative feelings and help them cope with their pain as described by participants P5 and P7.

Rasmusn wrote that to overcome psychological problems, individuals can use short-term and long-term coping methods. One of the short-term coping methods is to switch to other activities in order to forget the problems, such as doing hobbies/activities that one likes,<sup>28</sup> be it indoors or outdoors, whether with physical activity or not, which can be entertaining, provide satisfaction, and induce relaxation.<sup>29</sup> Referring to Fujiwara et al.<sup>30</sup> individuals who like sports and cultural activities will benefit physically and mentally. It can minimize depression and improve physical health.

The phases of cervical cancer acceptance are different for each patient and require different times. Most of the participants said they quickly accepted their condition and faced the disease constructively by directly seeking treatment at a referral hospital (Dr. Soetomo General Academic Hospital). Acceptance is the basis for everyone to accept the reality of life, all good or bad experiences. Kralik et al. (2010) stated that the way a person views himself and his illness affects a person in adjusting to the self-care that must be carried out.<sup>31</sup> In addition, other factors that can affect the adjustment and acceptance of cervical cancer that exacerbate psychological conditions are poor prognosis, difficult living conditions, social situations, young age, and trauma.<sup>10</sup> Anxiety in patients is also influenced by educational factors<sup>32</sup> as participants with higher education tend to be more concerned and look for more information. They have more awareness regarding their cancer. Participants have more awareness and understanding

regarding cancer they suffer from and the risk to their bodies. Nevertheless, this is what causes anxiety in highly educated participants to increase. Munkres et al., as cited in Bowman et al.,<sup>20</sup> found that one of the conditions that worse stress on cancer is a low-socioeconomic status and the number of symptoms related to the disease. Participant P5 said that she had a financial problem as her physical condition forced her to stop working and at the same time, her house rent had to be paid. Anger and feeling neglected are some of the factors that caused P5 to be more emotional and dramatic when diagnosed with cervical cancer. The spiritual factors also affect acceptance of cervical cancer. Spiritual activity has been associated with lower stress levels, reduced anger and anxiety, and social isolation as well as better adjustment to their condition.<sup>24,33</sup>

## CONCLUSION

A cervical cancer diagnosis is considered a tragedy that creates a stressful situation for a woman, not only due to the physical constraint but also because of psychosocial, economic, spiritual, and existential challenges. To be able to overcome this, women need support from family, peer groups, health care providers, and the workplace. In addition, in order to overcome negative feelings, women should have hobbies and get closer to God. The findings in this study are expected to be a reference for qualitative studies for health care providers to provide holistic care for women with cervical cancer.

## DISCLOSURES

### Acknowledgment

Gratitude is expressed to the Center of Human Resources Development of Ministry of Health that has funded this study through Professional Scholarship

### Conflict of interest

All authors have no conflict of interest.

### Funding

This research has received no external funding.

### Author contribution

All authors have contributed to all process in this research, including preparation, data gathering and

analysis, drafting and approval for publication of this manuscript.

## REFERENCES

1. WHO. Cancer Country Profiles: Indonesia [Internet]. Cancer Country Profiles. 2014 [cited 2020 Feb 27]. p. 22–3. Available from: <https://www.who.int/publications/m/item/cancer-idn-2020>
2. ICO/IARC. Indonesia: Human Papillomavirus and Related Cancers, Fact Sheet 2018 I. Key data on HPV and HPV-related cancers. 2018;6–7.
3. WHO. Cervical cancer [Internet]. 2018 [cited 2020 Feb 27]. Available from: [https://www.who.int/health-topics/cervical-cancer#tab=tab\\_1](https://www.who.int/health-topics/cervical-cancer#tab=tab_1)
4. RSUD Dr. Soetomo. Rekapitulasi data pasien baru POSA tahun 2019 [Data collection of new patients in Oncology Clinic]. Surabaya: RSUD Dr. Soetomo; 2019.
5. Myers Virtue S, Manne SL, Darabos K, et al. Emotion episodes during psychotherapy sessions among women newly diagnosed with gynecological cancers. *Psychooncology*. 2015;24(9):1189-96. doi: 10.1002/pon.3737. Epub 2014 Dec 17. PMID: 25521772; PMCID: PMC4470875.
6. Khalil J, Bellefqih S, Sahli N, et al. Impact of cervical cancer on quality of life: beyond the short term (Results from a single institution): Quality of life in long-term cervical cancer survivors: results from a single institution. *Gynecol Oncol Res Pract*. 2015;2:7. doi: 10.1186/s40661-015-0011-4. PMID: 27231567; PMCID: PMC4880873.
7. De Faye BJ, Wilson KG, Chater S, et al. Stress and coping with advanced cancer. *Palliat Support Care*. 2006;4(3):239-49. doi: 10.1017/s1478951506060317. PMID: 17066965.
8. Suhardin S, Kusnanto K, Krisnana I. Acceptance and Commitment Therapy (ACT) meningkatkan kualitas hidup pasien kanker [Acceptance and Commitment Therapy (ACT) improves cancer patients' quality of life]. *Jurnal Ners*. 2016; 11(1):118–27. doi:10.20473/jn.v11i1.1341
9. Susanti E. Gambaran penerimaan pasien awal terdiagnosa kanker serviks di poli onkologi satu atap (POSA), RSUD Dr. Soetomo Surabaya [Profile of admission with early diagnosis of cervical cancer at Oncology Clinic]. Surabaya: Universitas Airlangga; 2017.
10. Czerw AI, Religioni U, Deptala A, et al. Pain, acceptance of illness, adjustment to life with cancer and coping strategies in prostate cancer patients. *Arch Med Sci*. 2017;13(6):1459-1466. doi: 10.5114/aoms.2016.58458. Epub 2016 Mar 8. PMID: 29181078; PMCID: PMC5701675.
11. McEwen BS. Protective and damaging effects of stress mediators: central role of the brain. *Dialogues Clin Neurosci*. 2006;8(4):367-81. doi: 10.31887/DCNS.2006.8.4/bmcewen. PMID: 17290796; PMCID: PMC3181832.
12. Chen PY, Chang HC. The coping process of patients with cancer. *Eur J Oncol Nurs*. 2012;16(1):10-6. doi: 10.1016/j.ejon.2011.01.002. Epub 2011 Mar 3. PMID: 21376664.
13. Baldacchino D. Spiritual care education of health care professionals. *Religions*. 2015;6(2):594–613. doi: 10.3390/rel6020594.
14. Jefford M, Rowland J, Grunfeld E, et al. Implementing improved post-treatment care for cancer survivors in England, with reflections from Australia, Canada and the USA. *Br J Cancer*. 2013;108(1):14-20. doi: 10.1038/bjc.2012.554. Epub 2012 Dec 20. PMID: 23257892; PMCID: PMC3553535.
15. Olesen ML, Hansson H, Ottesen B, et al. The psychosocial needs of gynaecological cancer survivors: A framework for the development of a complex intervention. *Eur J Oncol Nurs*. 2015;19(4):349-58. doi: 10.1016/j.ejon.2015.01.007. Epub 2015 Feb 16. PMID: 25697547.
16. Wood AW, Gonzalez J, Barden SM. Mindful caring: using mindfulness-based cognitive therapy with caregivers of cancer survivors. *J Psychosoc Oncol*. 2015;33(1):66-84. doi: 10.1080/07347332.2014.977418. PMID: 25397963.
17. Given BA, Given CW, Kozachik S. Family support in advanced cancer. *CA Cancer J Clin*. 2001;51(4):213-31. doi: 10.3322/canjclin.51.4.213. PMID: 11577488.
18. Friedman M., et al. Buku ajar keperawatan keluarga. Riset, teori dan praktik V [Textbook on family nursing. Research, theory, and practice V]. Tiar E, editor. Jakarta: ECG; 2010.
19. Kusumaningrum T, Pradanie R, Yunitasari E, et al. Peran keluarga dan kualitas hidup pasien kanker serviks [Family role and the quality of life of cervical cancer patients]. *Jurnal Ners*. 2016; 11(1):112–7. doi: 10.20473/jn.v11i1.1920.
20. Bowman KF, Deimling GT, Smerglia V, et al. Appraisal of the cancer experience by older long-term survivors. *Psychooncology*. 2003;12(3):226-38. doi: 10.1002/pon.630. PMID: 12673807.
21. Deshmukh RD, Dhande DJ, Sachdeva KS, et al. Social support a key factor for adherence to multidrug-resistant tuberculosis treatment. *Indian J Tuberc*. 2018;65(1):41-47. doi: 10.1016/j.ijtb.2017.05.003. Epub 2017 Jun 2. PMID: 29332647.
22. Adams E, Boulton M, Watson E. The information needs of partners and family members of cancer patients: a systematic literature review. *Patient Educ Couns*. 2009;77(2):179-86. doi: 10.1016/

- j.pec.2009.03.027. Epub 2009 Apr 29. PMID: 19406609.
23. Walgito B. Psikologi sosial [Social psychology]. Yogyakarta: Andi Offset; 2001.
  24. Jafari N, Farajzadegan Z, Zamani A, et al. Spiritual therapy to improve the spiritual well-being of Iranian women with breast cancer: a randomized controlled trial. *Evid Based Complement Alternat Med.* 2013;2013:353262. doi: 10.1155/2013/353262. Epub 2013 Aug 18. PMID: 24023572; PMCID: PMC3759260.
  25. Weis J. Support groups for cancer patients. *Support Care Cancer.* 2003;11(12):763-8. doi: 10.1007/s00520-003-0536-7. Epub 2003 Oct 15. PMID: 14564493.
  26. Burnette CE, Roh S, Liddell J, et al. American indian women cancer survivor's needs and preferences: Community support for cancer experiences. *J Cancer Educ.* 2019;34(3):592-599. doi: 10.1007/s13187-018-1346-4. PMID: 29546486; PMCID: PMC6139076.
  27. Novaes HM, Itria A, Silva GA, et al. Annual national direct and indirect cost estimates of the prevention and treatment of cervical cancer in Brazil. *Clinics (Sao Paulo).* 2015;70(4):289-95. doi: 10.6061/clinics/2015(04)12. PMID: 26017797; PMCID: PMC4418354.
  28. Rasmun. Stres, koping dan adaptasi [Stress, coping, and adaptation]. Jakarta: Sagung Seto; 2009.
  29. Nurhariyadi D. Preferensi ruang hobi. *Temu Ilmiah IPLBI [Hobby space preference IPLBI Scientific Meeting].* 2016;135-40.
  30. Fujiwara D, Kurdna L, Cornwll Tet al. Further analysis to value the health and educational benefits of sport and culture [Internet]. 2015. Available from: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/446273/Health\\_and\\_educational\\_benefits\\_of\\_sport\\_and\\_culture.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/446273/Health_and_educational_benefits_of_sport_and_culture.pdf)
  31. Kralik D, Price K, Telford K. The meaning of self-care for people with chronic illness. *J Nurs Health Chronic Illn.* 2010;2(3):197-204. doi: 10.1111/j.1752-9824.2010.01056.x
  32. Fauziah RN. Kecemasan pada penderita kanker [Anxiety in cancer patients] [Internet]. eprints.ums.ac.id. Universitas Muhammadiyah Surakarta; 2016. Available from: [http://eprints.ums.ac.id/43931/12/NASKAH\\_PUBLIKASI.pdf](http://eprints.ums.ac.id/43931/12/NASKAH_PUBLIKASI.pdf)
  33. Zwingmann C, Wirtz M, Müller C, et al. Positive and negative religious coping in German breast cancer patients. *J Behav Med.* 2006;29(6):533-47. doi: 10.1007/s10865-006-9074-3. Epub 2006 Sep 2. PMID: 16951991.