

Self-concept of cervical cancer patients after chemotherapy in Yogyakarta

Nur Azizah Indriastuti^{a,1,*}, Riski Oktafia^{b,2}, Novika Riswanti^{c,3}

^a School of Nursing, Faculty of Medicine and Health Sciences, Universitas Muhammadiyah Yogyakarta, Indonesia.

^b School of Nursing, Faculty of Medicine and Health Sciences, Universitas Muhammadiyah Yogyakarta, Indonesia.

^c School of Nursing, Faculty of Medicine and Health Sciences, Universitas Muhammadiyah Yogyakarta, Indonesia.

¹azizah_indriastuti@yahoo.com*; ²kikifia.kf@gmail.com; ³vika33993@gmail.com

*corresponding author



ARTICLE INFO

Article history

Received, 20th February 2021

Revised, 15th April 2021

Accepted, 15th April 2021

Keywords

Self-concept
Cervical cancer
Chemotherapy

ABSTRACT

Cervical cancer is one of the deadliest types of cancer that attacks women in the world. One of the treatment efforts for cancer is chemotherapy. Patients with cervical cancer who receive chemotherapy more than twice will experience impaired self-concept. This study aims to determine self-concept in cervical cancer patients who have undergone chemotherapy in Yogyakarta. This research uses qualitative method with phenomenology approach. Data collection is done with interview and observation. Participants totaling five people were determined by purposive sampling. The validity of the data used source triangulation and checked the data back to the participants. Analysis of data were by comparing among categories, marking and describing descriptively. The results of the study are 6 themes, namely physical changes, emotional changes, changes in sexual relations, changes in relationships with family, changes in the role of parenting and social changes in society. The impact of chemotherapy causes various changes in cervical cancer patients which make the self-concept of cervical cancer patients undergo changes

This is an open access article under the [CC-BY-SA](#) license.



1. Introduction

According to the World Health Organization (WHO), cervical cancer is one of the deadliest types of cancer that attacks women in the world. Cervical cancer is second only to breast cancer. This case is of global concern because it causes an increase in mortality and morbidity in women. Based on data from WHO, there were 570,000 new cases of cervical cancer from 6.6% of all cancers in women in the world in 2018. Globally, the latest case incidence was found to be 600,000 patients diagnosed with cervical cancer with 300,000 deaths every year ([World Health Organization, 2018](#)). Yogyakarta City is one of the provinces with the highest cervical cancer incidence in Indonesia. In 2018 there were 1,223 cancer cases with 224 cervical cancer cases. The prevalence of cervical cancer among Kulon Progo, Sleman, Bantul, Gunung Kidul, and Yogyakarta City. The results were 46.83% occurred in Yogyakarta City and at least 9.03% in Bantul ([Yogyakarta Health Office, 2019](#)). One of the treatment efforts for cancer is chemotherapy ([Lewis, F, 2016](#)). Changes that occur in the body after undergoing chemotherapy include nausea, vomiting, diarrhea, constipation, alopecia (hair loss), anorexia (loss of appetite), weight loss, nerve damage, skin irritation, pain and bleeding ([Remesh, 2016](#)). Chemotherapy side effects greatly affects changes in family roles ([Levkovich et al., 2019](#)). Changes in the body's condition can create someone has a breakdown in self-concept. Based on a

preliminary study that was carried out in the Special Region of Yogyakarta, there were 198 women suffering from cervical cancer who were hospitalized in hospitals throughout Yogyakarta.

2. Method

This study uses a qualitative research method with a phenomenological approach to translate a person's life experience related to certain concepts or phenomena (Creswell, 1998). The number of participants in this research is 5 people with criteria: the client can communicate verbally well, the client is willing to be the respondent, the client does not have comorbidities. This research was conducted in the Special Region of Yogyakarta in December 2019 - April 2020. The variable in this study was the body image in cervical cancer patients after undergoing chemotherapy (Denny et al., 2015). The tools used in this study were interview guides, recorders, and field notes. The data analysis step in this study was by transcribing all the data from the interviews with participants, analyzing the data more deeply, then coding the data, grouping the data into small sub-themes then making them into large theme groups to form a narrative before finally being validated. This research has passed the ethical test by Bethesda Hospital Yogyakarta ethics committee with ethics number 035/KEPK-RSB/II/2020.

3. Results

3.1. Characteristics of Participants

The first participant is a 51 years old woman, Muslim, works as a PAUD teacher, her status is currently married and has 2 children, the participant lives with the child and her husband. Participants were diagnosed with stage 2 cervical cancer since February 2018 and have undergone treatment from surgery, external rays, internal rays, and chemotherapy. Currently, the participants are still in control of medication and Pap smears every 3 months. Apart from working as PAUD teachers, participants also take an active role in being members of social activities in their village.

The second participant is a 43 years old woman who works as a laborer to make woven plastic bags, her status is currently married and has 3 children, the participant lives with 2 children because her husband has left the house since several years ago and her first child lives with her adoptive parents. Participants were diagnosed with stage 2 cervical cancer since May 2018 and have undergone chemotherapy treatment and other surgical treatments, external rays, and internal rays. Currently, the participants are still in control for 6 months of treatment and pap smears

The third participant is a woman aged 36 years, a housewife, married and has 2 children, the participant lives with her husband and 2 children. Participants have undergone chemotherapy and other complementary treatments such as surgery, external rays and internal rays. Currently, the participants are still under control of the 6 months san pap smear treatment.

The fourth participant is a 63 years old woman, a retiree, currently married but her husband has died and has 2 children, the participant lives with her last child. Participants have undergone chemotherapy and other complementary treatments such as surgery, external rays and internal rays. Currently, the participants are still under treatment control for 2 weeks and still need to continue chemotherapy.

The fifth participant is a 39 years old woman, a housewife, currently married and has 3 children. Participants live with their husbands and 3 children. participants have undergone treatment from surgery, external rays, internal rays, and chemotherapy, currently participants are still in the control treatment process every 3 months and must have a pap smear.

In this study, researchers found 6 main themes which are related to self-concept in participants after chemotherapy and changes that occur after chemotherapy. These themes include:

a. Physical Changes After Undergoing Chemotherapy

Side effects experienced by all participants were alopecia (hair loss), nausea, vomiting, dry and blackened skin, weight loss, weakness and difficulty sleeping. This is consistent with the results of interviews with the following participants:

R1: My body aches all over, miss, nausea, fatigue, my mouth is dry and I have no appetite for food and drink, then diarrhea, then it is difficult to sleep too Ms. ... after the chemo both hairs were gone ... her skin was dry and black like burnt..So thin before that chemo ... "

R2: "my body is weak, nauseous, then my body is sick, my skin is black, all the hairs are falling out of my hair, all of my eyebrows are all gone ... my body weight is 60 less I continue to stay 38kg ... I am very thin ... burnt, scuffed like a burn ... "

R3: "During chemo, it was just nausea, sis, nausea continued to be weak, Grandma's hair only fell out but not bald ... my body weight decreased by 50 to 36 ... my skin was burnt black, blistered, like burns, sis, right? until the vagina also appears like thrush ... it hurts bleeding ... "

R4: "I was weak, I couldn't get up, I couldn't get up, I had cramps in my legs, my hair fell out, I felt nauseous ... my hair was bald and my skin was very dry, I lost 12 kg of skin ... I continued to bleed ... my uterus was also removed. ... "

R5: "The nausea is so weak, all the body aches ... my body has lost more than 10kg ... the skin is dry like burn scars ... after chemo the two hairs were gone until they were bald ... the skin was black too.. The following are the results of triangulation of data with one of the participants' families, namely the husband of participant 1, who explains the physical changes experienced by participants after chemotherapy:

Husband R1: ... after every chemo my wife always complains that her body is all sore, weak, has trouble sleeping, nausea so she doesn't want to eat..Burns..

b. Emotional Changes After Undergoing Chemotherapy

Participant feelings of sadness, shame, and even stress with their physical changes after chemotherapy. This is consistent with the results of interviews with the following participants:

R1: "sad ... sometimes I'm embarrassed sis ... I'm ashamed of my neighbors' mothers because I'm bald ... I'm not sure about my situation ... the fear must be there ... I often get angry ... cry..."

R2: "Emotional ... yes crying angry ... yes embarrassed I'm so sad sis and I cry and cry ... so sick ... emotional too ... not enthusiastic ... easy to get angry easily cry .. "

R3: "I just experience I'm shocked ... just crying when I want to eat not hooked ... my mind is already scared ... still shocked ... a little bit angry ... sensitive ... I'm embarrassed "

R4: "I cried all the time in that room ... I was sad, restless, not excited anymore, then I was confused ... yes there was embarrassment ... I was sure that I was sad ... I was not ... flighty..."

R5: "I get sensitive, I get angry easily, sometimes I cry ... I'm afraid of course ... I'm also embarrassed ..."

The following is the result of data triangulation with one of the participant's families, namely the husband of participant 1, which explains the participant's feelings about the physical changes they experienced:

Husband R1: ... every time my wife looks in the mirror, she will always daydream and cry, she told me that she said she was afraid that if her hair didn't grow anymore, how was she embarrassed ... I was stressed too early in the first place, right?

c. Changes in Sexual Intercourse After Undergoing Chemotherapy

The four participants experienced changes in sexuality after undergoing chemotherapy, 1 participant did not experience any effects related to sexuality because her husband had died. This is consistent with the results of interviews with the following participants:

R1: "Until now it has not been possible to do Sexual Intercourse... if I don't want to be different from my husband, if my husband is selfish, I want to keep in touch ..."

R2: "I have never had any contact since I was sick, my husband also left until now ..."

R3: "I could not carry out my duties as a wife to my husband ... for a year I never had a Sexual Intercourse with my husband ..."

R5: "During the treatment, yes, I never had sex ... for quite a long time, I didn't have any contact with my husband ..."

From the results of triangulation of data with one of the participant's family members, namely the husband of the participant who explained the changes in sexual relations after chemotherapy:

Husband R1: ... during the illness our wife never had any relationship, even now we haven't had a sexual intercourse yet ... my wife refused

The answers from the participants' husbands related to changes in their sexuality with the participants after chemotherapy were in accordance with the statements of the participants if since being sick they had not sexual intercourse, even until now there was no desire to have sex.

d. Changes in Relationships with Family After Undergoing Chemotherapy

After undergoing chemotherapy, cancer patients experience limitations in taking care of their families due to their weak physical condition. This is consistent with the results of interviews with the following participants:

R1: "I still have dependents ... if I keep doing this, my children and my husband will do it ..."

R2: "What about my children, my grandchildren ... I can't give children anything, right ... I don't want to bother my children ..."

R3: "If I continue to do this for my children, what will happen to my husband who wants to take care of ... my only thoughts are to children and husband ... grandmother children, what is the husband's need for me, pie later ..."

R4: "My children and grandchildren need me ... my first child still needs my guidance ... they have to prepare their future ... I have to guide them again for provisions later ..."

R5: 'my children still need me to miss, I'm still small ... I'm afraid if I can't take care of my children and husband ... I still have a lot of responsibility ... "

The five participants were very worried about their families, the participants felt they could not take care of their families like they used to.

e. Changes in the role of parenting after chemotherapy

Some of the side effects caused disrupt the daily activities of the patient, one of the activities that disturbs him is in childcare. The difference in parenting patterns occurs because of the physical and psychological symptoms experienced by the patient, causing the inability to maintain parenting styles such as before undergoing chemotherapy. Following are the participants' expressions related to changes in caring for children:

P1: now you can't take care of your children optimally no pick-up and dropping of children pay less attention to children

P2: so I pay less attention to children

P3: That's my attention less

P4: does not pay attention to the development of the school like ...

P5: I pay less attention to children, don't follow their growth and development, especially the youngest child, I don't monitor the subject to what extent.

f. Social Change in Society After Undergoing Chemotherapy

Participants' social activities after undergoing chemotherapy changed because participants restricted their activities outside the home. In addition to a weak physical condition and it is not possible to do activities like healthy people in general, another factor that causes social change in participants is a feeling of shame or insecurity to meet and gather with the surrounding community. This is consistent with the results of interviews with the following participants:

R1: "I rarely come out lazy to join the group with my neighbors' mothers, so I often stay at home ... I'm better off at home ... I'm not ready to meet other people miss ..."

R2: "Yes, I'm actually lazy to go out of the house to meet the neighbors, sis ... shame always haunts me, every time I want to leave the house ... every time I want to leave the house, I'm afraid ... I'm feeling inferior when I'm hanging out with my neighbor. shame ..."

R3: "I was sick while I was sick ... I didn't want to meet them ... I still don't want to go anywhere ... my friends want to come here, can't help ... feel inferior about meeting people ..."

R4: "I reduce all my outside activities, yes there is shame ... in the past, where did I always participate in social events, right now at home ..."

R5: "I never get together again ... I'm embarrassed to go out if I don't get stuck, I won't go out ... I spent a year with household activities ..."

From the results of data triangulation with one of the participant's neighbors regarding the social changes of the participants after undergoing chemotherapy, they are:

Neighbors R4: ... since being sick, Mrs. R rarely leaves the house ... after chemo, she doesn't participate in household events anymore, never gets together with neighbors again ... at home even though in the past Mrs. R was active Ms. Orange ... far different from the past and the same now.

4. Discussion

The side effects caused by chemotherapy which kill cells in the body, both cancer cells and normal cells, will cause changes in the mouth, skin, reproductive organs, and other body parts (Patel, 2018). Changes that occur in the body after undergoing chemotherapy include nausea, vomiting, diarrhea, constipation, alopecia (hair loss), anorexia (loss of appetite), weight loss, nerve damage, skin irritation, pain and bleeding (Remesh, 2016). This is in accordance with research conducted by (Darmawan et al., 2019) which states that the side effects caused by chemotherapy can cause changes in the physical part, but the physical changes that occur are not the same depending on the response of the body of each individual. The psychological impact after undergoing chemotherapy that is most often encountered apart from anxiety and depression is irritability, irritability, sensitivity, and some even experience frustration (C & RA., 2011). According to research conducted by (Abhishek et al., 2017) states that if sexual dysfunction is still a problem for cancer patients receiving chemotherapy treatment, sexual dysfunction after cancer treatment is usually caused by drastically dropping levels of estrogen, progesterone, and testosterone, which will interfere with their sexuality (Hwang et al., 2016). Another study conducted by (Barthakur et al., 2017) stated that changes that occur after chemotherapy make cancer patients feel anxious about having sex.

Changes in the body image of cancer patients after chemotherapy can cause mental disorders and affect their decreased sexual function. (Sampoornam, 2015) which state that Concern arises because cancer patients are not sure whether they will recover after undergoing chemotherapy or will even stop there, even though many cancer sufferers still have responsibility for their children and husbands.

According to (Thastum et al., 2016)(C & RA., 2011) children whose parents suffer from cancer and undergo chemotherapy treatment have a risk of anxiety, depressive symptoms, and depression or psychosocial difficulties. This is due to the emotional pressure on the child when he accepts that there are physiological and psychological changes in the mother. The changes in parenting styles that occur are also a factor in the occurrence of emotional distress in children.

(Thastum et al., 2016) said that the effects of psychological chemotherapy treatments such as patient mood, memory, and physiological effects such as energy levels, changes in appearance, have an impact on changes in parenting styles (Huang et al., 2017). In a study according to (Levkovich et al., 2019) revealed that fatigue due to chemotherapy side effects greatly affects changes in family roles, one of which is changes in parenting styles.

According to (Moore et al., 2016) the results of research conducted by patients who have undergone chemotherapy cannot meet the needs of children such as before undergoing chemotherapy, this is due to a decrease in the physical and psychological conditions experienced by patients, this change is an activity in managing the household (Banoycinova & Baskova, 2014). The impact of these changes creates psychological distress for the patient. These changes need support for those who come from the family to minimize these changes. (Aamotsmo & Bugge, 2016) said that the lack of interaction and time with children due to the effects of chemotherapy causes a lack of assistance in

decision making to children. On the other hand, children still need the role of mothers as caregivers and mentors, this requires collaboration to stabilize the place of change in caring for children. According to (Meng-Yao et al., 2016) activities in managing the household and affecting the quality of life after chemotherapy, namely cooking, cleaning the house, and taking care of children because patients have to rest completely after undergoing chemotherapy.

According to (Meng-Yao et al., 2016), patients experience instability in caring for children, so one family must help stabilize the problem by replacing the patient's role as caregiver. This will reduce emotional stress on the child and patient. Apart from the coping efforts that must be done is to control the emotional pressure of children by providing understanding.

Social relations have a very strong role in the optimism of cancer patients in undergoing treatment, after undergoing chemotherapy, social life will experience changes, whether it is caused by decreased body function or emotional changes in cancer patients (Banoycinova & Baskova, 2014) This is in accordance with research conducted by (Lienert et al., 2018) which states that the social changes that arise in cancer patients after chemotherapy are due to disruption of body functions which causes the participants' social activities to be limited and the participants themselves limit their social activities because they feel inadequate (Pakenham, 2012). Social support from the community is needed to foster enthusiasm and feelings of respect in the community (Wang et al., 2017). Support can come from friends, neighbors, medical personnel who handle it, which can improve the quality of life of cancer patients undergoing chemotherapy (Barthakur et al., 2017) Social support from the community shows a good quality of life for cancer sufferers (Lienert et al., 2018).

5. Conclusion

The impact of chemotherapy causes various changes in cervical cancer patients which make the self-concept of cervical cancer patients undergo changes.

Acknowledgment

The authors thank to all respondent who participating and giving information for accomplish research data

References

- Aamotsmo, T., & Bugge, K. (2016). *Balance artistry: The healthy parent's role in the family when the other parent is in the palliative phase of cancer- Challenges and coping in parenting young children. Palliative and Supportive Care. Palliative and Supportive Care. 12(4), 1–13. doi:10.1017/S1478951513000953*
- Abhishek, S., Prasad, N., & Roy, S. (2017). *Sexual Dysfunction in Females after Cancer Treatment: An Unresolved Issue. Asian Pac J Cancer Prev. 18(5), 1177–1182. doi: 10.22034/APJCP.2017.18.5.1177*
- Banoycinova, & Baskova. (2014). *Role of the family, friend and significant other in providing social support and enhancing quality of life in cancer patient. Int. Conf. Society. Health. Welfare. 30, 1–6. doi: 10.1051/shsconf/20163000020*
- Barthakur, M. S., Sharma, M. P., Chaturvedi, S. K., & Manjunath, S. K. (2017). *Body image and sexuality in women survivors of breast cancer in India: Qualitative findings. Indian Journal of Palliative Care. 23(1), 12–17. doi: 10.4103/0973-1075.197954*
- C, M., & RA., Z. (2011). *Interaction of hope and optimism with anxiety and depression in a specific group of cancer survivors: a preliminary study. BMC Res Notes. 4. doi: 10.1186/1756-0500-4-519*
- Creswell, J. W. (1998). *Qualitative Inquiry and Research Design, Choosing Among Five Traditions. Sage Publication, California.*

- Darmawan, E., Melani, R., & Raharjo, B. (2019). The Description of Relationship of Dosage Regimen and Side Effects of Chemotherapy in Cancer Patients at RSUD Prof. Dr. Margono Soekarjo Purwokerto Period of January-February in 2019. *Pharmaceutics Journal*, 15(2), 113–122. <https://doi.org/10.22146/farmaseutik.v15i2.47664>
- Denny, L., Herrero., R., & Levin, C. (2015). *Cancer: Disease Control Priorities, Third Edition (Volume 3)*. The International Bank for Reconstruction and Development, Washington (DC).
- Huang, H. Y., Tsai, W. C., Chou, W. Y., & Hung, Y. C. (2017). *Quality of life of breast and cervical cancer survivors*. *BMC Womens Health*. 17. doi: 10.1186/s12905-017-0387-x
- Hwang, K.-H., Cho, O.-H., & Yoo, Y.-S. (2016). Symptom clusters of ovarian cancer patients undergoing chemotherapy, and their emotional status and quality of life. *European Journal of Oncology Nursing*, 21, 215–222. <https://doi.org/10.1016/j.ejon.2015.10.007>
- Levkovich, I., Cohen, M., & Karkabi, K. (2019). . *The Experience of Fatigue in Breast Cancer Patients 1–12 Month Post-Chemotherapy: A Qualitative Study*. *Behavioral Medicine*. 45(1), 7–18. doi: 10.1080/08964289.2017.1399100
- Lewis, F. M. (2016). The Effects of Cancer Survivorship on Families and Caregivers. *The American Journal of Nursing*, 106(3), 20–25. doi: 10.1097/00000446-200603003-00008
- Lienert, J., Marcum, C. S., Finney, J., Tsochas, F. R., & Koehly, L. (2018). *Social influence on 5-year survival in a longitudinal chemotherapy ward co-presence network*. *Network Science*. 5(3), 308–327. doi:10.1017/nws.2017.16
- Meng-Yao, L., Yi-Long, Y., Liu, L., & Wang, L. (2016). . *Effects of social support, hope and resilience on quality of life among Chinese bladder cancer patients: a cross-sectional study Author Information*. *Health and Quality of Life Outcomes London*. 14. doi: 10.1186/s12955-016-0481-z
- Moore, C. W., Rauch, P. K., Baer, L., Pirl, W. F., & Muriel, A. (2016). *Parenting Changes in Adults with Cancer*. *Cancer*, 121(19), 3551–3557.
- Pakenham, K. (2012). *Test of a model of the effects of parental illness on youth and family functioning*. *Health Psycholog. Health Psychol.* 31(5), 380–390. doi: 10.1037/a0026530
- Patel, J. D. (2018). *Managing Side Effect of Chemotherapy Cancer*. <https://www.cancer.net/navigating-cancer-care/videos/side-effects/managing-side-effects-chemotherapy-with-jyoti-d-patel-md>
- Remesh, A. (2016). *Toxicities of anticancer drugs and its management*. *International Journal of Basic & Clinical Pharm.* 1(1), 1–11. doi: 10.5455/2319-2003.ijbcp000812
- Sampoornam, W. (2015). *Hermeneutic circle focusing lived experience of breast cancer survivorship- A phenomenological approach*. *Asian Journal of Nursing Education and Research*. 5(3), 439–442. doi: 10.5958/2349-2996.2015.00088.9
- Thastum, M., Watson, M., & Kienbacher, C. (2016). *Prevalence and predictors of emotional and behavioural functioning of children where a parent has cancer: a multinational study*. *Public Health Medical*. 115(17), 4030–4039. doi: 10.1002/cncr.24449.
- Wang, Q. X., Bai, Y., Lu, G. F., & Zhang, C. Y. (2017). *Perceived health-related stigma among patients with breast cancer*. *Chinese Research*. 4(4), 158–161.
- World Health Organization. (2018). *WHO Cervical Cancer*. <https://www.who.int/cancer/prevention/diagnosis-screening/cervical-cancer/en/>
- Yogyakarta Health Office. (2019). *Neoplasma Serviks Uteri*. www.dinkes.jogjaprov.go.id/