

Original Research Article

Caring for adherence with oral care to prevent oral mucositis in patients that conduct chemotherapy

Ni K. Kardiyudiani*

Department of Medical Surgery Nursing, Notokusumo College of Nursing, Yogyakarta, Indonesia

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***Correspondence:**

Dr. Ni K. Kardiyudiani,

E-mail: ketut.kardiyudi@gmail.com

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ABSTRACT

Background: Various attempts in the field of nursing have been made to address the health response due to cancer. Giving chemotherapy causes various side effects. Oral mucositis is one of the side effects of chemotherapy. Adherence in oral care of patients is needed to increase the adequacy of nutritional intake in patients so that various side effects do not occur. The study was to see how careful oral care is to prevent mucositis in patients undergoing chemotherapy.

Methods: The method used is a case study with sampling criteria and data collection by in-depth interviews.

Results: The themes found after the theme analysis were 3 themes that influenced the patient in carrying out oral care to prevent oral mucositis, namely: 1) Adherence in oral care to prevent oral mucositis 2) Family compliance in providing support 3) ways to improve care motivation to reduce patient effects.

Conclusions: Nursing intervention is needed to increase patient knowledge, increase family support, and efforts to overcome patient health problems.

Keywords: Adherence, Oral mucositis, Cancer and chemotherapy

INTRODUCTION

Neoplasms that arise in the body due to the influence of various tumor-causing factors that cause local tissue at the gene level to lose normal control over their growth are called tumors. Tumors can be divided into benign tumors and malignant tumors American cancer society.¹ The growth power of benign tumors is limited, usually local expansion, the growth rate is relatively slow and does not metastasize while malignant tumors grow rapidly and filter the surrounding tissue and metastasize if not got therapeutic effects brought death. Tumors are often called "neoplasms" referring to all diseases characterized by malignant cell hyperplasia.² According to Globocan there are approximately 14.1 million new cancer cases, 8.2 million deaths from cancer, and 32.6 million people living with cancer worldwide. Meanwhile, in Indonesia,

there are about 6% or 13.2 million incidents of cancer. And is the cause of the fifth death in Indonesia. This underlies various research related to cancer and therapeutic treatments and treatments.

Treatment therapy given to cancer patients is surgical therapy, radiotherapy, chemotherapy, and hormone therapy. This cancer therapy is given to patients in combination. According to ACS, Chemotherapy is the use of drugs to treat disease, usually for cancer treatment by administering chemical compounds (drugs) to reduce, eliminate or inhibit the growth of parasites or microbes in the host body (patient).¹ Chemotherapy is further classified according to its use, there is chemotherapy for cancer drugs, anti-amoebic group, anthelmintic group, anti-malaria group, and anti-fungal group.³

Various side effects due to chemotherapy can be in the form of physical and psychological disturbances that affect the continuity of trials and treatments for these patients. In general, physiological side effects depend on the type and amount of chemotherapy drug doses received by the patient.⁴ Toxic effects can disrupt normal cells in the bone marrow, gastrointestinal epithelium, hair follicles, organs of elimination, and excretion organs such as the kidneys, lungs, or sweat glands.²

According to WHO, 2011 in Peterson, Bensadoun and Roila states that the incidence of grade 3-4 oral mucositis is found in about 85% of head and neck cancer patients who receive chemotherapy.⁵ Oral mucositis grade 3 or 4 occurs in 75% of patients undergoing hematopoietic stem cell transplantation (HSCT), 50% in non-Hodgkin's lymphoma, breast, lung, and colorectal cancer. The high incidence of oral mucositis has led to various strategic nursing efforts to overcome the problems it causes, one of which is the compliance of care in the management of chemotherapy treatment that the patient is undergoing.⁶

Adherence to treatment is defined by WHO as the extent to which a person's behavior is in accordance with the agreed recommendations of health care providers.⁷ Adherence can also be interpreted as patient involvement to be actively, voluntarily, and collaboratively involved in accepting the need to achieve therapeutic results.⁸ The patient internalizes the chemotherapy treatment recommendations and then decides to adhere to the chemotherapy treatment guidelines.

Adherence can have consequences in the treatment of chronic diseases, especially cancer. Adherence is a growing problem due to the increasing variety of treatment regimens. And there are many factors that contribute to adherence to treatment regimens, including the need for adherence, education, communication, monitoring, and follow-up.⁹ So that various nursing interventions can be poured into increasing compliance such as anticipatory guidance, behavior modification, support in decision making, increased family involvement, health education, health system guidance, self-modification assistance, and procedure-related education.⁶

Adherence is very important in oncology. Various kinds of problems that can interfere with patient adherence to oral care during chemotherapy treatment, such as long chemotherapy cycles that cause burnout and fear in cancer patients, the problem of lack of support from family and the immediate environment to continue to encourage patients to carry out medication and treatments that can result in stopping treatment chemotherapy, as well as adherence to maintaining oral care efforts to prevent the side effects of oral mucositis that arise from chemotherapy treatment. If this problem of adherence is not resolved properly, it will cause various further problems such as repetition of chemotherapy treatment cycles to additional days of hospitalization for patients

due to inadequate nutrition of the patient so that it affects the general condition of the patient.

METHODS

The method used in this research is a case study by looking at and studying the meaning of human experience through a phase in his life. The purpose of research is to understand the events experienced by participants and explain the underlying philosophical perspective.¹⁰ A case study is an in-depth study of a situation or event known as a case by using systematic methods of observing, collecting data, analyzing information, and reporting the results. The results of the case study will provide an in-depth understanding of why something happens and can be the basis for further research.¹¹

Qualitative research requires closeness or familiarity as part of the criteria and requires reasoning in every decision making, so a purposive sampling strategy is used in sampling. This is supported by Poerwandari who state that purposive sampling is the most recommended method for qualitative research because all individuals who become participants are those who have experiences that want to be expressed, and this must be in accordance with the criteria of the participants.¹² Participants are used to describe the sample in qualitative research and are selected based on their ability to provide information about this phenomenon.¹³ Participants in this study were participants who had the following criteria : 1. All cancer patients who receive chemotherapy, 2. Can hear and speak clearly, and be able to participate in interviews. 3. Age 17 years to 60 years, and is undergoing treatment in the hospital.

Search for participants who meet the criteria and carry out the initial approach and participant-taking techniques that are carried out continuously until the data in the study reaches a saturation point according to Sarantakos 1993, in Poerwandari 12. The number of samples in this study ranged from 5-10 participants, and considering that the case study only explores the experiences of participants so it relies on a small number of participants who are not more than 10 (Steubert and Carpenter, 2003).¹³ The place of research is in RSPAU dr. S. Hardjolutito Yogyakarta, by searching for participants who meet the criteria, observation and interview activities will be carried out in the hospital. Data were collected until it reached saturation points, one meeting was held for 30-40 minutes for each informant. The in-depth interview observation method was carried out by the researcher simultaneously on the participants. The researcher used himself as a data collection tool, using the in-depth interview method (in-depth interview). With semi-structured interviews, each participant does not get the same order of questions at each meeting.¹² The process of testing the researcher's ability as an instrument was carried out beforehand on someone who was not a participant and had participant criteria, to see whether the researcher was ready as an instrument in the study. Procedurally, the researcher will

foster a trusting relationship with the participants by using therapeutic communication techniques, introducing themselves, greeting participants in a friendly manner, explaining the aims and objectives, listening, providing positive reinforcement, and so on.

Documentation is the initial process of processing data. Documentation is carried out on the same day with the final result in the form of a transcript of the interview results. Code (coding) is given to the data that has been collected. The analysis process uses the Colaizzi method, namely:¹³ a. Collecting data and making data transcripts by listening to the recordings over and over again which then compiling the interview results in verbatim form. b. Read over and over the existing data transcripts until you can find the meaning of the significant data and underline the important statements of the participants. c. Determine the category. Researchers classify existing data into a category. Then into sub-themes, then group them again into potential themes. d. Write a report. In writing the report, the researcher must be able to write down every phrase, word, and sentence as well as the meaning correctly so that it can describe the data and the results of the analysis.

RESULTS

In this study, the population of chemotherapy recipients was 23 patients with participants taking according to the sample criteria from 10 breast cancer patients who were undergoing chemotherapy, data saturation was achieved with 6 participants and the characteristics of the participants were described as follows:

Tabel 1: Characteristics of respondents age.

Valid	Frequency	%	Valid percent (%)	Cumulative percent (%)
44	2	33.3	33.3	33.3
45	1	16.7	16.7	50.0
48	2	33.3	33.3	83.3
50	1	16.7	16.7	100.0
Total	6	100	100	

Source: Primer Data (2020)

Tabel 2: Characteristics of respondents visit.

Valid	Frequency	%	Valid percent (%)	Cumulative percent (%)
3	3	50.0	50.0	50.0
4	1	16.7	16.7	66.7
5	1	16.7	16.7	83.3
6	1	16.7	16.7	100.0
Total	6	100	100	

Source: Primer Data (2020)

The characteristics of the participants described in the demographic data that the authors describe here are age, education, occupation, marital status, type of

chemotherapy, chemotherapy phase as follows: The first participant was a woman named Mrs. D, current age 50 years, high school education, housewife work, married status, type of FAC chemotherapy, the third chemotherapy cycle. Meanwhile, the second participant was a woman named Mrs. E, 44 years old, high school education, work as a housewife with a married marital status, currently undergoing FAC chemotherapy treatment, the fourth phase of chemotherapy. Furthermore, the third participant was a woman named Mrs. G, the current age is 48 years old, high school education, marital status is married, is currently receiving FEC chemotherapy, the fifth phase of chemotherapy, The fourth participant is a woman named Mrs. K, current age 48 years, high school education, housewife work, married marital status, type of FAC chemotherapy, the third phase of chemotherapy, then the fifth participant is a woman named Mrs. T, the current age is 45 years old, high school education, housewife work, married marital status, type of FAC chemotherapy, the sixth chemotherapy phase, the sixth participant is Mrs. T., age 44 years and received FAC chemotherapy. A total of 6 participants in this study reached a saturation point.

The following will describe the thematic analysis that has been carried out through several stages, namely 1) transcribed information obtained from interviews, from recording interviews continuously to be translated into dialogue transcripts. The results of the interview were listened to carefully and deeply, 2) The writing was done as soon as possible to avoid forgetfulness, while the time needed to write the transcript was relatively longer than the interview process. The writing of the interview results was made carefully to analyze the complete data from the results of in-depth interviews and observations, 3) data validation was done by returning all transcript data to the participants, 4) analyzing keywords by underlining meaningful words, 5) analyzing some of the same keywords to be organized into categories, 6) analyzing the categories to create themes, 7) analyzed themes.

The themes that were found after the theme analysis were 3 themes that influenced the compliance of patients in carrying out oral care to prevent oral mucositis, namely 1) adherence to oral care to prevent oral mucositis 2) family adherence in providing support 3) adherence increases the motivation for care for reducing the effects of fatigue experienced by patients.

The thematic on patient compliance are: Adherence to oral care to prevent oral mucositis. This was due to non-adherence data due to a lack of knowledge about the oral treatment of mucositis. This is supported by the statement "ah just an ordinary canker sores" (P3), "this canker sores healed for a long time and really hurts" (P6), "I'll just leave it with the scooter, because if I brush my teeth it hurts, so I'll just let it go" (P6). Disobedience due to lack of knowledge was also revealed by another participant (P4) who said that "I gave the medicine for canker sores but because there were so many, I was in pain, I didn't

give it anymore, I just found it hard to eat, I was very stressed" which then led to a sub thematic. The ignorance of oral mucositis and its treatment is supported by the statement P1 "If I don't brush my teeth again, it hurts, I just wanna talk difficult". And the fact that the participants did not know about the use of toothbrushes and pastes that needed to be done while experiencing oral mucositis "I brushed my teeth using an ordinary toothbrush... the toothpaste was also normal. the time is reduced" (P6).

Family compliance in providing support. This occurs due to data on non-compliance due to lack of family support. Participants also conveyed the need for support from their closest people to carry out treatment such as "if I tell my husband. but my husband works so I can't do anything" (P6). "It all depends on my husband and my family, nurses. when I am weak like this I can't bear anything" (P3). There is a statement about the lack of family support because of the lack of family knowledge about oral mucositis treatment. This hl was expressed by the participant (P1) "Yes, you know if you have canker sores, so don't do anything, just drink a lot".

Adherence increases the motivation of care to reduce patient-appropriate effects. This is because there is data on non-compliance due to disasters. Tired fatigue, P3 patients who also experience the effects of nausea and vomiting "I can't. just clean my mouth and I vomit again". P9 "I hurt all over my body, Nurse.... I can only lie down". And the knowledge about chemotherapy that was undertaken made the participants feel a sensation, thereby reducing their willingness to carry out oral mucositis treatments, supported by the participant's statement "it's common for canker sores. I'm actually tired, with this chemotherapy" (P8). "Wis is tired. With this medicine, Sister". (P9). "I know it will make me unable to eat, but what can I do else" (P4).

DISCUSSION

Adherence in oral care to prevent oral mucositis is formed from the sub-theme of lack of knowledge about oral treatment of paints, adherence to implementing the recommendations of health workers.¹⁴ The advice given by health workers in the form of health education before during and after the chemotherapy process is given, health workers also explain the effects of chemotherapy when signing the informed consent for action.¹⁵ Health education can be in the form of handling when there is a disturbance in the mouth like what is oral mucositis and its signs and symptoms, actions that can be done at home are doing oral care using salt solutions to rinse, less use of mouthwash because it contains chlorhexidine. Contact the health service if oral mucositis has resulted in the patient's inability to receive adequate nutritional intake.¹⁴ Reluctance to contact health services makes patients go to the hospital when their condition is weak due to lack of nutritional intake, this will result in prolonging the chemotherapy cycle, thereby reducing the quality of life

of cancer patients.¹⁶ Besides, a decrease in immunity also occurs due to the weakening of the body's condition because low nutritional intake will worsen the cancer status experienced by patients.

Family compliance in providing support is formed from the sub-theme of families who have to work so that there is less time for patient care, families who do not know about care, families who are tired due to stress experienced due to financial crises, and psychological disorders due to sick family members. Family support can be divided into physical, psychological, social, and financial support and resources. In the treatment of chronic patients, family support will be a big obstacle for patients considering the length of illness and time spent treating family members, while conflicts occur between the interests of financial fulfillment for medical purposes with psychological interests in assisting patients so that patients feel comfortable. Comfort is one of the elements of quality of life demanded by cancer patients. This has led to perception that there is a lack of family support for patient care, especially in terms of oral mucositis treatment

Adherence increases motivation for treatment to reduce the effects of fatigue experienced by patients. Adherence is defined as active, voluntary, and collaborative patient involvement in accepting behaviors to achieve therapeutic outcomes.⁸ Poor adherence to oral chemotherapy agents has been associated with poor results, increased toxicity, and increased health care costs.¹⁵ Non-adherence is a description of a person's behavior in implementing treatment programs such as taking medication, following dietary recommendations, and make lifestyle changes in accordance with the treatment that he is currently undergoing.¹⁶

Because adherence is the patient's ability to manage himself to strive to accept all treatment programs and carry out with sincerity to achieve the desired treatment goals, in this thematic There is non-compliance due to fatigue experienced by cancer patients receiving chemotherapy, this occurs due to various obstacles that affect a person in achieving their treatment goals such as perceptions of the pain they suffer, patient perceptions of the seriousness of illness.⁷ The patient's belief about the treatment he is undergoing, the patient's opinion about the psychological impact of the treatment he is taking, as well as the patient's confidence to take medication causes fatigue in patients.¹⁶ Given that chemotherapy is complex treatment management, adherence to treatment is low, such as modifying behavior in treatment to prevent side effects of chemotherapy and adherence to chemotherapy time.⁶

CONCLUSION

Adherence to oral care to prevent oral mucositis is illustrated through the theme so that several nursing interventions are needed to increase patient knowledge,

increase family support, and efforts to overcome fatigue experienced by patients. It is necessary to develop nursing interventions based on the thematic factors found to prevent chemotherapy treatment failures and to develop side effect nursing interventions according to patient needs so that professional nursing practice becomes increasingly visible as an independent profession.

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