

Relationship of Family Support and Coping Strategies with Anxiety in Cancer Patients Undergoing Chemotherapy

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Abstract: Cancer patients undergoing chemotherapy generally have many side effects that cause physiological coping strategies to be able to adapt and psychological side effects such as anxiety. Social interaction in the form of social support obtained from family plays a role in adaptation to cancer patients. This study aims to examine the relationship of family support and coping strategies with anxiety. The samples were 102 cancer patients undergoing chemotherapy at the Hospital Dr. Pirngadi Medan. (1) The family support received cancer patients, more than half receive family support were medium as many as 54 people (53.0%). Coping strategies that use strategies Problem Focused Coping (PFC), more than half strategy PFC were medium as many as 56 people (54.9%). Anxiety experienced cancer patients, more than half anxiety was medium as many as 53 people (51.9%), (2) There is a negative relationship between support families received with experienced anxiety ($r = -0.646$; $p < 0.05$), meaning that the higher the family support received by the diminishing anxiety experienced by cancer patients who are chemotherapy, there is a negative relationship with the strategic PFC use of anxiety experienced by cancer patients which chemotherapy ($r = -0.545$; $p < 0.05$), meaning that the higher use of PFC strategy then decreased anxiety experienced by patients with cancer chemotherapy. Based on the results of this study concluded that there is a relationship of family support received and the use of PFC strategy with anxiety in cancer patients whose chemotherapy. The results of this study can be input to health care to help improve family support received and the use of strategy PFC with decreased anxiety in cancer patients undergoing chemotherapy treatment.

Keywords: family support, cancer, coping strategies, anxiety

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I. Background

More than half of cancer patients treated with chemotherapy, where the chemotherapy is a cancer treatment with chemicals that can be used in cancer that has metastasized or are still localized and generally in combination with surgery or radiotherapy. Chemotherapy before surgery to reduce the size of the cancer undergo surgery or after surgery to clean the remnants of cancer cells.²

Chemotherapy has many side effects of physiological and psychological. Psychological side effects that can occur such as: stress, anxiety and depression. This stress will cause a person coping strategies to prevent further psychological disorders.³

Social support, especially the support of close family members will affect the effectiveness of coping strategies.⁴ Coping strategies used in cancer patients, where with the support of family members generally will reduce the level of anxiety and improve the quality of life of cancer patients.⁵ Coping strategies used an individual is said to be effective, if it produces a good adaptation and produce a new pattern of life while ineffective coping strategies can lead to physical and psychological health problems.⁶

Mohammed research et al, stated that the support of all members of the family, especially the couple was instrumental in the decision-making and strategy of survival.⁷ Research Kim and Morrow, states that family support has influence and role in anxiety levels and the prevention of nausea and vomiting or the severity of nausea and vomiting in cancer patients after chemotherapy treatment.⁸

Based on the results of interviews conducted with five patients with cancer who are undergoing chemotherapy treatment in the chemo room General Hospital Dr. Pirngadi Terrain result that three of the five patients delivered by family and two of them said that the next of kin was very helpful and patient with always pay attention to the situation, help with the costs of care and transport each be chemotherapy, giving a boost to keep the spirit and do not forget to keep a routine undergoing chemotherapy to cure disease. Patients keep the spirit of routine following a schedule of chemotherapy and the patients appear calm during the interview and said no experience sleep disturbances, while two other patients who escorted the family said the family did not

always deliver to the hospital for chemotherapy and may not always wish / dependence with family yes because family got nothing. Patients say it's not unusual to go the chemotherapy-alone and resigned to the conditions that must be endured. Patients are seen not excited at the interview and said constipation / can be up to three days, no appetite, stomach pain, often experience sleep disturbances and feelings of sadness when alone.

II. Research Methodology

The purpose of this study to examine the relationship of family support and coping strategies with anxiety in cancer patients undergoing chemotherapy at the General Hospital Dr. Pirngadi Medan. This research is a quantitative correlation with the design using any observation approach (*cross-sectional*). Design correlation is a relationship between two or more variables that aims to examine the relationship between these variables.⁹ The population is all cancer patients undergoing chemotherapy by using *purposive sampling* of 102 people.

Data is collected directly from respondents based research instruments using questionnaires given on family support, coping strategy, and anxiety. Analysis of data using univariate, bivariate analysis using correlation *Pearson product moment* test.

III. Results

Characteristics of Respondents

Table 1. Characteristics of the Cancer Patients Undergoing Chemotherapy Medications Moderate General Hospital Dr. Pirngadi Medan Year 2017 (n = 102)

| No. | Characteristic | f | (%) |
|-----|-----------------------------|-----|-------|
| 1 | Age (years) | | |
| | 26-45 (Adulthood) | 32 | 31.3 |
| | 46-65 (Future Elderly) | 58 | 56.9 |
| | 65 (Future Elderly) | 12 | 11, 8 |
| 2 | Gender | | |
| | Male | 39 | 38.2 |
| | Female | 63 | 61.8 |
| 3 | Marital Status | | |
| | Married | 75 | 73.5 |
| | Not married/widow/widower | 27 | 26.5 |
| 4 | Education | | |
| | Elementary | 26 | 25.5 |
| | Junior | 22 | 21.5 |
| | high school | 47 | 46, 1 |
| | PT | 7 | 6.9 |
| 5 | Works | | |
| | Working | 48 | 47.1 |
| | Does not work | 54 | 52.9 |
| 6 | History Chemotherapy | | |
| | 1-3> | 65 | 63.7 |
| | 3-6 | 37 | 36.3 |
| 7 | Types of Cancer | | |
| | Breast cancer | 45 | 44.1 |
| | Colorectal Cancer | 27 | 26.5 |
| | Ovarian Cancer | 15 | 14.7 |
| | Nasopharyngeal Cancer (NPC) | 13 | 12.7 |
| | Prostate Cancer | 2 | 2.0 |
| | Total | 102 | 100 |

Table 2. Frequency Distribution of Family Support in the General Hospital Dr. Pirngadi Medan Year 2017 (n = 102)

| Family Support | f | (%) |
|----------------|-----|------|
| Low | 24 | 23.5 |
| Medium | 54 | 53.0 |
| High | 24 | 23.5 |
| Total | 102 | 100 |

Table 2. shows that of 102 cancer patients who are undergoing chemotherapy treatment for more than half receive family support were as many as 54 people (53.0%) and nearly a quarter of family support low and high respectively of 24 (23.5%).

Table 3. Frequency Distribution Strategies *Problem Focused Coping* (PFC) at the General Hospital Dr. Pirngadi Medan Year 2017 (n = 102)

| Strategies <i>Problem Focused Coping</i> (PFC) | f | (%) |
|--|-----|------|
| Low | 19 | 18,6 |
| Medium | 56 | 54,9 |
| High | 27 | 26,5 |
| Total | 102 | 100 |

Table 3. shows that of 102 cancer patients who are undergoing more than half of chemotherapy treatment using strategies PFC were as many as 56 people (54.9%) and almost a quarter using strategies PFC is low as many as 19 people (18.6%).

Table 4. Frequency Distribution in the Hospital Anxiety General Dr. Pirngadi Medan Year 2017 (n = 102)

| Anxiety | f | (%) |
|---------|-----|------|
| Light | 47 | 46,1 |
| Medium | 53 | 52,0 |
| Weight | 2 | 2,0 |
| Total | 102 | 100 |

Table 4. shows that of 102 cancer patients who are undergoing chemotherapy treatment for more than half experienced anxiety were as many as 53 people (52.0%) and least experienced severe anxiety as much as 2 (2.0%).

Table 5. Pearson Test Results *Correlation* Support Families and Strategies *Problem Focused Coping* (PFC) with anxiety at the General Hospital Dr. Pirngadi Medan Year 2017 (n = 102)

| Variable | Anxietas | |
|--|----------|-------|
| | r | p |
| Family Support | -0,646 | 0,001 |
| Strategies <i>Problem Focused Coping</i> (PFC) | -0,545 | 0,001 |

Table 5. shows the results of a value $p = 0.001$, which means there is a significant relationship between family support and PFC with anxiety ($P < 0.05$). The results obtained by analysis of the value of *correlation coefficient* ($r = -0.646$ and $r = -0,545$ indicating a strong relationship and a negative pattern which means the family support received and PFC by the respondent then experienced anxiety decreases.

IV. Discussion

The Relationship Family Support with Anxiety in Cancer Patients Undergoing Chemotherapy

Based on bivariate analysis test, $p = 0.001$, which means there is a significant relationship between family support with decreased anxiety in the General Hospital Dr. Pirngadi Medan, besides the value of correlation $r = -0.646$ showed a strong relationship and a negative pattern means the better support families who received the lower the anxiety experienced by respondents.

The findings are consistent with studies Lekka et al, stating that there is a relationship that is negative, but sequence being between family support with anxiety shows that the better support for families accepted the respondent the anxiety level decreased in patients with lung cancer,¹⁰ while According to research Sadeghi et al, found that there is a relationship that is both negative and sequence being between social support (emotional support, instrumental support, information support) with anxiety in patients undergoing hemodialysis.¹¹ The research result Guan Ng et al, states that social support is an important factor for cancer patients who are undergoing treatment to lower the anxiety level so as to improve the quality of life.¹²

Based on the results of this study concluded, a good family support to family members suffering from cancer with chemotherapy should be intense, cyclical, time long treatment and hospitalization repeated by having the side effects of physiological and psychological form of anxiety level was going to affect a decrease in the level of anxiety that can help improve the quality and survival of cancer patients.

Relations Strategy *Problem Focused Coping* (PFC) with Anxiety in Patients with Cancer While Undergoing Chemotherapy

Based on the test bivariate analysis, $p = 0.001$, which means having a significant relationship between the use of strategy PFC with anxiety experienced by cancer patients who are undergoing chemotherapy at the General Hospital Dr. Pirngadi Medan, besides the value of correlation $r = -0.545$ showed a strong relationship and a negative patterned means higher family support received by the respondent then decreases anxiety.

The findings are consistent with studies Yahaya et al, stating that the use of strategy PFC will decrease the symptoms of physical and psychological distress, while the use of strategy emotion focused coping (EFC) high will increase the symptoms the symptoms of physical and psychological distress in cancer patients undergoing

chemotherapy.¹³ In line with the research Saniah and Zainal, found that breast cancer patients who undergoing chemotherapy strategy EFC of highwill experience psychological distress.¹⁴

According to Lazarus in Potter and Perry, states that the individual coping strategies are determined by the type of stress experienced by the individual, the individual life goals, beliefs about yourself and the world, and the personal resources of the individual.¹⁵ Individuals tend to use strategies PFC when they believe that the demands of the situation or stressor can be changed, while the use of strategies EFC when they believe it is only a little or not able to make changes of pressure situation, although the situation is full pressure, generally people use a strategy combination of PFC and EFC.¹⁶

According to Page in Manurung, states that one of the factors that influence anxiety is trauma or conflicts that would give the experiences of emotional or mental conflicts that occur in individuals that will facilitate the emergence of symptoms of anxiety.¹⁷ If a cancer patient undergoing chemotherapy treatment that previously experienced a pressure situation and do not use coping strategies are not effective, then the high will likely increase anxiety.¹⁸

Based on the results of this study concluded, the higher the use of strategies PFC in cancer patients undergoing chemotherapy should be intense, cyclical, time long treatment and hospitalization repeated by having the side effects of physiological and psychological to decrease the level of anxiety affect patient compliance in regular chemotherapy and healthy lifestyles that have an impact on improving the quality and survival of cancer patients.

V. Conclusions

- a. Family support received 102 patients with cancer who are undergoing chemotherapy which consists of a low family support as many as 24 people (23.5%), family support were as many as 54 people (53.0%), and high family support as many as 24 people (23.5%).
- b. Coping strategies PFC 102 cancer patients who are undergoing chemotherapy which consists of strategies PFC low many as 19 people (18.6%), strategies PFC were as many as 56 people (54, 9%), and strategies PFC as many as 27 people (26.5%).
- c. Anxiety experienced by 102 patients with cancer who are undergoing chemotherapy were divided into mild anxiety as many as 47 people (41.0%), anxiety was as many as 53 people (51.9%), and severe anxiety as much as 2 (2.0%) ,
- d. There is a negative relationship between family support received by the anxiety experienced by cancer patients who are undergoing chemotherapy ($r = -0.646$; $p < 0.05$), meaning that the higher the support the family received the anxiety experienced decreases, and vice versa more low family support received by the increased anxiety experienced by cancer patients undergoing chemotherapy.
- e. There is negative relationship strategy use PFC with anxiety experienced by cancer patients who are undergoing chemotherapy ($r = -0.545$; $p < 0.05$), meaning that the higher use strategies PFC then the decreased anxiety experienced and vice versa, the lower the use of strategies PFC, the increased anxiety experienced by cancer patients undergoing chemotherapy.

Suggestions

- a. Health Care, The results of this research can be used as input to the family about the importance of family support for cancer patients who are undergoing chemotherapy in the use of effective coping strategies and reduce the level of anxiety that can improve the quality of life of cancer patients undergoing chemotherapy.
- b. Nursing Education, results of this study can be used as additional information relating to the use of coping strategies PFC and EFC and the level of anxiety in cancer patients undergoing chemotherapy.
- c. For researchers, expected that further research can be done by using qualitative research methods to explore the family support, coping strategies, anxiety in cancer patients undergoing chemotherapy, so as to complement the existing research results.

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