



THE EFFECT OF PSYCHOEDUCATIONAL THERAPY ON THE SELF EFFICACY OF CHILDREN WITH CHEMOTHERAPY PROGRAM

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ABSTRACT

Chemotherapy is one of the therapy programs that must be carried out for cancer sufferers. Unfortunately, many cancer patients, especially children, are not ready to face it. This unpreparedness will certainly affect the success rate of the chemotherapy program. The aim of this research is to determine the effect of psychoeducational therapy on the level of self-efficacy of the chemotherapy process in children with cancer. This research used a pre-experimental with one group pretest post-test design. The population of this study were children diagnosed with leukemia who underwent chemotherapy at the YKAKi Halfway House Semarang in May-June 2023. The sample in this study used a total sampling of 25 respondents. Self-efficacy was measured using the self-efficacy scale instrument with validity results showing t -value > 1.96 and reliability test results showing $r = 0.97$. Providing psycho-educational therapy consists of four phases Bivariate analysis used the Wilcoxon statistical test. Statistical test results show a p -value of 0.001. It can be concluded that there is an influence of psychoeducational therapy on the level of self-efficacy for the chemotherapy process in children with cancer. Based on the research results, it can be concluded that providing atraumatic therapy such as psychoeducation is very important for pediatric patients undergoing chemotherapy. This aims to increase self-efficacy so that the chemotherapy program can be carried out optimally so as to improve the quality of the patient's health.

Keywords: chemotherapy; children with cancer; post-education; self-efficacy

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INTRODUCTION

Cancer is currently still a health problem that causes high death rates throughout the world. Cancer cases are predicted to reach 22 million cases in 2032 (Hartini, Winarsih and Nugroho, 2020). Cancer is a chronic disease characterized by abnormal and uncontrolled cell division, invading surrounding tissue and can spread to all parts of the body through the blood and lymph circulatory systems (Prastiwi and Febri, 2013). Cancer is a serious disease that mostly attacks children. Cancer in children is considered a life-threatening disease with low life expectancy if not treated properly (Ozen *et al.*, 2017). According to the World Health Organization (WHO), there is an increase in the number of children suffering from cancer every year, namely around 400,000 children and adolescents aged 0-19 years. WHO also states that every two minutes a child is diagnosed with cancer (Syarif and Putra, 2014).

Indonesia ranks first in the number of cancer sufferers in Southeast Asia. In 2020, Indonesia experienced an additional 396,914 cases of cancer in children (Hartini, Winarsih and Nugroho, 2020). Cancer is a chronic disease that requires a long treatment time. In children it

takes around 6 months to 3 years (Inayah *et al.*, 2021). Cancer is a chronic disease that requires a long treatment time. In children it takes around 6 months to 3 years (Wolley, 2024). The physical impacts of chemotherapy include inhibiting cell growth, pain, nausea, fatigue, and so on. Psychological impacts that often arise include anxiety, fear, mood disorders, low self-esteem, unpreparedness for therapy, trauma, and even refusal to undergo therapy (Sommariva, Pongiglione and Tarricone, 2016).

Previous research results explain that chemotherapy has a negative impact in the form of feelings of worry, anxiety, fear, and even bad experiences during therapy (Lewandowska *et al.*, 2020). The results of other research also state that the symptoms caused after chemotherapy can also trigger anxiety about carrying out the next chemotherapy program (Maria, Achmad Dafir Firdaus and Evi Dwi Prastiwi, 2023). The results of a preliminary study conducted at the Cancer Foundation, Semarang found that the majority (8 out of 10) of children experienced anxiety while waiting for the chemotherapy schedule (Megasari *et al.*, 2023). The presence of anxiety and fear before chemotherapy can cause poor self-efficacy. Self-efficacy is a person's ability to be able to carry out tasks, achieve goals, and face obstacles. Self-efficacy must be possessed by children with cancer undergoing chemotherapy (Putri, Rinanda and Chaidir, 2022). When children have good self-efficacy, anxiety and fear will decrease. Patients will also be better prepared to face the next chemotherapy program (Megasari and Wulandari, 2024).

Good self-efficacy skills can prevent children from the trauma of chemotherapy. A patient who has good self-efficacy means that the patient knows all the actions that will be taken during the chemotherapy process and has the knowledge and skills related to handling post-chemotherapy side effects (Kwak *et al.*, 2021). Self-efficacy can be increased by providing atraumatic therapy. One type of atraumatic intervention that is suitable for cancer sufferers is psycho-educational therapy. namely providing psycho-educational therapy. Providing psycho-educational therapy aims to improve coping mechanisms in dealing with problems and for mental changes. Psycho-educational therapy is also the provision of information to solve problems and discuss the patient's needs to reduce stress, manage symptoms, develop relaxation techniques, and increase the ability to adapt to certain conditions (Bartolo *et al.*, 2019)

Previous research results indicate that psychoeducational interventions can increase self-efficacy for various cases, such as smoking and autism (Trialovena *et al.*, 2018). Other research also states that the application of psycho-educational therapy can reduce anxiety and increase a person's readiness to take certain actions (Pardede 2020). Psycho-educational therapy has many advantages, namely it is easy to implement, does not require expensive costs, and can build relationships between patients and nurses. Psychoeducational therapy has several stages, including identifying the problem (cancer), providing knowledge related to the problem (cancer), and stress management (anxiety). (Putri, Rinanda and Chaidir, 2022). These stages aim to maximize the impact of providing psycho-education, this is because each stage has a different role and function. Based on this, the researcher wants to conduct research with the title "the effect of psychoeducational therapy on the self-efficacy of children with chemotherapy program".

METHOD

This research used pre-experimental with one group pretest post-test. Respondent settings The population of this study were children undergoing chemotherapy at the YKAKi Halfway House Semarang in May-June 2023. The sample in this study used total sampling, totaling 25

respondents. Psycho-educational therapy is divided into four sessions, namely: session 1 (education about cancer and treatment therapy), session 2 (prevention of the effects of chemotherapy), session 3 (measures of the effects of chemotherapy), and session 4: stress management (teaching various stress management techniques non-pharmacological).

The dependent variable in this research is self-efficacy. The independent variable is psycho-educational therapy. The intervention was given three times before the chemotherapy schedule with a duration of 15 minutes. The instruments used in this research include an observation sheet on respondent characteristics and a self-efficacy assessment instrument. Self-efficacy is measured before and after the action is given to the respondent. Self-efficacy is measured using the self-efficacy scale instrument. The construct validity test on the Self-Efficacy Scale questionnaire shows that all items have a t-value > 1.96 and have a positive factor load. So, the Self-efficacy Scale is proven to be valid in measuring the construct of self-efficacy in a comprehensive context. The reliability test shows that the results for the self-efficacy scale are $r = 0.971$. Thus, this instrument has good reliability (very high correlation). This self-efficacy scale consists of 10 favorable items. The answer choices have 4 alternatives, namely not often, somewhat often, almost often and very often. Each item has a value of 1-4. The total score for this instrument is the sum of the scores obtained from ten questions. Univariate analysis in this study was to describe each variable in the form of a frequency distribution, including: age, gender, and length of treatment. Bivariate analysis was carried out to determine the effect of implementing psycho-educational therapy on the self-efficacy of children with cancer undergoing chemotherapy. The statistical test used is the Wilcoxon Test

RESULTS

Univariate Analysis

Characteristic Respondent

Based on table 1, it was found that the majority of respondents were male (64%) with an average age of 6 years

Table 1.
Respondent characteristics (n= 25)

Respondent Characteristics	f	%
Gender		
Man	16	64
Woman	9	36
Age	Min – max (2-11) Mean (6)	

Level of Self-efficacy

Based on table 2, the results showed that before the intervention, the highest level of self-efficacy of respondents was less than 12 (48%) respondents, while after the intervention the level of self-efficacy was highest, namely (52%) of respondents.

Table 2.
Level of Self-efficacy

Level of self-efficacy	Pre-test		Pos-test	
	f	%	f	%
	2	8	13	52
	11	44	1	44
	12	48	1	4

Bivariate Analysis

The influence of self-efficacy therapy on self-efficacy

Based on Table 3, it can be concluded that there is an influence of psychoeducational therapy on the self-efficacy of children with chemotherapy programs. This is supported by a p value of 0.001. Cancer is a disease that can cause individuals to imagine changes in their lives in the future as a result of the disease they are suffering from or as a result of the disease process. Therefore, many cancer sufferers are not ready to undergo chemotherapy programs, especially children

Tabel 3.
The Influence Of Self-Efficacy Therapy On Self-Efficacy

	Mean+ sd	p- value
Pre-test	2.24+0.77	0.001
Post-test	1.32+0.55	

DISCUSSION

Based on table 3, it can be concluded that there is an influence of psychoeducational therapy on self-efficacy in children with chemotherapy programs. This is supported by a p value of 0.001. Before giving the intervention, researchers conducted interviews with several respondents. The results of the interviews showed that the majority of participants felt they were still not ready to undergo the chemotherapy program. Lack of self-efficacy in children with cancer can be caused by various things. One of the main factors is anxiety or fear related to the disease or treatment procedures, such as chemotherapy programs. This is in accordance with previous research which states that the majority of children who will undergo chemotherapy experience anxiety so they are not ready to undergo the next chemotherapy program (Miller *et al.*, 2017).

Research on the physical condition of cancer sufferers conducted by Hirai *et al.* (2018) showed that there was a high correlation between physical condition, self-efficacy and trauma. Patients who are in good physical condition will have high self-efficacy patients who have high self-efficacy will have low levels of stress. Providing psychoeducation to cancer children aims to increase self-efficacy. Self-efficacy is an assessment of personal ability to organize and carry out certain actions. In the Health Promotion Model theory, perceived self-efficacy is influenced by influences related to activities. The more positive the influence, the greater the perceived efficacy (Rahimi *et al.*, 2017). Individual assessment of managing self-care activities to achieve desired outcomes. Self-assessment is a bridge between an individual's knowledge and the individual's final behavior.

Self-efficacy can be defined as an individual's process of achieving progress and being able to carry out as many daily life activities as possible. Self-efficacy is one way to increase self-confidence in undergoing a chronic treatment process (Ramezani *et al.*, 2018). When a patient has been diagnosed with a chronic disease (such as cancer), the patient will automatically take action to prevent the disease from getting worse, in this case self-efficacy plays an important role in the patient's decision making. Self-efficacy is directly related to health behavior, but also indirectly influences its impact on goals. Self-efficacy influences a person's ability to set goals and face various problems (Baron, Mueller and Wolfe, 2016).

This result showed that the majority of respondents were at a good level of self-efficacy after being given the self-efficacy intervention. This result of this study was supported by previous research, showed that there are significant results from providing psychoeducation on self-

efficacy in pregnant women. this is indicated by the average score of self-efficacy after providing psychoeducation increased by two follow-up interval (Firouzan *et al.*, 2020). Previous research showed that there was an influence of providing health education to mothers on self-efficacy as indicated by a p value <0.001. Not only that, this research also shows that self-efficacy can change mothers' behavior in caring for children with cancer (Barani *et al.*, 2023). other research on the impact of education mother of a child with cancer undergoing chemotherapy on the prevention of gastrointestinal side effects also shows that educational interventions have a significant impact reduces this effect (Shoghi, Shahbazi and Seyedfatemi, 2019).

Good self-efficacy has a positive impact on health behavior. If the level of self-efficacy is low then readiness to face something difficult will also be low. Self-efficacy influences the quality of life of cancer patients. The benefits of self-efficacy are a condition that can influence the energy within oneself which is able to increase the success one wants to achieve. High self-efficacy can raise the strength of children with cancer to try to recover with enthusiasm when undergoing chemotherapy to achieve healing for cancer sufferers (Ersoy, Şahin and Pala, 2021). A form of increasing self-efficacy through psychoeducation therapy is that researchers provide various knowledge to prepare patients to face their days and be able to be friends with their illness. Researchers used video media and also playbooks with the aim of ensuring that respondents did not get bored and wanted to participate in activities that were maximal and enjoyable. The limitation of this research is the limited research sample.

CONCLUSION

There is an influence of modality therapy (psychoeducation) on self-efficacy in children with chemotherapy programs with a p value of 0.001. Future researchers are expected to be able to develop this research by involving more respondents and a better research design.

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