

## **Depression of Parents of Children With Survivors Leukemia**

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### **Abstract**

Parents faced with a diagnosis of leukemia in a child may manifest depressive symptoms. The long treatment process for children with leukemia is a major source of stress for parents that affects mental health. The purpose of this study is to identify the level of depression in parents who have children with leukemia. This study used a quantitative descriptive design with a non-probability sampling technique of accidental sampling type, involving 23 parents. The instrument used was the Beck Depression Inventory II (BDI-II). The data analysis used was univariate. The results showed that parents were not depressed (39%), mild depression (22%), moderate depression (26%), and severe depression (13%). The data showed that the most common symptoms of depression experienced by parents were sadness (57%), feeling worthless (48%), fatigue (52%), and loss of sexual desire (52%). This study is expected to help other researchers develop research on similar topics.

**Keywords:** Child, Depression, Leukemia, Parents

### **INTRODUCTION**

Leukemia is a non-communicable disease with a high mortality rate in the world, including among children. According to data from the World Health Organization (WHO) in 2021, it is estimated that every year there are around 300,000 new cases of leukemia in children worldwide. The disease is the leading cause of cancer deaths in children under the age of 15, with a mortality rate of 5.9 per 100,000 children. (World Health Organization, 2021). Although advances in treatment have significantly improved survival rates, leukemia remains a serious

threat to children's health in many countries.

Leukemia is a disease that starts with the rapid and abnormal growth of white blood cells. These rapidly growing cells will crowd out normal body cells, vital organs, and the cardiovascular system, so children suffering from leukemia can experience a variety of symptoms such as fever, bone pain, pallor, weakness, and decreased appetite (Hartini et al., 2020). Chemotherapy, which is one of the treatments for children with leukemia, also has effects on children such as nausea and

vomiting, anemia, and sleep disturbances that cause children to experience fatigue. The long and continuous therapy process causes children with leukemia to experience physical and mental fatigue, so children are prone to fatigue (Nugroho, S. et al., 2017).

Parents' involvement in the treatment of leukemia in children can interfere with daily life. In the treatment process, sick conditions and hospitalization in children with leukemia can cause distress (Wati, 2016). Parents who are faced with a diagnosis of leukemia in a child at a critical time, such as when the child is first diagnosed, can experience tension and distress reactions that manifest as uncertainty, anxiety, depressive symptoms, and Post-Traumatic Stress Syndrome (PTSS) (Feki et al., 2021). Depression is one of the images of psychological distress that occurs in parents (Mirowsky John, 2017).

Depression experienced by these parents can slow down the treatment process for children and increase the cost of treating them with leukemia. Depression itself is defined as an emotion in the form of sadness and a lack of interest that is prolonged and caused by irregular moods (Harper et al., 2013). It is characterized by withdrawn behavior, feeling wrong and meaningless; even individuals who experience depression tend to have a reduced appetite and sexual

appetite, difficulty sleeping, and a lack of enthAsm in carrying out daily activities (Ormel et al., 2019). The level of depression in parents of leukemic children is important to know because it can have a significant impact on family well-being and child care. Research by Beron Wei Zhong Tan, Lois Ling'en, and Jasper Weng Kong (2022) found that 30% of parents with children with cancer experienced significant distress and needed psychological support. Parents of children with cancer, including leukemia, have a high risk of depression, with a prevalence of 46%. Depression in parents can affect their ability to care for sick children, make treatment decisions, and manage long-term stress. In addition, parents' mental state can also affect their child's quality of life and treatment success. Therefore, understanding the level of parental depression is essential to identifying psychosocial support needs and designing appropriate interventions to improve family mental health and optimize the care of children with leukemia.

## **RESEARCH METHOD**

This study uses descriptive research, which aims to obtain a description of depression in parents who have children with leukemia. This study was conducted on 23 parents of children with leukemia who visited the Ambu Cancer Fighters House Foundation in Bandung. The

sampling technique used was non-probability sampling with an accidental sampling technique. This study used the Beck Depression Questionnaire II (BDI II)

instrument and univariate analysis or descriptive statistics to analyze data by explaining or showing depression in parents of children with leukemia.

## RESEARCH RESULT AND DISCUSSION

### RESULT

Demographic characteristics consisted of age, length of treatment, and type of leukemia in children.

**Table 1. Demographic Characteristics of Respondents (n = 23)**

Characteristics of Respondents	Frequency (f)	Percentage (%)
<b>Age</b>		
16-25 years	2	9
26-35 years	8	35
36-45 years	7	30
>45 years	6	26
<b>Duration of paediatric treatment</b>		
0-1 years	11	48
1-2 years	3	13
>2 tyears	9	39
<b>Type of Leukaemia</b>		
Acute lymphoblastic leukaemia (ALL)	18	78
Acute myeloid leukaemia (AML)	5	22

Referring to Table 1, it is known that the age range obtained by respondents with the highest number in the early adult group (26–35 years) is as many as 8 respondents (35%). The youngest respondent was 22 years old, and the oldest was 59 years old.

The length of cancer treatment in children is mostly 0–1 year, with 11 respondents (48%). The majority of leukemia types in respondents' children were acute lymphoblastic leukemia (ALL) (78%).

**Table 2. Frequency Distribution of Depression Level in Parents with Leukemia Children (n=23)**

Parents' Depression Level	Frequency (f)	Percentage (%)
No depression	9	39
Mild depression	5	22
Moderate depression	6	26
Severe depression	3	13
Total	23	100

Based on Table 2, it is known that the level of depression in parents of children with cancer is high; as many as 39% of respondents

are not depressed, and 61% of others have mild to severe depression.

**Table 3. Frequency Distribution of Depression Variables in Parents who have extreme values with mild to severe symptoms (n=23)**

No.	Variable of Depression	Level of Depression			
		No Symptoms (%)	Mild (%)	Moderate (%)	Severe (%)
1	Sadness	2	13	7	1
		9	57	30	4
2	Feeling of worthlessness	9	11	2	1
		39	48	9	4
3	Fatigue	6	12	4	1
		26	52	17	4
4	Loss of sexual desire	5	12	4	2
		22	52	17	9

Based on table 3, the items of the depression variable that are most felt by respondents are sadness with mild symptoms (57%), feeling worthless with mild symptoms (48%), fatigue with mild symptoms (52%), and loss of sexual desire with mild symptoms (52%).

found depression in older parents. According to research related to depression and anxiety symptoms conducted on 374 adult parents aged 18–93 years, it was found that this could be due to older adults being less accurate in labeling symptoms as neither anxiety nor depression (Wetherell et al., 2009).

## DISCUSSION

### Age

Based on the age of the parents, mild to severe levels of depression are mostly experienced by parents aged 36–45 years. According to previous research conducted on parents with cancer children at Boston Children's Hospital, Philadelphia Children's Hospital, and Seattle Children's Hospital, younger parents have higher levels of psychological distress (Rosenberg, Dussel, Kang, Geyer, et al., 2013). In contrast to this study, researchers

### Child's Length of Treatment

From the studies that have been conducted, the length of treatment with a time of 0–1 year most experienced mild to severe depression. Previous research found the level of psychological distress tended to increase over time since the child was diagnosed with cancer (Vernon et al., 2017). In contrast to this study, researchers found that higher levels of depression were found in parents of leukemia children who were undergoing initial treatment, namely 0–1 year of treatment. This is because the

first time the child is diagnosed with cancer provides a higher level of distress and emotional distress and more psychosomatic complaints in parents (Nasab & Foroghi, 2016).

### **Parents' Depression Level**

From the research that has been done, the highest percentage obtained for the level of depression in parents with cancer children is not depressed (39%). However, the data obtained also showed that parents experienced mild depression (22%), moderate depression (26%), and severe depression (13%). The data showed that the most common symptoms of depression experienced by parents were sadness (57%), feeling worthless (48%), fatigue (52%), and loss of sexual desire (52%). Rosenberg et al. (2013) stated that a cancer diagnosis in children results in children experiencing physical and emotional suffering, so that parents can experience protracted sadness because they have to witness this. The problems experienced by parents include problems in leaving other family members, financial problems in medical expenses, and physical fatigue felt by parents in caring for and giving attention to children (Lempang et al., 2021).

Parents experience feelings of unworthiness or worthlessness, with 48% of parents experiencing mild symptoms, 9% experiencing moderate symptoms, and 4% experiencing severe symptoms. This is

in accordance with the theory of Townsend (2013), which explains that a sign of someone experiencing depression is the emergence of feelings of worthlessness and inadequacy that appear for 2 weeks. Parents also experienced fatigue; 52% experienced mild symptoms, 17% experienced moderate symptoms, and 4% experienced severe symptoms. The study by Repkaet et al. (2019) states that parents who take care of children with cancer have high levels of distress, and negative coping strategies such as denial and self-blame can provide experiences that lead to high levels of fatigue.

The results of the study found that parents experienced loss of sexual desire; 52% experienced mild symptoms; 17% experienced moderate symptoms; and 9% experienced severe symptoms. Studies conducted by Rokhaidah and Herlina (2018) found that parents of children with cancer experience changes in sexuality needs. In accordance with the theory of Becking et al. (2015), which states that individuals who experience depression can experience a decrease in responding to sexual stimuli and even have no response to sexual stimuli.

### **CONCLUSION**

Based on the results of the study, it was found that 39% were not depressed, 22% were mildly depressed, 26% were

moderately depressed, and 13% of other parents experienced severe depression. In addition, from the research that has been done, it has been found that the symptoms of depression most felt by parents who experience depression are sadness, feeling worthless, fatigue, and loss of sexual desire. This research is expected to be used by nurses to develop prevention strategies for psychological distress and provide nursing care that applies family-centered care (FCC) by paying attention to the psychological aspects of the symptoms that are often experienced by parents and detecting as early as possible the causes that trigger depression in parents.

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26

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