

The Effectiveness of Implementing Daily Journaling on The Anxiety of Mother Children With Hemophilia

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ABSTRACT

The anxiety of mothers who have children with hemophilia can be overcome in various ways, including daily journal writing therapy. The research aims to determine the effectiveness of implementing a daily journal in reducing the anxiety of mothers who have children with hemophilia at HMHI Riau: quantitative research type, quasi-experimental design, one group pre-test post-test—carried out the research from January to June 2023. Samples were taken using a total population technique of 25 respondents. The research instrument used the HARS (Hamilton et al.), which consists of 14 items. This research has passed ethical test no. 067/STIKES PN/KEPK/V/2023. Before the intervention, respondents filled out personal and anxiety data questionnaires. Then, respondents were given a notebook to write down what they felt every day, and their anxiety level was measured again. The research results showed that the average level of maternal anxiety decreased by (7.56%) before the intervention (27.00) and after the intervention (19.44), p-value $0.000 < 0.05$. So, H_0 was rejected, which means that the daily journal is effective in reducing the anxiety level of mothers who have hemophilic children at HMHI Riau. The research results showed that the majority of respondents had the same anxiety both before and after the intervention, namely feeling afraid about their thoughts about their children; they are worried that their child will experience injury or bleeding during their daily activities. It recommended that future researchers create a digital program to overcome anxiety in mothers with hemophilia.

Keywords: hemophilia, maternal anxiety, daily journaling

INTRODUCTION

A blood clotting disorder called hemophilia is caused by damage to the X chromosome, clotting factor VIII (hemophilia A), or clotting factor IX (hemophilia B). Hemophilia A is the most common; around 80%-85% of people with hemophilia throughout the world spread across 120 countries, 165,379 people have hemophilia A, 33,076 people have hemophilia B, it is more common in the birth of boys, according to a survey by the World Federation of Hemophilia (WFH) in 2020 (Herdata & Perdana, 2020).

The highest number of hemophilia cases is in India, while in Indonesia, up to the end of 2018, 2,098 people were recorded based on HMHI data, which is estimated to be only 10% of the total estimated patients, namely 20,000-25,000 cases (Kementerian Kesehatan RI, 2021).

Related research regarding the anxiety of mothers who have children with hemophilia caused by fear of their child being injured. Mothers will forbid children from playing outside the house,

which can disrupt their behavior even in standard terms (Kartikasari & Nurizka, 2019; Renylda, 2015). Treating anxiety can involve several methods, including aromatherapy, relaxation techniques, relaxation music, murals from the Koran, talking to friends or family, and writing therapy, also known as daily journaling (Margiana et al., 2021; Raharjo & Aktifah, 2021).

Daily journaling is a form of psychological therapy in which a person writes to gain the benefits of cognitive therapy. This method helps overcome problems of depression, anxiety, and stress by stimulating reflection of an individual's most profound thoughts and feelings. Through this reflection process, a person can change thought patterns, regulate emotions, gain new energy, divert attention, relieve emotional stress, and focus on positive goals and behavior. Writing therapy is also helpful in reducing anxiety without making individuals worry about being blamed for exploring the feelings or emotions they experience (Danarti & Sugiarto, 2018; Febrianti & Yuniarti, 2022).

Based on data obtained from HMHI Riau on November 28, 2022, there were 120 people with hemophilia in Riau Province. The highest number of people with hemophilia is in Pekanbaru, 25 people. Interviews conducted by researchers with ten mothers with children with hemophilia found that 50% of the mothers experienced severe anxiety, 30% moderate anxiety, and 20% mild anxiety. Causes of maternal stress: 40% are worried that their child will get injured, 30% of mothers are worried if their child cannot walk (paralyzed), and 30% of mothers are worried if their child is rejected by school. They are handling the mother's anxiety by mutual Al-Qur'an.

METHODS

Quantitative research type, research design with a quasi-experimental design with a "one group pretest-posttest" design. The research population was mothers who had children with hemophilia who were members of the Indonesian Hemophilia Society Association (HMHI) Riau Province 2023. The sampling technique used a total population of 25 people. The data collection tool is an observation sheet containing respondent data, including age and occupation. The instrument used in research is the HARS of Hamilton et al., anxiety instrument, which consists of 14 question items with a score of 0-4, where 0 is not anxious, one is mildly apprehensive, 2 is moderately anxious, three is severely anxious, and four is very nervous. This research has passed research ethics test No. 067/Stikes PN KEPK/V/2023. Before the research, respondents were asked to sign a consent form to become respondents (informed consent). Then, the researchers conducted a pre-test by administering the HARS questionnaire. Next, the researcher gave them several daily journaling sheets to write down all

the feelings or moods and things they experienced. Researchers administered the HARS questionnaire again to assess post-intervention anxiety. The collected data was analyzed using the t-test statistical test because the data was normally distributed.

RESULTS

The results of research on the application of daily journaling on the anxiety of mothers with children with hemophilia can be seen in the following table:

Table 1. Frequency Distribution of Respondent Characteristics

No	Characteristics	Frequency (f)	Percentage (%)
1	Age		
	26-35 years	8	32
	36-45 years	13	52
	46-55 years	3	12
	56-65 years	1	4
2	Education		
	Elementary School	6	24
	High School	15	60
	College	4	16
3	Income		
	<3.319.023	8	32
	≥3.319.023	17	68
4	Child age		
	1-5 years	1	4
	6-11 years	11	44
	12-16 years	7	28
	17-25 years	6	24
5	Type Hemophilia		
	A	21	84
	B	4	16

Most respondents are 36-45 (52%), and most have a high school education (60%). With the majority's family income equal to and more significant than IDR 3,319,023, most hemophilia children are 6-11 years old (44%), and the type of hemophilia the majority suffers from is Hemophilia A.

Table 2. Distribution of Mother's Anxiety Before and After being given Daily Journaling at HMHI Riau

Intervention	Mean	Anxiety		
		Medium	Light	Heavy
Pre Intervention	27	1 (0,04%)	11 (44%)	13 (52%)
Post Intervention	19	16 (64%)	9 (36%)	0 (0,0%)

The results of the analysis of the anxiety level of mothers with children with hemophilia on average before the intervention were 27, and those who experienced mild anxiety 11,

respondents who were moderately anxious, and 13 respondents who experienced severe anxiety. Meanwhile, after the intervention, 16 respondents experienced mild anxiety, nine respondents experienced moderate anxiety and 0 severe anxiety.

Table 3. Effectiveness of Daily Journaling on Mothers with Hemophilic Children Anxiety at HPHI Riau

Intervention	Mean	SD	SE	X	p-value
Pre	27	2,77	0,55	7,6	0,00
Pre	19,4	2,2	0,44		

Table 3 shows that the mean difference before and after the intervention is 7.6, and the p-value is $0.00 < 0.00$, which means that daily journaling effectively reduces the anxiety of mothers with children with hemophilia.

DISCUSSION

Age

The research results showed that most respondents were aged 36-45 (late adulthood), namely 13 people (52.0%). This aligns with research conducted by Miharja and Fitrianti (2020), which showed that out of 31 mother respondents, 14 (38%) were aged 36-45. The age factor greatly influences anxiety levels; young people are more susceptible to anxiety disorders than older people. An individual who has personal maturity will find it more challenging to experience anxiety because the individual has excellent adaptation to a stressor. In contrast, an individual whose personality is not yet mature enough is more sensitive to stimuli, so it will be straightforward to experience anxiety (Miharja & Fitrianti, 2019).

Education

The research results show that the highest level of Education of respondents is high school. Education means guidance given by someone to develop others, determining how humans act and fulfill their lives. Education is needed to obtain information, such as things supporting health. A person's level of Education has a direct impact on anxiety. Thus, the level of Education has a significant influence on a person's anxiety. A person's level of Education is related to his knowledge so that he can overcome specific problems, and it is also high, so the higher a person's level of knowledge, the lower his anxiety level. However, a mother who has a child who has hemophilia will feel anxious even if she has a high school education, such as high school or higher Education, because hemophilia is a disease that can result in physical limitations/paralysis and even death if not treated properly (Kartikasari & Nurizka, 2019).

Work

All of the respondents' occupations in this study were housewives (homemakers), namely 25 people (100%). This research aligns with research Suryani (2020), which states that most mother respondents do not work or are housewives (83.3%). Individuals who do not work tend to have a lighter mental load than those who work, so the workload, which is one of the anxiety factors in these individuals, is not felt, but the anxiety they feel tends to be caused by other factors. This is different for people who work; anxiety tends to be caused by the burden of work and the burden of household affairs. People who work tend to experience stress due to the workload they have.

Family Income

The majority of family income is above the minimum wage (\geq Rp. 3,319,023), namely 17 people (68%). According to Pragholapati et al. (2021), the family's economic status greatly influences the anxiety felt. The higher the economic status, the less anxiety you feel because there is no burden of thinking about something that will happen in the future because everything you need can be fulfilled with a high economic status.

Economic status is something that can be a benchmark for the anxiety felt by an individual. Families who have a high economic status will feel less anxiety because they do not have as many burdens on their minds compared to families who have a low economic status. Mothers who have low economic status, apart from thinking about their children, also think about the cost of living in the future, so it is possible that if one of their mental burdens is not resolved, it will result in high anxiety felt as time increases (Said et al., 2015). Understand more and also have more experience so that the anxiety you feel begins to decrease as the years go by.

Age of Children with Hemophilia

The study results showed that most children with hemophilia were aged 6-11 years (Children), namely 11 people (44.0%). According to Abali et al. (2014), the younger the child, the higher the level of anxiety experienced by parents, especially mothers, because children are still dependent on their parents when undergoing care and treatment. Parental anxiety can be caused by school-age children usually having good cognitive development so that children can complain and express their emotions. Furthermore, school-age children are usually starting to realize what is happening, so their reaction to their illness will be the same as that of babies, such as needing emotional support from parents, feeling uncomfortable due to the disruption

of school work, feeling angry and sad because of their illness, not playing as usual, and withdrawing because of their illness.

Types of Pediatric Hemophilia

The study showed that most children had hemophilia A, namely 21 people (84.0%). Research (Dewanata, 2021) showed that 25 people (91.0%) had hemophilia A. The type of hemophilia in children also affects anxiety in parents, especially mothers. Most mothers who have children with hemophilia B have a severe level of anxiety due to hemophilia B because the body lacks blood clotting factor IX. Generally, this disorder is inherited from the mother but can also occur due to changes or gene mutations before the baby is born. A baby girl is more at risk of experiencing this type of hemophilia compared to a baby boy.

Meanwhile, Hemophilia A is not caused by genetic factors but by a lack of blood clotting factor VIII. It is generally associated with pregnancy, cancer, the use of certain medications, and diseases such as lupus. This type of hemophilia A is rare and dangerous if it occurs.

Anxiety Before and After being Given the Daily Journaling intervention.

Description of the anxiety of mothers with children with hemophilia at HMHI Riau before being given daily journaling with an average value of 27, the majority anxiety level was in the severe anxiety category, 52%. In contrast, after being given the daily journaling intervention, the average anxiety decreased to 19, with the majority being in the mild anxiety category, 64%.

The results of filling out the HARS questionnaire, which consisted of 14 questions before and after being given daily journaling, showed that most respondents experienced anxiety because they felt afraid of their thoughts towards their children; they were afraid that their children would experience injuries or bleeding when their children carried out daily activities.

Anxiety is a manifestation of rejection from the individual, which causes feelings of fear. Individuals with low self-esteem will also easily experience anxiety (Danarti K & Sugiarto N, 2018). The severity of anxiety felt by a mother will hurt her child because a mother will be more protective of her child's safety and will not want her child to be hurt in the slightest. A mother who experiences a severe level of anxiety has several symptoms of anxiety, such as feelings of anxiety that arise accompanied by restlessness, tension which result in sleep disturbances, in addition to somatic symptoms (muscle pain and twitching), rapid breathing, palpitations, easy sweating, and facial tense research (Kartikasari & Nurizka, 2019; Margiana et al., 2021),

According to researchers' assumptions, mothers' anxiety decreases after being given daily journaling, which is expected because writing down all the feelings that mothers have experienced so far can reduce the anxiety they feel because they can be more open and can express all their thoughts and hopes for the future to their children.

The results of the daily journaling research are effective in reducing the anxiety of mothers with children with hemophilia at HMHI Riau. Writing memorable or traumatic events in a book (daily journaling) affects improving the immune system's mental health, reducing physical complaints, and strategies that can be used to adapt or cope with stress or anxiety (Ayudya et al., 2022; Sarahdevina & Yudiarso, 2022).

Most respondents wrote stories in their daily journaling about their feelings of anxiety that if their children enter school age, their children will have many activities with their friends. They are afraid that their children will fight or joke too much, which will result in their children bleeding more often in the joints, so they will need more injections of blood clotting factor concentrate.

Respondents also wrote about feelings of anxiety regarding their children's future; they were afraid that once their children reached working age, it would be difficult to find work and it would be difficult to find a life partner. Apart from that, respondents also wrote stories in daily journaling about feelings of anxiety regarding their children's or grandchildren's descendants if they inherited the same disease as their son.

CONCLUSION

The average anxiety score of mothers with children with hemophilia before the daily journaling intervention was the average anxiety (27.0), and after the daily journaling intervention, the average anxiety was (19.4), and there was a decrease in the level of anxiety (7.6). It was found that daily journaling affects reducing anxiety with $p\text{-value} = 0.000 (< \alpha 0.05)$. Suggestions for further research are creating a digital program to overcome anxiety in mothers of children with hemophilia.

LIMITATION

The limitation of this research is that the research time is short, so respondents have not adapted to expressing anxiety by writing a daily journal.

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