

The Effect of Bibliotherapy on Anxiety Level of School-Age Children at Pediatric Ward, Blambangan General Hospital, Banyuwangi

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ABSTRACT

Introduction

Commonly children have difficulty in understanding why they are sick. Hospitalization can cause anxiety in a child, because of a child experience the separation with closest to it person and an unfamiliar environment. the response that showed by the child covered: protests, despair, fussing, frequent crying and losing control (wriggle), so the need for bibliotherapy. Bibliotherapy is the use of books as a therapeutic medium to minimize stressors, prevent feelings of loss, reduce anxiety, and support adaptive coping for the child. the purpose of this study was to determine the effect of Bibliotherapy against anxiety levels in school-age children (7-12 years old) in the pediatric Room of Blambangan Banyuwangi Hospital.

Methods

Pre-experimental research design using the technique of one group pre-post test design. A sample of 20 children with accidental sampling technique. Data obtained from observations before and after giving bibliotherapy, and then do the scoring, tabulating, and statistical tests using Wilcoxon match pair test.

Results

Manually obtained calculation number $199 > 52 = H_0$ is rejected and H_a is accepted, meaning that there are differences in anxiety levels before and after bibliotherapy which means there is a significant effect of bibliotherapy on child anxiety levels.

Conclusions

Bibliotherapy can be applied as a nursing intervention to reduce anxiety in the child during hospitalization.

Keywords

Bibliotherapy; Anxiety Children; Hospitalization

BACKGROUND

Children who are sick can be stressful for the child himself and his family [1]. Caring for the disease (Hospitalization) is part of the process that requires the child to undergo therapy and care so that the condition of the child returns to health and can return home [2]. The hospital environment can be a cause of stress and anxiety in children [3]. Norton-Westwood In a

comprehensive systematic review found several factors that cause stress and anxiety in children when treated in hospitals including unfamiliar hospital atmosphere, unfamiliar faces, various sounds from the machine used, and distinctive odors [4].

Coyne in qualitative studies with the grounded theory method to find out the experience of hospitalization of children from four pediatric units in the UK, with data collected through semi-structured interviews with 11 children between the ages of 7 and 14 found that all children experience stress with interview data shows Children identify a variety of fears and concerns, which include: separation from parents and family, an unknown environment, investigation, care, and loss of self-determination [5]. Nur Ifdatul Jannah in her research to find out the stress level of school-age children with hospitalization in Labuang Baji Hospital with a sample of 19 children obtained the results of moderate stress had a large percentage of as many as 14 children (73.7%), based on the sex of girls having proportions the biggest for medium stress category is 9 children (64.3%) and children who have previous hospitalization experience have a large percentage in the medium stress category which is 10 children (71.4%) [6].

Based on the preliminary study conducted in the children's room, Tk.III Hospital, RS.W. Mongisidi, Manado, for 2 months October - November 2014 obtained data from the number of 184 patients who were treated and children aged 3-5 years as many as 57 patients, the results found as many as 56 patients (98%) experienced anxiety with observation data found children often nervous, fussy, often crying, always wanted to be accompanied by parents while undergoing the treatment process and said they wanted to go home [7]. The results of the preliminary study at Blambangan Banyuwangi Regional Hospital on February 19, 2016 through observation in 10 patients aged 7 - 12 years and interviews with nurses in the Children Room, Blambangan Hospital, data was obtained that all children were agitated, fussy, always wanted to be accompanied by parents, hugged the mother, invite to go home, struggled and shouted, and were afraid when medical treatment was done during the hospitalization period. The occurrence of hospitalization anxiety in children can affect the process of care and healing of children while in the hospital because the child reacts fussy, frightened, angry, uncooperative and does not want to be approached by health workers [7,8]. The role of nurses is very necessary for an effort to distract to reduce and eliminate anxiety in children hospitalization, this role is done through bibliotherapy. Bibliotherapy gives children the opportunity to express their feelings both verbally and nonverbally and to accept children's fears and invite children to discuss their feelings [7]. Based on the description above, researchers are interested in conducting research on "The Effect of Biblio Therapy on Anxiety Levels in School-aged Children (7 - 12 years) due to hospitalization in the Children's Room of 2016 Blambangan Hospital".

METHODS

This research was conducted for 1 month on April 13 - May 13, 2016, in the Children's Room of Blambangan Banyuwangi Regional Hospital. This research is an experimental study using a pre-experimental research design with the form of one-group design pre-post-test. The characteristic of this study reveals a causal relationship involving one group of subjects. Subject groups were observed before the intervention, then observed again after intervention [9]. The variables of this study were bibliotherapy and anxiety level. In this study, respondents who underwent hospitalization were first observed before bibliotherapy, then observed again after being given biblio intervention and then compared the results.

Table 1. The form of research design is described as follows:

Subject	Pre	intervention	Pasca-test
K	O	I	OI
	Time 1	Time 2	Time 3

Figure.1 Research design of one group pre-post test design. source: [9].

Information:

K: Subjects (patients who experience anxiety during school-age hospitalization).

O: Observe the level of anxiety before giving bibliotherapy.

I: intervention (bibliotherapy).

OI: Observe the level of anxiety after giving bibliotherapy.

The study population was all school-aged children (7-12 years old) who were treated in the Children's Room of Blambangan Banyuwangi Hospital with the sampling technique used accidental sampling [9]. A total of 20 respondents with inclusion criteria: Children aged 7-12 years at the stage of hospitalization in the Children's Room of Blambangan Hospital, treated at least 1 day in the child's room, not mentally disturbed and able to read.

The instrument used in this study uses illustrated storybooks and types of observation variations. This variation can be used as a real fact in making a conclusion because researchers see, observe, and record directly. An anxiety gauge uses an observation sheet modified by Hockenberry and Wilson [10]. Anxiety was observed using 15 child response items that were assessed on a Likert scale, the statement consisted of favorable (positive) and unfavorable (negative) statements, for positive statements having values that were "always" (SL) = 4, "frequent" (SR) = 3, "Sometimes" (KD) = 2, and "never" (TP) = 1. A positive statement is found in the item statement no. 1,2,6,11,12, and 15. While the rest are negative statements with the opposite values that is "always" (SL) = 1, "often" (SR) = 2, "Sometimes" (KD) = 3, and "never" (TP) = 4. (in appendix 9 child anxiety observation sheet).

The process of collecting research data, first approaches administratively to the education or institution, that is, armed with a letter permit to collect preliminary data to conduct research from

Banyuwangi STIKes through the National Unity and Political Agency, which was submitted to the director of Blambangan Banyuwangi Hospital. The process of taking data on the research respondents conducted informed concentrations, explained the procedure of the study, observed and assessed the response of hospitalization before being given bibliotherapy, the researchers gave bibliotherapy and finally, the researchers observed the response of hospitalization response after being given bibliotherapy.

Data analysis in this study using Wilcoxon match pair test, this technique is used to test the comparative hypothesis of two samples that correlate if the data is ordinal [11]. The aim of the test was to assess the effect of bibliotherapy on the anxiety level of school-aged children 7-12 years before and after bibliotherapy.

RESULTS

Characteristics of respondents based on age in this study found the highest number of respondents in the Children's Room of Blambangan Banyuwangi Regional Hospital aged 9 years and 11 years, each of which was 5 respondents (25%). Based on gender, there were 12 respondents (60%) female and 8 respondents (40%) male. Based on the experience of hospitalization, it was found that there were never previous hospitalization experiences 14 (67%) and who have inpatient experience 6 (33%). Characteristics of respondents based on anxiety levels before being given bibliotherapy found mild anxiety 4 respondents (20%), medium 12 respondents (60%), weight 4 respondents (20%).

Table 2. Characteristics of respondents based on anxiety level before being given bibliotherapy

No.	anxiety level before being given bibliotherapy	Frequency	Percentage
1.	Light	4	20%
2.	Medium	12	60%
3.	Weight	4	20%
4.	Panic	0	0%
Total		20	100%

The characteristics of the majority of respondents in the Children's Room of Blambangan Banyuwangi Regional Hospital before being given bibliotherapy the majority experienced moderate anxiety levels 12 respondents (60%).

Table 3. Characteristics of respondents based on anxiety level after being given bibliotherapy

No.	anxiety level after being given bibliotherapy	Frequency	Percentage
1.	Light	16	80%
2.	Medium	4	20%
3.	Weight	0	0%
4.	Panic	0	0%
Total		20	100%

Characteristics of respondents based on the level of anxiety after being given bibliotherapy found mild anxiety 16 respondents (80%), medium 4 respondents (20%).

Tabel 4. Distribusi frekuensi tingkat kecemasan sebelum dan sesudah diberi terapi *biblio* pada anak usia sekolah (7 – 12 tahun) di Ruang Anak RSUD Blambangan Banyuwangi Tahun 2016

No.	anxiety level	Before Therapy		After Therapy	
		Frequency	Percentage	Frequency	Percentage
1	Light	4	20%	16	80%
2	Medium	12	60%	4	20%
3	Weight	4	20%	0	0%
4.	Panic	0	0%	0	0%
Total		20	100%	20	100%

Based on table 4 above, there was a change in the level of anxiety in the respondents with the medium category which previously 12 respondents (60%) dropped to 4 respondents (20%). Based on the data above, an analysis of the effect of bibliotherapy on anxiety levels due to hospitalization for school-aged children (7 - 12 years) in the Children's Room of Blambangan Banyuwangi Regional Hospital in 2016 was conducted using the Wilcoxon test match pair with a significant level of 0.05 (5%) For small sample tests ($n = \leq 25$).

Table 5. Wilcoxon table, the effect of bibliotherapy on anxiety levels in school-aged children (7 - 12 years) in the Children Room of Blambangan Banyuwangi Regional Hospital in 2016

Based on the table, the calculation of the smallest number of ranks is 199. Furthermore, figure 199 is compared with the critical price of Wilcoxon Table VIII where $N = 20$ with a level of error 0.05 obtained a number of 52. The figure $199 > 52 = H_0$ rejected and H_a was accepted, there was a difference in the level of anxiety before and after bibliotherapy which meant that there was a significant influence of bibliotherapy on anxiety levels in school-aged children (7–12 years) in the Children's Room of Blambangan Banyuwangi Regional Hospital in 2016.

N	Xa1	Xa1	B	Rank	Sign (+)	Sign (-)
1	30	27	-3	6.5	-	6.5
2	28	21	-7	18	-	18
3	26	20	-6	13.5	-	13.5
4	27	21	-6	13.5	-	13.5
5	21	20	-1	2.5	-	2.5
6	33	28	-5	9.5	-	9.5
7	25	20	-5	9.5	-	9.5
8	28	23	-5	9.5	-	9.5
9	20	19	-1	2.5	-	2.5
10	25	16	-9	20	-	20
11	18	17	-1	2,5	-	2,5
12	27	21	-6	13.5	-	13.5
13	24	21	-3	5	-	5
14	28	21	-7	18	-	18
15	25	20	-5	9.5	-	9.5
16	31	28	-3	6.5	-	6.5
17	23	21	-2	5	-	5
18	25	19	-6	13.5	-	13.5
19	20	19	-1	2,5	-	2,5
20	32	26	-7	18	-	18
Total					-	199

DISCUSSION

hospitalization can provide a feeling of discomfort for children which can lead to anxiety [12]. Anxiety occurs because children feel lost, separated from family, bodily injury or pain experienced, foreign environment, and different habits [5,7,13]. The researchers also found that based on cross-tabulation between anxiety levels with gender, it was found that the most experienced anxiety levels were women, that is from 12 children, 9 children (75%) who experienced moderate category anxiety. This finding is in accordance with Sari and Coal research that children who experience hospitalization are at risk of anxiety in their study to identify the level of anxiety of children who experience hospitalization in the Orchid Room at Ambarawa Regional Hospital found that moderate anxiety is most common in women children [14].

The results of cross-tabulation between the level of anxiety and age of the respondents showed that those who experienced severe category anxiety level were 7 years old as many as 2 respondents (50%) of the total 4 respondents who experienced severe category anxiety level. This finding is in line with the theory that the age of a child can affect the level of anxiety a child experiences during treatment. This is because every child has different general characteristics in dealing with stressors in accordance with the stages of development. Child development is still egocentric, so children often conclude problems based on their own perspective. Underwent

treatment and care while in the hospital, children often perceive as punishment, so children show negative behavior in receiving care such as feeling embarrassed, guilty, and afraid. Fear in children arises because they assume that the nursing intervention provided can threaten their body's integrity [15]. Character and behavior development, children aged 6-7 years are uncooperative periods and their emotions easily explode because of their ability to control themselves is still not balanced [1].

Children who have experienced hospitalization have lower anxiety than children who have not had a hospitalization experience [16]. The experience of child hospitalization affects the anxiety of children undergoing hospitalization because children still have previous unpleasant experiences [17]. This fact is consistent with the results of the study that respondents who have never experienced previous hospitalization experience experienced moderate category anxiety levels of 10 respondents (50%).

Based on table 4 above, it can be seen that the majority of respondents in the Children Room of Blambangan Banyuwangi Hospital after being given bibliotherapy, Respondents showed that there were changes, namely from the level of mild anxiety before treatment, there were 4 (20%) respondents after treatment experienced an increase of 16 (80%) respondents, moderate anxiety before treatment 12 (60%) respondents after treatment experienced a decrease of 4 (20%) respondents and severe anxiety before treatment 4 (20%) respondents after treatment 0 (0%) respondents. Through reading, children are more able to explore, imagine, and expand knowledge [18]. Reading activities in bibliotherapy provided by health workers are expected to be able to overcome children's problems by asking them to read storybooks about the character of the story that has been successfully resolved, which is similar to what children experience so that it can help build the mind and the possibility of solving problems related to the problem diseases faced by children, disability, alienation, separation during treatment, and when undergoing treatment in the hospital [19].

School-age children undergoing hospitalization allow stress. This stress of hospitalization will pose a threat to physical integrity and self-system. This threat will stimulate the autonomic nerves to increase the release of adrenaline (epinephrine) so as to cause physiological and psychological anxiety response, the autonomic nervous system is a nerve that works without realizing it or without the central nervous system commands, when the child faces a procedure that causes pain naturally the child will show feelings of worry, nervousness, tension, anxiety, anger, whimpering and confusion [18]. This is consistent with the results of the study in Table 4 that there are 4 respondents (20%) before and after treatment showing a constant level of anxiety, namely the mild category anxiety level. This is because physiological and psychological reactions to anxiety in children can only be reduced but cannot be eliminated in children because the psychological development of children lacks good coping and some children are less able to communicate stress

openly, anxiety responses will still occur when children face stressful procedures as a result of the natural autonomic nerve response in children.

The results of the study in the children's room of 2016 Blambangan Banyuwangi Hospital, it was found that most anxiety levels decreased to 16 respondents (80%) in the mild anxiety category, this indicates that the factor of diversion of anxiety by viewing and reading picture books can improve children's ability to imagine and be creative. Thus the child is no longer easy to cry, fear, restless, rebel, struggle, hugging parents because the child's psychological condition becomes relatively stable. So complex are nursing actions, anxiety in children appears when hospitalized in a hospital, usually, children protest by crying, trying to find parents and physically forcing parents to always be with him. Bibliotherapy is a form of technical exploration and style, exploration of ideas, and can even be an expression and self-actualization because, in addition to having practical functions, reading also has a function for psychological therapy.

After analyzing the data, the data is then processed manually, so the calculation of the number of ranks/levels of the smallest is 199. Next, figure 199 is compared with the critical price of Wilcoxon Table VIII where at $N = 20$ with a level of error 0.05 obtained a number of 52. The figure $199 > 52 = H_0$ rejected and H_a was accepted, there was a difference in the level of anxiety before and after biblio therapy which meant that there was a significant effect of bibliotherapy on anxiety levels in school-aged children (7 - 12 years) in the Children's Room of Blambangan Banyuwangi General Hospital in 2016. Bibliotherapy has a very significant effect on the level of anxiety of children, these results indicate bibliotherapy can reduce the level of anxiety of children who experience hospitalization because bibliotherapy can help children identify and express their feelings that are supported by a comfortable relationship with nurses and children [18].

Study Limitations

Researchers have not found references books that can be recommended for use in bibliotherapy. Researchers determine the book used in this study based on age and children's reading ability. Not all children treated can be directly used as a research sample because some children are not able to be given bibliotherapy such as children who look too hysterical because of the impact of hospitalization and also children who are too weak and tired related to the disease process experienced, so that the time measurement process anxiety until giving bibliotherapy to each child is different in range which should be in accordance with the guidelines for the procedure of giving bibliotherapy.

CONCLUSION

The conclusion of this study shows that the factor of diversion of anxiety by viewing and reading picture books can improve a child's ability to imagine and be creative, thus the child no longer easily cries, fears are nervous, rebels, struggles, embraces parents because the child's psychological condition becomes relatively stable. The complexity of nursing actions, child anxiety also arises

when hospitalization in a hospital, children usually protest by crying, trying to find parents and physically forcing parents to always be with him. Bibliotherapy is a form of technical exploration, idea exploration, and can even be an expression and self-actualization because, in addition to having practical functions, reading is also proven to have a function for psychological therapy.

the influence of bibliotherapy on the level of anxiety due to hospitalization for children aged 7-12 years in the Children's Room of Blambangan Banyuwangi Regional Hospital in 2016 that most of the respondents in the Blambangan Banyuwangi Regional Hospital before being given bibliotherapy experienced anxiety in the medium category and after being given bibliotherapy most of the respondents in The Children Room of Blambangan Banyuwangi Hospital experienced mild category anxiety, thus there was an effect of bibliotherapy on the anxiety level of school-aged children (7 - 12 years) due to hospitalization in the Children Room of Blambangan Hospital.

Declarations

Authors' contributions

These authors contributed equally to this work

Ethics approval and consent to participate

Not applicable

Consent for publication

Not applicable

Availability of data and materials

I approve of my research data is publication

Competing interests

There aren't conflicts of interests in the study

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