THE INFLUENCE OF BIBLIOTHERAPY ON CHILDREN'S PSYCHOLOGICAL RESPONSE DURING HOSPITALIZATION: A SYSTEMATIC REVIEW

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Fear, anxiety, stress are emotional parts and the impact of a child's psychological response while undergoing hospitalization. The purpose of this review is to determine the effect of bibliotherapy on stress hospitalization and anxiety in children who are hospitalized. Data sources were obtained from PubMed, Science Direct and Google Scolar. Data were collected through the Search String search method in accordance with the inclusion criteria, namely 1) Pediatric patients undergoing hospitalization in the children's hospital room 2) Patients included in the category of children aged 2.5-14 years, 3) Output of stress hospitalization and anxiety studies were decrease. Article published in 2010-2019. Analysis studies using the Systematic Review with appraisal studies using the Critical Appraisal Skills Program (CASP), and the synthesis method uses the PICO (Population, Intervention, Compare, and Outcame) approach. The results of the study found that there were 10 articles according to eligibility to review the effect of bibliotherapy on reducing stress in hospitals and anxiety. With significant heterogencity in bibliotherapy comparisons. Reduction in hospitalization stress 4.45 and anxiety 4.7 to 13.87 (p<0.05). The implications of bibliotherapy research can reduce the stress of hosptalisation and anxiety in children so that they have a psychological response through coping that is adaptive and cooperative in medical and nursing implementation. In conclusion, bibliotherapy influences changes in hospitalization stress and anxiety and has implications for outcomes that can be applied to children who experience both hospitalization and anxiety stress.

Keyword: Bibliotherapy, Stress hospitalization, Children's Anxiety

Introduction

Hospital treatment or what is referred to as hospitalization is an emergency or deliberate process that requires the child to be cared for until repatriation (Widyaningrum and Siwi, 2019) Research that examines children's fears Because hospitalization is carried out on 90 children with an average age of 4-6 years finding that 91% of children experience fear. After identification of the causes of fear are mostly due to nurses' medical actions, fear of being a patient, fear associated with the stage of child development. Other fears relate to the

environment and relations with hospital staff (Salmela, Salantera, & Aronen, 2009 in Ball, Blainler & Cowen, 2012). Fear, anxiety, stress are part of the emotional impact of a child's psychological response that is a response, behavior or attitude towards certain stimuli / problems related to the state of the soul in children. This can be seen from the child's cognitive, children's emotions, and social behavior.

Data from Ilmiasih's research (2016) showed that most children treated at the University of Muhammadiyah Malang Hospital performed invasive measures in the form of venous blood collection and infusion and a small portion of intracutaneous injection. From these

performed pain management results measures with lidocaine spay and obtained results that almost half of children experience moderate pain when taking venous blood (Ilmiasih, 2017). In this study it was concluded that there was still not enough physical pain management measures caused by the child still aching due to experiencing stress and anxiety. Another possibility is that the child does not understand and is not ready for the action to be taken.

Treatment efforts need to be done in helping to reduce stress by paying attention to psychological readiness to understand children with the actions to be taken. This effort can be with bibliotherapy that is giving stories or story books to children associated with situations and characters similar to those faced, but characters that are different from the reader can also increase empathy and understanding for the reader. Bibliotherapy readings for children have also been developed to suit almost all problems encountered (Duncan, 2010).

The use of bibliotherapy can be adjusted to the problem in the hospital and the purpose of the invasive action taken. The experience of the contents of this story will be an illustration of how the action is carried out so that there is no excessive perception and the child understands the action to be carried out. Bibliotherapy has been widely used in improving coping in the face of the processor, improving emotions and improving mental health (Yuan et al., 2018).

This review aims to find out and examine the literature (examine the literature) whether there is an effect of bibliotherapy measures there are changes in stress hospitalization and anxiety in children undergoing hospitalization in hospitals. Researchers conducted a review of research using quasy experimental and pre-experimental designs related to the effect of bibliotherapy on changes in stress hospitalization and anxiety in children.

Method

Protocol and Registration

In this study the method of design review analysis is used: Systematic Review and in accordance with specific inclusion indicators in the selection of documents through a comprehensive search system (Comprehensive literature search).

Eligibility Creteria

The Eligibility Criteria in this study are based on the inclusion criteria to eliminate and select data. Types of study using Pre-experiment and Ouasy effect Experiment about the of bibliotherapy on children treated hospitals. There are no restrictions, and document publications are reviewed, document publication year is 2010-2020. Respondents are children who are cared for in hospitals. The type of intervention is the provision bibliotherapy which can influence the stress of hospitalization and anxiety so that it affects the coping of children against nursing and invasive actions in children who are being treated in hospital. Outcame measured was stress hospitalization and anxiety.

Information Sources

This research is to identify from the search for electonic databases, and search for reference list articles, there are no language restrictions on the article. This research was taken from PubMed NCBI's electronic database, Science Direct and Google Scholar, through database scanning, and article screening conducted independently researchers. by researcher follows the requirements in fulfilling the inclusion criteria.

Search

The researcher used the entire electronic search strategy for electronic database, with limitations on

inclusion criteria. Researchers use Search Strings.

Data Collection Process

The researcher identifies data using extraction sheets through the PICO (Population, Intervening, compare, and outcame) approach. Researchers extracted and checked data from documented data. The data was also identified by the facilitator, for a review of the extraction results by the researcher, after which a discussion was made related to the results of the data extraction that had been carried out by the researcher. Researchers do a Critical Appraisal.

Data Items

Data extracted information include; 1) Characteristics of respondents include the age of the child, 2) Children who are hospitalized in hospital 3) Types of interventions namely bibliotherapy 3) Outcame types measured include stress hospitalization and anxiety

Risk of Bias in Individual Studies

The researcher validates the literature by extracting data. The researcher identifies the research in the literature whether it has been carried out in accordance with the procedure, and is measured using a validated tool, and also the method of collecting data in whether the blank method is carried out. The researcher explores variability in the results of the study (heterogeneity), and the determines researcher the objectives or hypotheses before conducting the analysis. Researchers in identifying the effect of bibliotherapy in each literature might produce different effects according to the research methodology used. The possible bias in this study is that respondent children with different age groups from 2.5 - 14 years old.

Summary Measures

The main in the impact administration of bibliotherapy in children undergoing hospitalization in hospitals is reduce hospitalization stress and anxiety. Researchers conducted a review of 10 articles with the Critical Appraisal Skill Program (CASP) to determine the strength of the influence of bibliotherapy, after which data extraction was carried out using the PICO approach to identify each indicator in the article. Systematic Review on the effect of this bibliotherapy to analyze the effects of an intervention. Researchers also analyzed the follow-up of the bibliotherapy measures taken. The main objective in this research is to determine the effect of bibliotherapy on stress hospitalization and anxiety in children.

Result

Study Selection

Researchers get a total of 10 research articles in accordance with the inclusion criteria. 10 research studies that fit the criteria include Varghese, 2015, Chobam, 2012, Fetriani et al., 2017, Yudianto & Fitriyah, 2010, Lestiawati et al., 2019, Apriza, 2017, Widyaningrum & Siwi, 2019, Dwinugrahaningtyas & Ismayati, Ilmiasih, 2019, 2018 and Sarah & Manik, 2019.

Researchers conducted a PubMed NCBI literature search strategy, Science Direct and Google Scholar Total data obtained using the search string. Preliminary results of the dances on PubMed NCBI 573 obtained data, Google Scolar obtained 328 data and Science Direct obtained 699 data. The

data is identified the possibility of duplication and conducted an abstract review whether it fits the research criteria. After identifying the data, 36 suitable data were obtained, after which Eligibility was obtained, 24 literatures were obtained. Researchers identified in-depth articles and

articles that can be used (include) totaling 10 articles.

Study Characteristics

Characteristics 10 literature studies have characteristics that are based on research Varghese, (2015) with respondents consisting of 30 control groups and 30 interventions carried out for 2 times for 2 days, then measure the stress of hospitalization between the two groups. (t (29) = 2.04) (p < 0.05) and impact the child more cooperatively when taking care of the hospital. The results of the research Lestiawati, Natalia & Dewi, (2019) with the number of respondents 18 children aged 6-8, have a minimum of children who have been treated 2 days in the hospital so that they have the experience of adapting even boredom while being treated, with the length / number of bibliotherapy measures that are not explained in research journals, reduce stress hospitalization in children by measuring through hospitalization stress questionnaire (p> 0.05). Based on Ilmiasih literature, (2019) with the number of respondents 14 children aged 6-12. Respondents were given bibliotherapy intervention 2 times a day for 2 days (4 interventions). The results showed that the child experienced a reduction in stress hospitalization 4.45 There was also a decrease in stress on invasive measures, respondents were more cooperative on invasive infusion and blood drawings after being given bibliotherapy (p> 0.05). In the literature source Dwinugrahaningtyas & Ismayati, (2018) with 7 child respondents and 7 parents. Respondents were given bibliotherapy based on the Qur'an 2 times a day. Then the stress of hospitalization was assessed before and after the results of stress reduction in the hospital, tended to be cooperative, anxious, and also felt happy and comfortable, which could help the healing process of the disease (p < 0, 05). Yudianto & Fitriyah research results, 2010 with a sample of 20 people in children aged 3-6 years, the intervention group was

given bibliotherapy for 2 consecutive days, then both levels of anxiety were measured. There was a decrease in anxiety and maladaptive response in preschoolers when infusion was placed (p < 0.05).

Chobam research results, (2012) on 55 respondents aged 7-14 children. The characteristics of this study are that children already have less than 3 months of hospitalization experience and 6 months before. Bibliotherapy measures involve parents and are carried out 12 times a week. The therapy was able to reduce the stress of pediatric patients who were hospitalized with p = 0,0006 (p < 0.001). Literature based on Fetriani et al., 2017, with the number of respondents 30 preschool age children 3-5 Characteristics of respondents are children who have anxiety when hospitalized both mild, moderate and severe, then have the characteristics of being treated 1-6 days. In the intervention group Bibliotherapy was performed and then anxiety was measured by HARS but it was modified, the results obtained in the intervention group showed anxiety values could drop by 7.33 with p =0.001 (P < 0.05). This is also in line with Apriza's research, (2017) in 19 respondents of pre-school age children that is 2.5-5 years, obtained a decrease in anxiety 4.7 with p = 0.001 (p < 0.05). The results of Widyaningrum & Siwi's study, 2019 among 20 respondents aged 7-12 years, the characteristics of the respondents in this study were that the respondent was the first / second time treated in a hospital. The action of bibliotherapy was also added with Snack Ladder playing therapy in the intervention group, the results obtained decreased anxiety 9.9 with p-value <0.001. Sarah & Manik research results, 2019. With 30 respondents children aged 3-6 years having characteristics of children undergoing hospitalization for at least 1 day, the treatment of bibliotherapy interventions with a duration of 20 minutes/day carried out for 3 days, obtained a decrease in anxiety as much as 13.87. (p = 0.000 < 0.05).

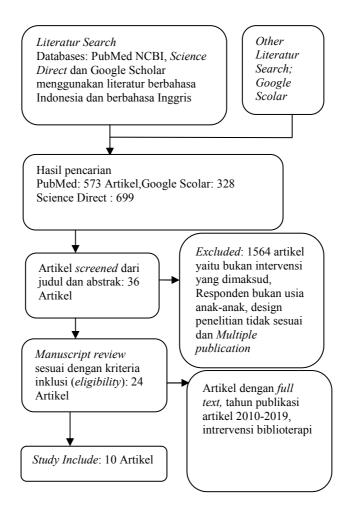


Figure 1. Diagram Flow Chart Sintesa Systematic Review

Synthesis of Result

The results of synthesis forest plot found that from 10 research studies using Pre-Experiments and Quasy Experiments. The literature that used pre-experiments was 4 literatures while 6 literatures were used as design experiments. All of them used 2 groups, namely the control group with the intervention / treatment group with the subject of patients with the age of the child being treated in the children's hospital room.

Table 1. Data Extraction with the PICO Approach

Citations	Setting	N	Age range (Years)	Inclusion Criteria	Design	Protocol	Follow- Up	Outcame Finding
Varghese, 2015	Inpatient Children's Room Hospital	1:30 C:3 0	6-12	Child-aged patients who are hospitalized , both male and female	Quasy Experiment	Respondents consisted of 2 control and experimental groups The experimental group was given biblioterpai action 2 times in 2 days The control and experimental groups measured the stress of hospitalization	2 meeting s in 2 days	Bibliotherapy is effective in reducing stress of children who are hospitalized with medical conditions. Therefore, it can be used as adjunctive therapy in hospital settings to reduce stress. (t (29) = 2.04) (p < 0.05)

Citations	Setting	N	Age range (Years)	Inclusion Criteria	Design	Protocol	Follow- Up	Outcame Finding
Chobam, 2012	Inpatient Children's Room Hospital	55	7-14	Child-aged patients who are hospitalized, both male and female. Has been hospitalized 3 months or 6 months before	Pre Experiment	Respondents consisted of 2 control and experimental groups The experimental group was given bibliotherapy The control and experimental groups were measured by anxiety using a questionnaire Acts of bibliotherapy involve parents	times a week	Bibliotherapy reduces stress on pediatric patients who are hospitalized. Reduction in anxiety p = 0,0006 (p < 0.001)
Fetriani <i>et al.</i> , 2017	Inpatient Children's Room Hospital	I:15 C:15	3-5	1. Children who experienc e mild, moderate and severe anxiety 2. Can communi cate and be cooperati ve 3. Treated 1-6 days	Pre Experiment	1. Respondents consisted of 2 control and experimental groups 2. The experimental group was given bibliotherapy 3. The control and experimental groups measured HARS anxiety with a modified questionnaire		p=0,001 (P<0,05)
Yudianto & Fitriyah, 2010	Inpatient Children's Room Hospital	20	3-6	Patients aged 3-6 years who are treated in the children's hospital room	Quasy Experiment	Respondents consisted of 2 control and experimental groups The experimental group was given bibliotherapy Both groups were measured with anxiety by questionnaire s and observation sheets	2 hari	There was a decrease in maladaptive stress in children (p <0.05)
Lestiawati, Natalia & Dewi, 2019	Inpatient Children's Room Hospital	18	6-8	Children are treated for at least 2 days in the hospital, and children 6-8 years old. Conscious well, no hearing loss / Vision	Quasy Experiment	Respondents consisted of control and experimental / treatment groups. Then the treatment group is given action. Then both of them measured the stress level of the hospital	2 days	There is an effect of giving bibliotherapy measures to reduce the stress of hospitalization for school-age patients who are hospitalized (p <0.05)

Citations	Setting	N	Age range (Years)	Inclusion Criteria	Design	Protocol	Follow-Up	Outcame Finding
Apriza, 2017 (Kaushik et al., 2006)	Inpatie nt Childre n's Room Hospita	19	2,5 - 5	Preschool age children who are hospitalized	Pre Experiment	Respondents consisted of 2 control and experimental groups The experimental group is given biblioterpai action The control and experimental groups were measured by their anxiety	-	Reduction in anxiety p = 0.001 (p <0.05)
Widyaning rum & Siwi, 2019	Inpatie nt Childre n's Room Hospita I	20	7-12	1. Children who are treated for the first time are treated on the first or second day 2. Ages 7-12 years 3. Do not have physical disabilities, cognitive and language disorders; have enough physical abilities	Pre Experiment	Respondents were given bibliotherapy and played Snack Ladder and then their anxiety was measured		Decreased anxiety p- value <0.001
Ilmiasih, 2019	Inpatie nt Childre n's Room Hospita	14	6-12	Children who are hospitaliz ed Age 6-12 years	Quasy Experiment	Respondents were given bibliotherapy twice a day	2 times a day in 2 days	Decreased stress so that it is cooperative towards invasive infusion and blood sampling (p <0.05)
Dwinugrah aningtyas & Ismayati, 2018	Inpatie nt Childre n's Room Hospita	14 (7 chi ldr en and 7 par ent s)	-	Children and parents who are cared for in the nursery	Quasy Experiment	Respondents were given bibliotherapy based on the Qur'an. Then the stress of hospitalization was examined with a questionnaire filled out with the help of parents	2 times a day	Reduction of stress in the hospital, also feels happy and comfortable, which can help the healing process of the disease (p <0.05)
Sarah & Manik, 2019	Inpatie nt Childre n's Room Hospita	I:1 5 I: 15	3-6	1. Composit ional awarenes s 2. Can communi cate 3. At least 1 day of hospitaliz ation p; C: control groups	Quasy Experiment	Consists of 2 groups, namely control and treatment. The treatment group was given bibliotherapy with a duration of 20 minutes / day for 3 days.	3 times with a duration of 20 minutes	There is an effect of bibliotherapy on the anxiety level of preschoolaged children undergoing hospitalizatio n (p = 0,000 <0.05)

Discussion

The results of a systematic review study found that bibliotherapy significantly

changed the stress of hospitalization, anxiety in children while being hospitalized (see table 1). Bibliotherapy can be applied easily either independently or involving parents / caregivers who are close to the child. All systematic review literature consists of two groups: the control group and the intervention / treatment group.

The possible bias is that not all aspects are carried out blank methods, limitations of the search language used by researchers to review, and publication in journals that cannot be downloaded / paid for

The results of the analysis obtained 10 research studies that fit the criteria and interests (Varghese, 2015), (Cobham, 2012), (Yudianto and Fitriyah, 2010), (Fetriani et al., 2017), (Lestiawati, Natalia 2019), Ayu, (Apriza, 2017), (Widyaningrum and Siwi, 2019), (Ilmiasih, 2019). (Dwinugrahaningtyas and Ismayati, 2018), and (Sarah and Manik, 2019).

Systematic Review found studies that can be done with bibliotherapy in pediatric patients aged inpatients. Study of the measurement of the success of the action of bibliotherapy is by measuring through questionnaires and observations related to stress hospitalization and anxiety of children while undergoing medical and nursing actions while undergoing hospitalization.

Play is an activity where children can perform or practice skills, give expression to thoughts, be creative, prepare themselves to act and behave in adults (Tielsch Goddard, 2011) (Sarah and Manik, 2019) Games will make children free from anxiety and stress experienced because by doing games, children will be able to transfer their pain to the game. It is hoped that children's anxiety will soon decrease, so that it can make children work more closely with health workers.

Bibliotherapy psychological stress during infusion in the room. Decreased psychological stress will affect the hypothalamus, which is will further affect the pituitary thereby reducing the excretion of ACTH (Adrenal Cortico Tropic Hormone) which will affect the adrenal glands to suppress cortisol. This emphasis will increase the immune response in children. Children can deal with stress and anxiety by moving the

source of coping in the environment so that they are able to cooperate with medical / nursing actions in the hospital. (Yuan et al., 2018).

Bibliotherapy is a technique that can stimulate discussion because of the fear. guilt, and shame that children feel. Reading a character in a book can overcome the problem where the problem is similar to the problems faced by children, this can help children verbally express their feelings about the problems children face to the nurse (Apriza, 2017). The purpose of using bibliotherapy is to children overcome emotional disorders related to life problems (in this case anxiety hospitalization) by reading related literature. Stories in bibliotherapy can be used as stepping stones for discussion and the possibility of solving self-crisis by reading directly supporting activities. (Yudianto and Fitriyah, 2010) (Duncan, 2010). reading stories in which the character successfully resolves the problem at hand can help children overcome and change the problems they are facing. For example, when children have physical obstacles and read about characters who have physical obstacles also succeed in overcoming problems about the physical obstacles they face. Children who feel they have obstacles or

weaknesses can learn that many children who are in situations like themselves are able to successfully overcome the problems they face. This can develop self-awareness about the problems currently faced by children (Vélez and Prieto, 2018) (Yuan et al., 2018).

The results of the data can be that analyzed the Bibliotherapy intervention can be applied to children undergoing hospitalization. The strength of this study is that it has the same characteristics and is easy to apply to the health care setting anywhere, bibliotherapy interventions can be carried out by nurses and those closest to those who care for so that they are implemented for children. Limitations in all of these studies are not explained in terms of other confounding factors that

influence the reduction in hospitalization stress or anxiety in children.

Implications Bibliotherapy of Interventions can be applied by health professionals as one of the nurses' independent measures to hospitalization stress and anxiety in children who are hospitalized, management varies for at least 2 days. It will be more effective with a variety of stories during several meetings and involving parents to accompany the child. Bibliotherapy has a significant effect (p <0.05) in improving the cooperative behavior of children in following nursing actions during hospitalization, increasing coping with invasive actions and as a diversion of attention so that children have a more stable emotional state when they are at home. sickness / hospitalization.

Conclusion

Bibliotherapy given at least 2 days / 2 times up to 12 times in 6 days can affect a decrease in stress hospitalization by 4.45 and anxiety 4.7 to 13.87 in children when undergoing hospitalization so that they are more cooperative in undergoing nursing actions in the hospital.

The results of the systematic review can be recommended to future researchers, namely how the effectiveness of Bibliotherapy modification as well as collaboration with other measures on the success of invasive measures in children when hospitalized.

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