

# Effectiveness of Bibliotherapy and Snake and Ladder Game's Therapy Combination Towards Hospitalization Stress in School Ages

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## ABSTRACT

**Background:** The stress of hospitalization in school-age children affects the child's care and healing process. Stress hospitalization shown by children is individual, depending on the stage of development of the child's age, previous experience of illness, available support systems, and coping abilities possessed. Play therapy helps children to express emotions, conflicts within children, and feelings experienced during treatment. The combination of Bibliotherapy and Snake and Ladder Game's Therapy is used as play therapy to reduce the stress of hospitalization in school-age children.

**Objectives:** This study aims to identify the effectiveness of a combination of Bibliotherapy and Snake and Ladder Game's Therapy on stress hospitalization in school-age children.

**Methods:** The design of this study used Pre experimental with the One Group Pretest-Posttest approach. The sampling technique used is simple random sampling. The study was conducted on children aged 7-12 years, as many as 20 respondents. The statistical test used is a paired t-test.

**Results:** The results showed that there was a significant effect ( $p$  value  $<0.001$ ) a combination of Bibliotherapy and Snake and Ladder Game's Therapy on the stress of hospitalization in school-age children.

**Conclusions:** Researchers recommend providing a combination of Bibliotherapy and Snake and Ladder Game's Therapy into the Standards Operational Procedures of Hospitalization to reduce the stress of hospitalization in school-age children.

**Keywords:** *Bibliotherapy, Snake and Ladder Game Therapy, Stress hospitalization*

## INTRODUCTION

Hospitalization is a process of treating children in a hospital. According to Wong, et al, hospitalization is a planned (emergency) process, requiring that children stay in the hospital, undergo therapy and care until return home (1). Hospitalization is the entry of an individual into a hospital as a patient for a variety of reasons such as diagnostic examinations, surgical procedures, medical care, administration of drugs, stabilizing or monitoring body conditions (1,3).

Nationally, of all children who have been hospitalized in the past year, most have been hospitalized in government hospitals (39.33 percent) and private hospitals (38.47 percent).<sup>14</sup> Research Lemos et al, shows the percentage of school-age children (7–11 years) who are hospitalized at 47.62%.<sup>15</sup>

The impact of hospitalization risks disrupting the child's growth and development and the healing process. The stress of hospitalization in school-age children affects the child's care and healing process. The short-term effects of anxiety and fear that are not immediately treated will make the child reject the actions of care and treatment given.<sup>13</sup> Long-term effects of stress hospitalization that are not immediately addressed will result in difficulties and poor reading skills, language disorders and cognitive development, decreased intellectual and social abilities and immune function.<sup>13</sup> Stress hospitalization shown by children is individual, depending on the stage of development of the child's age, previous experience of illness, available support systems, and coping abilities possessed.

Hospitalization stress management can use several techniques, such as: drawing, coloring, music, medical play, and play therapy. Play therapy helps children to express emotions, conflicts within children, and feelings experienced during treatment. Playing helps children reduce stress, develop a sense of humor, and the media express feelings of anxiety, fear, pain and guilt.

According to research, bibliotherapy is therapy using literature to support the needs of children to process difficult or painful personal experiences, the child's opportunity to explore events that are almost the same as events experienced with different versions so that children are not too focused on events. The literature used is not limited to books, poetry, or creative writing, but games, short stories, novels, essays, magazine articles, sections from

textbooks (3,9,10) According to Vries, bibliotherapy helps children identify and validate feelings, help children realize that other children have problems similar to those they experience, stimulate discussion, cultivate thoughts and self-awareness, find solutions, and decide constructive coping (9,10).

Snake And Ladder Game's Therapy facilitates the need for games with peers that occur in the development of school-age children. (12,15) The game is modified according to the child's needs for positive self-concept during hospitalization, thus forming constructive coping with stress. The combination of Bibliotherapy and Snake And Ladder Game's Therapy is used as play therapy to reduce the stress of hospitalization in school-age children.

## MATERIALS AND METHODS

The design of this study used Pre experimental with the one Group Pretest-Post test approach. The sampling technique used is simple random sampling. The study was conducted on school-age children, as many as 20 respondents. The inclusion criteria of this study were children were treated for the first time in a hospital and the first or second day of hospital admission; children aged 7 - 12 years; lacks physical disabilities, cognitive and language disorders; have sufficient physical ability to take part in the game; Parents and children who are willing to be respondents and follow the research until the end. The exclusion criteria for this study were that children had been treated > 2 times in the same or different hospitals; Children experience conditions: severe pain, high fever, moderate to severe dehydration, or get therapy through NGT. The statistical test used in this research is paired t-test.

## RESULTS AND DISCUSSION

The results of the study were in the form of Respondents characteristics tables and analysis table of the effectiveness of the combination of Bibliotherapy and Snake and Ladder Game's Therapy to Reduce Stress Hospitalization in School Age Children in Regional Hospital in Yogyakarta.

### **Characteristics of School Age Respondents hospitalized by Children Ward Regional Hospital in Yogyakarta**

The majority of respondents aged 7-9 years as many as 12 children (60%), male sex as many as 12 children (60%). Most were hospitalized because of

febris as many as 7 children (35%), with the most nursing care being administered drugs by infusion of 13 children (65%), with a length of stay of at most 3 days (45%), and partly the large waiters were 15 respondents (75%). The characteristic of the respondents are presented in Table 1.

**Table 1. Characteristics of school-age respondents hospitalized by children ward regional hospital in yogyakarta (n = 20)**

Characteristics	Frequency	Percentage (%)
<b>Age (years old)</b>		
7 – 9	12	60
10 -12	8	40
<b>Sex</b>		
Male	12	60
Female	8	40
<b>Medical diagnosis</b>		
Febris	7	35
Fracture	3	15
Typhoid	2	10
DHF	1	5
Asthma	1	5
Diarrhea	1	5
Appendicitis	1	5
others	4	20
<b>Nursing Intervention</b>		
plug infusion	13	65
dressing and casts	3	15
nebulisation	1	5
wound care	1	5
others	2	10
<b>Length of stay (days)</b>		
3	9	45
4	8	40
5	3	15
<b>Caretakers / Parents waiting</b>		
Mother	15	75
Father	5	25

Source: Primary Data (2019)

Based on table 1 the results show that the majority of respondents aged 7-9 years were 12 people (60%). Research Lemos, et al, shows the percentage of

school-age children (7–11 years) who are hospitalized at 47.62%. (7) Stress during hospitalization was found more in the age group  $\geq 10$  years while less in the 8-10 year age group.<sup>4</sup> During hospitalization the child experiences separation from family, is in a foreign environment, and must undergo several nursing or medical procedures. Many reactions that arise due to these conditions. Broadly speaking the reactions that arise are influenced by age of development, previous experience with illness, separation, hospitalization, coping skills possessed, severity of diagnosis, and the existing support system (5).

Based on table 1 the results show that the majority of respondents were male as many as 12 people (60%). Boys tend to be more prone to stress from hospitalization due to several factors, including: attachment to high peer groups or limitations in movement and play. Stress levels in boys ( $30.4 \pm 3.7$ ) are higher than girls ( $29.6 \pm 2.7$ ) but there is no significant relationship between stress levels and gender (6, 15).

Based on table 1 the results showed that most of the medical diagnoses of febrile respondents were 7 people (35%), fracture 3 (15%), typhoid 2 (10%). Commodari's Research determined that respondents who were divided into 55% of patients had respiratory disease, 30% by gastrointestinal pathology, 9% by allergic reactions and 11% by other temporary pathologies (7).

Based on table 1 the results show that the majority of respondents received nursing care in the form of drug administration through infusion of 13 people (65%), dressing and casts 3 (15%), and nebulisation 1 (0.5%). This is in line with A'dillah's research that the second visit was the administration of storytelling therapy for three minutes using tools in the form of animal shaped hand puppets (4). After that, the nurse gives action (in this case the administration of drugs through an IV line) to the respondent and the researcher observes the respondent's anxiety score and records it on the observation sheet.

Based on table 1 the results show that the majority of respondents had the longest stay of 3 days (45%). More than half of children (65.2%) are hospitalized <3 days.<sup>6</sup> The length of stay of a child has an influence on the child's anxiety score. The longer he is treated, then the anxiety score will be lower (4).

Based on table 1 the results showed that most of the parents or caregivers of female respondents who were respondents were 15 (75%). Based on

the Commodari's research states that as many as 179 caregivers are mothers of children who live in hospitals, 18 are fathers, 5 are brothers or sisters, 17 are other siblings (grandmothers or aunts) (7).

### The Effectiveness Of The Combination Of Bibliotherapy And Snake And Ladder Game's Therapy On The Stress Of School-Age Hospitalization In Children's Ward Regional Hospital In Yogyakarta

Table 2. Paired t-test analysis(n=20)

Variabel	Pre-test	Post-test	p-value
Hospitalization stress	47,6±8,33	67,4±7,54	<0.001

The results of statistical analysis showed a significant difference between before and after the intervention of combination of Bibliotherapy and Snake and Ladder Game's Therapy on the reduction of stress hospitalization in school-age children hospitalized in the Children's Ward Hospital of Yogyakarta. After two times interventions, there was a significant increase (p value <0.001) on stress of hospitalization of children. This shows that the intervention in the form of combination of Bibliotherapy and Snake and Ladder Game's Therapy can effectively reduce the stress of children hospitalized in the Children's Ward Hospital of Yogyakarta. The combination of Bibliotherapy and Snake and Ladder Game's Therapy can be an alternative problem solving technique in dealing with stress hospitalization in children that can be done by nurses and parents.

Based on Yuan et al, bibliotherapy was significantly more effective than the control conditions in reducing the symptoms of depression or anxiety (standardized mean difference, -0.52; 95% confidence interval [CI], -0.89 to -0.15).<sup>10</sup> Bibliotherapy CBT had significantly more all-cause discontinuations than some psychotherapies and control conditions (range of odds ratios, 2.48-9.32) (11).

Bibliotherapy can identify and explore children's emotions that are difficult to express. Similar studies are limited to only one pediatric diagnosis of respiratory disease, suggesting that the level of development has a significant impact on a child's response to hospitalization. School-age children are better able to cope with inpatient pressures than younger children because of their ability to reason, understand verbal explanations, communicate needs, express feelings about their experiences, and

tolerate separation from family. According to Piaget's theory, the concrete operational stage begins at the age of 7 years. At this age, children begin to develop logical reasoning skills and to understand causal relationships. This developing cognitive ability determines how children perceive situations such as medical experiences (8).

Based on Bhama et al, after the play session (Snake And Ladder Game's Therapy), reaction was reduced to a moderate level among 31.8%(14) of children than before the intervention, all children 100% (44) showed severe reaction to hospitalization (12). Games based on child psychotherapy can give children the opportunity to identify and express feelings.

The approach needed to overcome the stress of hospitalization for school-age children with specific handling according to the stages of physical-motor development, cognitive, language, emotions, social, and religion. Good communication and educational techniques that are packaged in appropriate play therapy are expected to reduce the stress of hospitalization in school-age children.

## CONCLUSION AND RECOMMENDATION

The combination of Bibliotherapy and Snake and Ladder Game's Therapy significantly reduces the stress of hospitalization in school-age children. The researcher recommends providing a combination of Bibliotherapy and Snake and Ladder Game's Therapy into Standard Operating Procedures Operational to reduce the stress of hospitalization in school-age children.

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