

## THE EFFECT OF STORYTELLING IN A PLAY THERAPY ON ANXIETY LEVEL IN PRE-SCHOOL CHILDREN DURING HOSPITALIZATION IN THE GENERAL HOSPITAL OF BUTON

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### ABSTRACT

**Background:** Anxiety is one of the psychical stresses experienced by children during hospitalization. A storytelling in a play therapy is considered effective in reducing anxiety.

**Objective:** This study aims to determine the effect of storytelling in a play therapy on anxiety level in pre-school children during hospitalization in the general hospital of Buton.

**Methods:** This was a quasi-experimental study with pretest-posttest control group design. There were 30 pre-school children selected in this study using accidental sampling, with 15 assigned in each group. The Pre School - Spence Children's Anxiety Scale (SCAS) was used to measure anxiety in pre-school children. Wilcoxon matched paired test was used to analyze the data.

**Results:** Findings showed that the mean of anxiety level in the intervention group in pretest was 42 and in posttest was 31.53. Wilcoxon matched paired test showed p-value 0.003 (<0.05), which indicated that there was a statistically significant effect of storytelling on the level of anxiety in pre-school children.

**Conclusions:** There is a significant influence of storytelling in a play therapy on anxiety levels in pre school children during hospitalization. It is suggested that this intervention could be applied as a nursing intervention to reduce anxiety in children.

**Key words:** storytelling, anxiety, hospital

### BACKGROUND

Hospitalization is often the first crisis children face, primarily because of a basic fear of not knowing what will occur and limited coping mechanism to deal with stressors. The main stressors of hospitalization in children include separation from

family, loss of control, body injury and pain,<sup>1,2</sup> which lead to child reactions in the form of anxiety due to separation, regression, apathy, depression, anger, sleep disturbances, and trauma due to painful procedures.<sup>3,4</sup>

Hospitalization is a stressful event for children and negative effects can occur such as lose of control, anxiety, refused to eat, often ask, weeping slowly, un-cooperative of health workers, frightened, unsure, lack of confidence, and feeling inadequate and insecure.<sup>5-8</sup> The safety level of each child is different, some children are more shy and anxious than others.<sup>9,10</sup>

Anxiety is one of the psychological stresses experienced by children during hospitalization.<sup>11</sup> Anxiety is an uncomfortable and anxious fear accompanied by an autonomous response, sometimes from unspecified or unknown to the individual.<sup>12</sup> Therefore, an effort to deal with anxiety is needed.

A play therapy is considered as one of treatments to cope with anxiety in children. Children can distract the pain on the play activities and relaxation.<sup>13</sup> Storytelling is one of playing techniques that can channel the child's emotions. Children can be taught to live the sadness, misfortune, sorrow, and be invited to share happiness, joy, profit and joy.<sup>14</sup> Through storytelling, feelings or emotions can be trained to feel and live various roles in life, thereby releasing fear, anxiety, expressing anger and enmity. The story used is a fairy tale because it can be understood, which can be viewed as a fantasy story and very imaginary.<sup>15,16</sup>

Based on the preliminary study in the General Hospital of Buton, there were 189 children treated in 2011, 185 people in 2012, 218 people in 2013, 225 in 2014, and 71 children in 2015.<sup>17</sup> Interview results with 6 children showed that two children could not stop crying until their mothers beside them, the other two children had no expression and no answer when being asked. Thus, this study aimed to determine the effect of storytelling in play therapy on the level of anxiety in pre-school children during hospitalization in the general hospital of Buton district.

## METHODS

### *Design*

This was a quasy-experimental study with pretest-posttest control group design, which was conducted on 25 May – 25 June 2015.

### *Research subjects*

The target population in this study was all children treated in the General Hospital of Buton. There were 30 pre-school children selected in this study using accidental sampling, with 15 assigned in each group.

### *Instrument*

The Pre School-Spence Children's Anxiety Scale (SCAS) was used to measure anxiety in pre-school children. There were 26 items with 5-Likert scale, which 0 = no symptoms, 1 = sometimes having symptoms, 2 = rarely having symptoms, 3 = often having symptoms, and 4 = very often having symptoms. Anxiety is categorized into four classifications and six sub-scale scores, with higher scores indicating greater severity of anxiety symptoms. Mild anxiety if score < 26, moderate anxiety if score 26-52, severe anxiety if score 53-78, and very severe if score > 79.

### *Intervention*

Each respondent was given a play therapy by a storytelling for 3 times by the researcher. The story used is a fairy tale, which is viewed as a fantasy and imaginary story. After telling the story, then the researcher asked the kids what the stories about and re-telling the stories. While the control group received a play therapy (no storytelling).

### *Data collection*

Data were collected after given study permission from the General Hospital of Buton. Informed consent was performed in each respondent. Pre-test was performed in

the first met with the respondents and posttest was done after 20 minutes of intervention.

#### Data analysis

Wilcoxon matched paired test was used to analyze the data.

## RESULTS

The results of pre-test as shown in the Table 1 indicated that 80% of respondents had moderate anxiety, 13.3% experienced severe anxiety, and 6.7% with mild anxiety

in the intervention group. While in the control group, as many as 60% of respondents had moderate, 33.33% experienced severe anxiety, and 6.7% experienced mild anxiety. Posttest result in the intervention group showed that 60% of respondents experienced moderate anxiety, and 40% experienced mild anxiety. While in the control group as many as 60% of respondents experienced moderate anxiety, 26.7% with severe anxiety, and 13.3% with mild anxiety.

**Table 1.** Distribution of Respondents based on the level of anxiety before and after intervention

Level of anxiety	Intervention		Control	
	n	%	n	%
<b>Pretest (n=15)</b>				
Mild	1	6.7	1	6.7
Moderate	12	80	9	60
Severe	2	13.3	5	33.3
Very severe	0	0	0	0
<b>Posttest (n=15)</b>				
Mild	6	40	2	13.3
Moderate	9	60	9	60
Severe	0	0	4	26.7
Very severe	0	0	0	0

**Table 2.** Effect of Storytelling in a Play Therapy on Anxiety Level In Pre-School Children during hospitalization In The General Hospital of Buton in intervention and control group using Wilcoxon matched paired test

Level of Anxiety	n	Mean	Standard of Deviation	Z	p-value
<b>Intervention group</b>					
Pretest	15	42	12.124	2.952	0.003
Posttest	15	31.53	10.690		
<b>Control group</b>					
Pretest	15	46.53	14.779	1.230	0.219
Posttest	15	44.67	14.554		

Table 2 shows that the mean of anxiety level in the intervention group in pretest was 42 and in posttest was 31.53. The Wilcoxon matched paired test showed p-value 0.003 (<0.05), which indicated that there was a statistically significant effect of storytelling on the level of anxiety in pre-school children. While the mean of anxiety level in the control group in pretest was

46.53 and in posttest was 44.67, with p-value 0.219 (>0.05), which indicated that there was no significant effect of treatment on anxiety level in pre-school children.

## DISCUSSION

Hospitalization in pediatric patients can cause anxiety and stress at all age levels.

For preschoolers, they view hospitalization as a frightening experience.<sup>18,19</sup> Anxiety is an individual response to an unpleasant situation and is experienced by all living things in everyday life.<sup>20-22</sup> Anxiety experienced by the child during hospitalization can have an impact such as the healing process of children can be hampered, decreased the spirit to recover and uncooperative against the act of treatment.<sup>23,24</sup>

Finding of this study revealed that there was a significant effect of storytelling therapy on the anxiety level in pre-school children. This research is in line with Samiasih, et al stated that there was a decreased anxiety in pre-school children before and after storytelling.<sup>25</sup> Similarly, Alfiyanti et al found that there was an influence of play therapy with the technique of telling on the level of anxiety due to hospitalization in preschool children at Roemani Hospital Semarang.<sup>26</sup>

Play is a natural communication tool for children, therefore play is a basic education and therapeutic application that requires development in early childhood education.<sup>27</sup> By telling the imagination of children under the impregnation of the story, asking back to the child, and the child multiply the information obtained from the story,<sup>28</sup> are able to improve the mindset of children and divert anxiety acquired due to hospitalization.<sup>29</sup>

Physiologically, this anxiety involves the anatomical structure in the brain. The aspect that explains the anxiety disorder is the presence of the hormone epinephrine, which is an adrenal hormone released in response to stress through the synthesis of catecholamine such as ephineprin.<sup>30</sup> Children who experience stress or anxiety will have increased epinephrine hormones in the body because of increased oxygen and glucose to the brain and muscles by increasing heart rate.<sup>31</sup> However, play therapy could decrease the increased

hormone epinephrine thereby decrease anxiety.<sup>32</sup> Beggarly *et al* said that stress management and play therapy with storytelling techniques reduce stress, anxiety and fear of preschoolers during hospitalization.<sup>33</sup>

Findings of this study provide the evidence that anxiety levels in pre-school age children in the General Hospital of Buton could be reduced by a storytelling in a play therapy.

## CONCLUSION

In this study, we found that there is a significant influence of storytelling in a play therapy on anxiety levels in pre school children during hospitalization. It is suggested that this intervention could be applied as a nursing intervention to reduce anxiety in children.

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