



# Fun Cognitive Games: A Play Therapy Approach to Alleviate Anxiety in Preschool Children with Thalassemia

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## ABSTRAK

Kecemasan merupakan salah satu bentuk respons emosional tidak menyenangkan yang sering dirasakan oleh anak penderita thalassemia selama proses hospitalisasi. Penelitian ini bertujuan untuk menganalisis pengaruh terapi bermain dengan menggunakan fun cognitive games terhadap gangguan kecemasan pada anak penderita thalassemia. Penelitian menggunakan pendekatan kuantitatif pre-eksperimen dengan desain One Group Pretest-Posttest pada anak usia prasekolah yang menjalani pengobatan di Rumah Sakit Ibu dan Anak (RSIA). Sampel dipilih menggunakan teknik purposive sampling dan melibatkan lima anak usia prasekolah. Instrumen yang digunakan adalah adaptasi dari instrumen HARS yang telah divalidasi serta diuji secara internal dan eksternal. Data dikumpulkan melalui kuesioner dan dianalisis menggunakan program SPSS. Uji hipotesa dilakukan dengan menggunakan uji Wilcoxon. Hasil pretest dan posttest menunjukkan penurunan gangguan kecemasan dari kriteria gangguan kecemasan berat sekali menjadi gangguan kecemasan ringan setelah anak menerima terapi bermain fun cognitive games. Uji Wilcoxon menghasilkan nilai  $Asymp.Sig. (2-tailed)$  sebesar  $0,042 < 0,05$ , yang mengindikasikan pengaruh signifikan terapi bermain fun cognitive games terhadap gangguan kecemasan pada anak penderita thalassemia usia prasekolah di RSIA. Simpulan dari penelitian ini adalah bahwa inovasi terapi bermain fun cognitive games efektif dalam menurunkan tingkat kecemasan pada anak penderita thalassemia usia prasekolah. Implikasi penelitian ini ialah dapat menjadi intervensi yang direkomendasikan untuk mendukung kesejahteraan emosional anak selama hospitalisasi.

## ABSTRACT

Anxiety is one form of unpleasant emotional response that is often felt by children with thalassemia during the hospitalization process. This study aims to analyze the effect of play therapy using fun cognitive games on anxiety disorders in children with thalassemia. The study used a quantitative pre-experimental approach with a One Group Pretest-Posttest design in preschool children undergoing treatment at the Mother and Child Hospital (RSIA). The sample was selected using a purposive sampling technique and involved five preschool children. The instrument used was an adaptation of the HARS instrument that had been validated and tested internally and externally. Data were collected through questionnaires and analyzed using the SPSS program. Hypothesis testing was carried out using the Wilcoxon test. The results of the pretest and posttest showed a decrease in anxiety disorders from the criteria for very severe anxiety disorders to mild anxiety disorders after children received fun cognitive games play therapy. The Wilcoxon test produced an  $Asymp.Sig. (2-tailed)$  value of  $0.042 < 0.05$ , which indicated a significant effect of fun cognitive games play therapy on anxiety disorders in preschool children with thalassemia at RSIA. The conclusion of this study is that the innovation of fun cognitive games play therapy is effective in reducing anxiety levels in preschool-age children with thalassemia. The implication of this study is that it can be a recommended intervention to support children's emotional well-being during hospitalization.

## 1. INTRODUCTION

Thalassemia is a genetic disease characterized by abnormalities in the red blood cells in the body which causes sufferers to require blood transfusions throughout their lives (Paloma, 2023; Rediyanto, 2023). This condition causes red blood cells in thalassemia sufferers to easily break and hemoglobin is

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reduced or not formed. Based on data from the Indonesian Thalassemia Foundation or the Association of Parents of Sufferers (YTI/POPTI), in 2018 there was an increase in the number of thalassemia sufferers from 4,896 in 2012 to 9,028 (Adyanti et al., 2020; Daud, 2020). The number of thalassemia carriers in Indonesia is still high, with the ten regions with the highest distribution of thalassemia disease in Indonesia coming from the region English with the bearer of the trait  $\beta$  of 3%, Medan of 4.07%; Yogyakarta, Maumere and Bangka each of 6%; Ambon of 6.5%; Jakarta of 7%; Banyumas of 8%; and Ujung Pandang of 8% (Rujito, 2019; Tursinawati & Fuad, 2018). The large increase in the number of thalassemia sufferers and the wide distribution of the disease indicate that thalassemia in Indonesia is a chronic disease that must be watched out for. Thalassemia is a chronic disease that is debilitating and fatal for children and their families. Previous studies have shown that children with thalassemia experience obstacles in attending school because they are often hospitalized for blood transfusions and are too weak to attend school (Nagiria et al., 2021; Hastuti, 2016). Therefore, thalassemia sufferers must always have regular blood transfusions to help overcome the lack of hemoglobin throughout their life. Until now, thalassemia cannot be cured except by bone marrow transplantation, besides that strong treatment is needed which involves regular blood transfusions and iron chelation therapy starting from an early age so that patients can survive (Huang et al., 2020; Angastiniotis & Lobitz, 2019).

In thalassemia sufferers, the common symptom that appears is anemia which occurs due to imperfect hemoglobin synthesis so that red blood cells are easily damaged (lysed) and broken down by the spleen. The clinical symptoms that appear in thalassemia sufferers vary depending on how many genes have changed due to the gene being passed on from the parents, then... There are three clinical features of thalassemia  $\beta$  namely thalassemia major or also called "Cooley's anemia", thalassemia intermedi (Mediterranean anemia) and thalassemia minor (thalassemia  $\beta$  trait/heterogigous thalassemia) (Suryoadji & Alfian, 2021; Origa, 2017). Children with thalassemia major show characteristics of anemia which make them look pale, lethargic and unable to do heavy physical activities, besides that physically the child has a small stature, experiences changes in the bones such as an enlarged head, prominent facial bones, flat nose bridge, protruding upper jaw, protruding central and upper incisors and experiences delayed sexual maturity (Hockenberry et al., 2019).

Thalassemia disease not only causes physical problems, but also psychological ones. 85% of 1,194,081 pre-school children in Indonesia who are undergoing hospital treatment experience anxiety, other data also states that 35 out of 100 children who receive hospital treatment experience anxiety (Ramadhayanti et al., 2023; Saputro & Fazrin, 2017). This proves that the percentage of children who experience anxiety disorders while undergoing treatment in the hospital is not small. Other research states that anxiety disorders are related to the use of health services (Ridarsyah, 2022; Dark et al., 2017). Research in America shows that anxiety is ranked 6th (out of 531) most experienced by children suffering from chronic diseases in the Pediatric care room, in addition to that, personal health care costs caused by health disorders in the United States itself are ranked 20th out of 150 disease conditions with the highest costs. (Berry et al., 2017; Bui et al., 2017). Thalassemia sufferers experience anxiety with symptoms that arise including worry, discomfort, and feelings of helplessness due to dependence on blood transfusions and desferal injections that function to reduce the accumulation of excess iron in the body as a result of blood transfusions. The treatment process experienced by children causes children to be fussy, unstable emotions and behavior, fear that makes children refuse to take medical action and refuse to undergo the treatment process (Ramadhayanti et al., 2023; Christiana & Hafsari, 2018). This uncooperative attitude can affect the results of the treatment and care program provided.

According to the American Psychological Association (APA), anxiety is a psychological condition that occurs with feelings of vague or painful worry, fear, or restlessness at varying levels (Amali, 2020; Rohmansyah, 2017). In general, according to APA, children who experience anxiety disorders have the following criteria: a) excessive anxiety/worry for more than or equal to the last six months; b) having difficulty controlling their worries; c) these worries must be accompanied by at least one of the following physical/cognitive symptoms, namely restlessness, fatigue, impaired concentration, irritability, muscle tension and sleep disturbances; d) the worries/symptoms must cause significant disruption in social, educational and other areas (Katharine et al., 2022). Anxiety or worry in children with thalassemia has several factors, one of which is the child's fear when an injection is about to be performed. Some children who have this fear will fight back. To deal with anxiety disorders felt by children while undergoing treatment in the hospital, an activity is needed. Fun activities that can divert anxiety such as playing activities. Playing is an activity that can be a place for children to express various feelings, emotions, sadness, fear, disappointment about something.

Play therapy activities provided can reduce feelings of anxiety in children (Habibi, 2022; Asmarawanti & Lustyawati, 2020; Setiawati & Sundari, 2019). Studies show that children with thalassemia need entertainment facilities such as playrooms, video games, internet or age-appropriate play equipment during the long period of blood transfusion and do fun activities such as playing (Ramadhayanti et al., 2023;

Abu Shosha et al., 2022). A supportive environment will make patients feel comfortable, calm and safe to interact and communicate with others, which can indirectly help the treatment process for child patients.

Play therapy is a form of play experience that is planned before someone enters the treatment room, to help them overcome anxiety and fear and provide an understanding of the treatment actions that will be carried out while they are hospitalized. Play therapy can be given to children in healthy conditions and also children who are undergoing treatment, including children with thalassemia. Previous research has shown that painting play therapy can reduce anxiety levels (Adawiyah et al., 2024; Nurachman & Yuniarti, 2023). Based on data from the Mother and Child Hospital (RSIA) in Bekasi Regency, there are a total of 83 people with thalassemia with details of 32 adult patients and 51 child patients under the age of 18 years. 2 out of 10 child patients in the Thalassemia polyclinic have a fear of needles when injecting blood transfusion. During the procedure, child patients also show behavior that sticks to their parents, is uncooperative with health workers and hysterical. This is one of the attitudes/behaviors of anxiety shown by children during the blood transfusion process. This is one form of anxiety shown by child patients with thalassemia at RSIA in Bekasi Regency. Studies on thalassemia in children have been widely conducted throughout the world, examining the impact of nursing care and treatment received by pediatric patients. However, there is currently little research examining anxiety disorders experienced by thalassemia sufferers, especially preschool-aged children. Research on children with thalassemia in Indonesia focuses more on medical and nutritional studies, quality of life of children with thalassemia, and family support for children (Fauziah et al., 2023; Kamilah et al., 2023; Mariam, 2022). Several studies that examine anxiety disorders in children with thalassemia state that anxiety disorders can be reduced by using therapy, one of which is using play therapy (Rohmah, 2018; Saputro & Fazrin, 2017). Several previous studies have shown that play therapy can improve children's literacy and cognitive abilities (Paramita et al., 2022; Adimayanti & Siyanti, 2020). To overcome anxiety disorders in children with thalassemia, play therapy is also applied using image media through coloring, drawing and playdough media methods (Ramadhayanti et al., 2023; 2022; (Asmarawanti & Lustyawati, 2020). In contrast to previous studies, this study was conducted using fun cognitive games to reduce anxiety disorders experienced by children before undergoing blood transfusion.

Based on this background, the researcher is interested in conducting a study to test whether there is an effect of fun cognitive games therapy on anxiety disorders experienced by preschool-age thalassemia patients at RSIA in Bekasi Regency, West Java. The urgency of this study is the anxiety that is often felt by children with thalassemia during the hospitalization process. Therefore, this study aims to analyze the effect of play therapy using fun cognitive games on anxiety disorders in children with thalassemia. The latest information in this study is expected to be a recommended intervention to support children's emotional well-being during hospitalization.

## 2. METHOD

This study was conducted using a pre-experimental design of One Group Pretest-Posttest. This design was chosen to evaluate the effects of treatment before and after the intervention was given. In this study, a control group was not used because the sample used had very unique characteristics. Before being given treatment, the sample group was given a pre-test as comparative data after the treatment was given. The research design model can be seen in Figure 1.

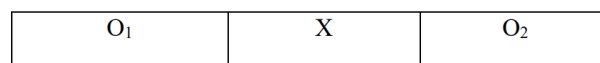


Figure 1. One Group Pretest-Posttest Model

Treatment in the form of play therapy was given to children before the blood transfusion process in the morning in the thalassemia room for a total of 5 times. Children were given fun cognitive games therapy in the form of Maze Numbers, Numbers Ice Cream, Feed Me, Shapes Sorting Trees, and Match Me games for ± 30 minutes. A pre-test was given before the play activities were carried out in the first session (first treatment) and at the end of each first, second, third and fourth treatment session, children's anxiety disorders were also measured to see changes in anxiety disorders that occurred. A post-test was given after the child completed the play activities in the fifth treatment session. In each treatment, children were given the same game for each treatment, including in the first treatment the child was given a maze number game, the second treatment was given a number ice cream game. The third treatment was given the Feed me game, the fourth and fifth games the child was given the shapes sorting tree game and the match me game.

The population in this study were 51 children with thalassemia who were undergoing routine blood transfusion treatment and control at RSIA in Bekasi district. From this population, the sample was

selected purposively according to the characteristics required in the study as many as 5 (five) preschool children (3-6 years) consisting of 1 (one) boy and 4 (four) girls. The questionnaire was used as a data collection tool. The questionnaire was designed by adapting the Hamilton Rating Scale for Anxiety (HARS) anxiety disorder measurement tool developed by Hamilton(1959). HARS consists of 14 questions used to measure anxiety symptoms in adults and children. The HARS questionnaire measures 3 (three) aspects, namely attitudes/behaviors, symptoms and body movements shown by thalassemia sufferers when experiencing anxiety disorders. The instrument can be presented on [Table 1](#).

**Table 1. The Instrument Variables of Anxiety Disorders**

Variables	Sub variables	Indicator
Anxiety disorders	Attitude/behavior	Feeling anxious
		Tension
		Afraid
		Sleep disorders
		Intellectual disability
		Feelings of depression
		Autonomic symptoms
	Symptom	Somatic (muscle) symptoms
		Somatic (sensory) symptoms
		Cardiovascular symptoms
		Respiratory symptoms
		Digestive symptoms
		Urogenital symptoms
	Body movement	The level of behavior of child patients when treatment activities are given

The assessment scale used in this questionnaire is a score of 0 = no symptoms; score 1 = mild symptoms; score 2 = moderate symptoms; score 3 = severe symptoms; and score 4 = very severe symptoms. The degree of anxiety is measured by adding up the scores from items 1-14, where a score <14 = no anxiety; score 14-20 = mild anxiety; score 21-27 = moderate anxiety; score 28-40 = severe anxiety; and score 42-56 = very severe anxiety. Although HARS has been standardized for measuring anxiety symptoms, in this study adaptations were made to adjust to the characteristics of preschool-aged samples. For internal validation of the questionnaire was carried out by expert testing by experts in the fields of Guidance and Counseling, Early Childhood Education and Psychology. The results of the internal test with experts stated that the HARS instrument developed was in accordance with the research construct and could be used on the research sample.

External validation of the instrument was conducted on 5 (five) children with thalassemia who had the same characteristics as the research sample. The results of the external test stated that the average  $r_{count} > 0.998$  with the criteria  $r_{table} = 0.9969$ , so based on the criteria if  $r_{count} > r_{table}$  then the research instrument is valid. The reliability test showed a result of 0.994 and the instrument was declared reliable for use in this study. The questionnaire was filled out by parents who accompanied the children with thalassemia, because preschool children have limitations in filling out questionnaires. The research flow and the steps of therapy activities can be presented in [Table 2](#).

**Table 2. The Steps for Fun Cognitive Games Play Therapy Activities**

Stages	Activity
Opening	Introduce yourself and explain the purpose of playing, playing techniques and playing rules and demonstrate how to play
Implementation	Nurses distribute play equipment to each child who will undergo hemodialysis (blood dialysis) and help children who experience obstacles/difficulties in playing. Throughout the play activity, the nurse records the child's responses during play.
Closing	The nurse informs that playtime is over and gives Positive feedback on the implementation of play therapy activities

Data analysis was conducted on the pretest and posttest results obtained through questionnaires filled out by nurses on five children with thalassemia. Hypothesis testing was conducted using the Wilcoxon test to identify whether there was a significant difference in the level of anxiety disorders in preschool children at RSIA Bekasi Regency before and after the implementation of fun cognitive games play therapy.



### 3. RESULT AND DISCUSSION

#### Result

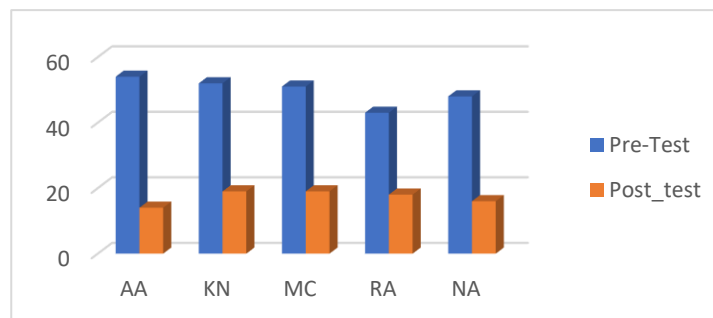
The sample in this study were pre-school children aged 3-6 years who underwent blood transfusion treatment at RSIA in Bekasi district as many as 5 (five) people. Consisting of one boy and four girls. This study was conducted to determine the effect of fun cognitive games therapy on anxiety disorders in preschool-age children with thalassemia at RSIA in Bekasi district. This study included a pre-experiment using a one group pretest-posttest design.

The treatment given was carried out five times using fun cognitive games including Maze Numbers, Numbers Ice Cream, Feed Me, Shapes Sorting Trees, and Match Me for ± 30 minutes in the morning before the blood transfusion process. The pretest was carried out once before the child played in the first treatment. Then at the end of the play activity in each of the first, second, third and fourth treatments, the magnitude of the changes in anxiety disorders that occurred was measured again. The posttest was given after the child finished playing at the end of the fifth treatment session. The results of the pretest and posttest conducted on 5 (five) thalassemia children can be presented in [Table 3](#).

**Table 3.** The Pretest and Posttest Results

No	Initials	Pretest Score	Category	Session 1 Score	Session 2 Score	Session 3 Score	Session 4 Score	Session 5 Score	Posttest Score	Category
1	AA	54	It's so heavy	47	35	30	30	14	14	Light
2	KN	52	It's so heavy	45	37	31	27	19	19	Light
3	MC	51	It's so heavy	45	36	36	27	19	19	Light
4	RA	43	It's so heavy	43	34	26	26	18	18	Light
5	NA	48	It's so heavy	40	30	28	25	16	16	Light

Based on the table above, it can be seen that the average pretest score of children is 49.6. This score is included in the category of children experiencing anxiety with a very severe category. The results of the posttest of children on the anxiety disorders they experienced averaged a score of 17.2 which is in the category of mild anxiety disorders. After five treatments, children with thalassemia who received fun cognitive games therapy, all children experienced a decrease in anxiety scores and the anxiety category became mild anxiety disorders. Based on the results of the pretest and posttest, overall the development of anxiety disorders in thalassemia children in Bekasi Regency can be presented in [Figure 2](#).



**Figure 2.** The Development of Anxiety Disorders in Thalassemia Children

[Figure 2](#) shows that after 5 treatments, there was a significant decrease between before treatment and after treatment for each child. In this study, the Wilcoxon test was conducted to determine the effect of fun cognitive games therapy on anxiety disorders in children with thalassemia at RSIA in Bekasi Regency because the data was non-parametric and the number of samples was less than 10 people. After calculations were carried out using the SPSS program, the results of the Wilcoxon test were obtained which can be presented in [Table 4](#). Based on the results of the table above, it is known that the results of the calculation of the significance value of Asymp.Sig. (2-tailed) are worth 0.042 < 0.05. This shows that there is a significant difference between the pretest and posttest results. Thus,  $H_0$  is accepted and it is stated that there is a significant effect of fun cognitive games therapy on anxiety disorders in children with thalassemia of preschool age at RSIA Bekasi Regency.

**Table 4.** The Wilcoxon Test Results

Parameters	Post-test-Pre-Test
Z	-2.032
Asymp. Sig. (2-tailed)	0.042

**Discussion**

The results of this study state that there is a significant influence of anxiety disorders experienced by children with thalassemia of preschool age after receiving fun cognitive games therapy. This result is in line with previous research which revealed that coloring play therapy is effective in reducing anxiety in preschool children (Novia & Arini, 2021; Marni et al., 2018). Empirically, this study can prove that children's anxiety disorders decreased from very severe criteria to moderate criteria after receiving fun cognitive games therapy from anxiety disorders with very severe criteria to mild criteria. The pretest results on the research sample proved that all preschool children experienced anxiety disorders with very severe criteria with scores ranging from 42-56 based on the HARS instrument criteria used in this study. In the sample, reactions were found to refuse to eat, often ask questions, cry, and be uncooperative with health workers/nurses which are reactions to anxiety disorders experienced by children with thalassemia. After the fun cognitive games therapy was given, the posttest results showed a decrease in anxiety experienced by children to include mild anxiety disorder criteria with scores ranging from 14-20. The results of this study differ from previous research, which was conducted on 38 children at Al Ihsan Hospital, Bandung in 2022, explaining that 98.4% of children with thalassemia experienced mild anxiety disorders and only 1.6% experienced mild anxiety disorders (Maula et al., 2023). This could be because the age range of thalassemia patients at Al Ihsan Hospital, Bandung is between 8-17 years, so they have better emotional maturity in controlling anxiety disorders compared to the age of thalassemia patients at RSIA in Bekasi district which is between 3-6 years.

Based on previous research results, play therapy is effective in reducing children's anxiety (Habibi, 2022; Padila et al., 2022). The same effect was also felt by children with thalassemia at RSIA in Bekasi district after receiving fun cognitive games therapy. In session 1, children were invited to play maze numbers. In this game, children were asked to connect the number symbols 1-10 and other pieces of paper depicting objects with the same number using rubber bands. Children were cognitively stimulated to match numbers with the same number of objects as the picture using rubber bands. Thus, children's attention was diverted to the game and the anxiety disorders they felt also decreased because children were more focused on playing. In this session, children are stimulated in their cognitive aspects by recognizing the concept of numbers 1-10 and also connecting the numbers with pieces of paper with the same number of pictures as the numbers. Emotionally, while children are playing the number maze, the feelings of restlessness, anxiety, and fear that are felt are diverted by feelings of joy, pleasure and enjoying the playing activities provided. Likewise with the treatment given in the second and third sessions where children are given a number ice cream game that is almost the same as the previous game but with an ice cream themed game. Children are asked to match the numbers written on the ice cream sticks with pieces of ice cream pictures containing a number of dots. Children seem to enjoy the process of playing and cognitive stimulation by recognizing numbers and matching numbers with pictures. In this study, through play therapy, children with thalassemia are invited to divert their pain to play activities and relaxation during the play process. This was also done in one of the case study researches on 2 (two) children with thalassemia who succeeded in proving that play therapy through painting media had an effect on the level of anxiety when children were undergoing treatment in the hospital (Nurachman & Yuniarti, 2023; Asmarawanti & Lustyawati, 2020).

Painting or coloring can help children express their emotions into pictures by choosing colors, making colors and coloring pictures/objects given to children so that a feeling of happiness is created and helps reduce the level of anxiety experienced by children with thalassemia. While in this study, painting was replaced with fun cognitive games such as Maze Numbers, Numbers Ice Cream, Feed Me, Shapes Sorting Trees, and Match Me. While children play the five games, feelings of sadness, fear, worry, anxiety are diverted into playing activities and become a positive coping mechanism.

The decrease in anxiety levels experienced by the five samples in this study can occur because the child's feelings decreased after being involved in the fun cognitive games provided by the nurse before the hemodialysis process was carried out, so that the hemodialysis process was much easier to do and ran smoothly. The anxiety disorders felt were diverted when the child began to be involved in the treatment given. As in the treatment in session 4 where the child was asked to match the same geometric shapes and colors on a paper tree and in the fifth session the child was asked to match the initial letter shape of the animal picture that had been provided.

Children's attention becomes more on playing fun cognitive games and forgetting the anxiety, fear, and restlessness that they felt when they first arrived at the hospital. The results of this study are in line with previous studies that revealed that play therapy with the coloring method can reduce anxiety in thalassemia children (Ramadhayanti et al., 2023; Yulianti, 2023). In coloring therapy, children can express their emotions by choosing the colors they like, while in fun cognitive games therapy, children can channel their emotions by diverting their attention to playing activities by matching various geometric shapes and matching numbers with the number of images. Several other studies have revealed that the use of puzzle and plasticine play therapy has been proven to reduce anxiety disorders in children with thalassemia (Adelya et al., 2024; Periyadi et al., 2022).

The results of this study are in line with and strengthen the results of previous research on thalassemia children who experience anxiety disorders, but using a different play therapy approach. In this study, it was proven that fun cognitive games therapy is a fun play therapy for children, and can divert pain or distract pain so that it can reduce anxiety about pain experienced by children during the treatment process. The results of the posttest after fun cognitive games therapy proved that play therapy can help children reduce fear and anxiety from what was initially in the category of very severe anxiety to the mild category.

Thus, it can be seen that the innovation of fun cognitive games play therapy is effective in reducing anxiety levels in preschool-age children with thalassemia. The implication of this study is that it can be a recommended intervention to support children's emotional well-being during hospitalization. Meanwhile, the limitations of this study are the use of a small sample and focusing on only one hospital, so the results of the study may not be able to represent the population of children with thalassemia in various conditions and other hospital environments. Further research can expand the sample to obtain more optimal results.

#### 4. CONCLUSION

The results of the Wilcoxon test prove that there is a significant influence of the use of fun cognitive games play therapy in reducing anxiety disorders experienced by children with preschool-age thalassemia at the RSIA in Bekasi Regency. The innovation of fun cognitive games play therapy can help divert anxiety felt by children when undergoing hospitalization such as hemodialysis. In addition, children also feel happy because this activity is one that can stimulate children cognitively, can help children in controlling their emotions and provide therapeutic effects. It is hoped that the results of this study can be an alternative play therapy that can be given to thalassemia children undergoing dialysis/hemodialysis. The hospital, especially the hemodialysis room, can provide playroom facilities and various games that can help children reduce the anxiety disorders they experience while undergoing treatment in the hospital.

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