

The Effect of Paper Doll Dress-Up Play Therapy on Reducing Anxiety in Preschool Children in the Children's Inpatient Ward of RSIA Kendangsari Surabaya

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ABSTRACT

Hospitalization can be a big problem and cause fear and anxiety for children. Play therapy is a game that is given and used to manage anxiety, learn about the environment, treatments, and procedures that have been done, and hospital staff. The purpose of this study was to analyze the effect of paper doll dress-up play therapy on reducing anxiety in preschool children in the Children's Inpatient Ward of RSIA Kendangsari Surabaya. This study used a quasi-experimental design with a two group pre-post test design. The population in this study were all preschool inpatients aged 3-6 years in the Pediatric Inpatient Room of RSIA Kendangsari Surabaya, totaling 30 children. A sample of 28 respondents were divided into control and treatment groups. The sampling technique uses probability sampling. This study used the Facial Image Scale (FIS) Observation Sheet instrument. Statistical test using t-test with $\alpha \leq 0.05$. The treatment group showed a difference in the average value of reducing anxiety between before and after being given play therapy according to the results of the t-test statistic test obtained $p = 0.000$ in the treatment group and $p = 0.547$ in the control group. Paper doll dress-up play therapy has an effect on reducing the anxiety of preschool children in the Children's Inpatient Room of RSIA Kendangsari Surabaya. It is hoped that the hospital can facilitate the paper doll dress-up play therapy and create standard procedure to reduce anxiety levels.

Keywords: paper doll dress-up play therapy, preschool, reducing anxiety

BACKGROUND

Hospitalization can be a big problem and cause fear and anxiety for children (Saputro & Fazrin, 2017a). Children, especially at an early age, are particularly vulnerable to crises and hospitalization due to the stress of ordinary health conditions and environmental routines (Wong, 2009 in Pratiwi dkk., 2021). Some preschoolers exhibit aggressive behavior such as biting, kicking and running out of the nursery (Firmansyah, 2021). Anxiety has short-term effects and if not treated immediately, can result in the child refusing treatment or medication and affecting the length of stay in the hospital (Saputro & Fazrin, 2017a).

According to the World Health Organization (WHO) in 2018, almost 87% of children are hospitalized. It was found that between 3-10% of hospitalized pediatric patients in the United States experience anxiety during treatment (Pratiwi, 2021). Based on the results of the 2020 National Health Survey (Susenas), it is currently estimated that there are around 32.96 million people in the 0-6 year age group. From these data, there were around 6.27 percent of early childhood children who were hospitalized during the past year (Bureau of Statistics, 2020). Based on observations of 5 patients in the Children's Inpatient Ward at Kendangsari Surabaya Mother and Child Hospital (RSIA), it was found that 60% of the children looked anxious.

According to Silalahi (2021), anxiety is influenced by internal and external factors. Internal factors are age, stressors, gender, and education, while external factors are family support and environmental conditions. Wong, *et al.*, (2018 researched the effect of play therapy on anxiety levels in preschool children, concluding that play therapy effectively reduces anxiety and negative emotional manifestations among children who undergo cast removal procedures. Another study by Saputro & Fazrin (2017), regarding reducing children's anxiety levels due to hospitalization with the application of play therapy, found that there was a significant change between the average anxiety score before and after play therapy with parental involvement reducing children's anxiety. Meanwhile, from a literature review research by Nuliana (2022), play therapy is carried out using various methods such as puzzles, clay, origami, storytelling, coloring, dolls, snakes and ladders, bibliotherapy, videos, *congklak*, and other children's favorite games has proven effective in reducing anxiety in hospitalized preschoolers.

Some of the studies above show the effect of play therapy on reducing anxiety levels in preschool-aged children, but no other research results have been found on disassembling play therapy. Unloading is a game in the form of dolls made of paper, complete with various types of clothing and pictures of miniature household items (Azmiyah, dkk., 2019).

Based on the description above, the researcher is interested in providing hands-on play therapy to preschoolers who experience anxiety by conducting a study entitled "The Effect of Paper Doll Dress-Up Play Therapy on Reducing Anxiety in Preschool Children in the Children's Inpatient Ward of RSIA Kendangsari Surabaya".

METHODS

The type of research used is quantitative, the design used in this study is quasi-experimental. The design used in this study was a two group pre-post test design. The sample was divided into two groups (the treatment group and the control group) and measurements were made before the intervention (pre-test) and after the intervention (post-test). The independent variable in this study is the pairing play therapy. The dependent variable in this study is the level of anxiety in preschool children, that is 3-6 years.

The population is the subject to be studied and meets the requirements set by the researchers (Nursalam, 2020), namely all inpatient children aged 3-6 years in the pediatric inpatient room of RSIA Kendangsari Surabaya, totaling 30 children. The sample in this study were inpatient children aged 3-6 years who met the inclusion and exclusion criteria. The inclusion criteria were (1) Parents who were willing to have their children studied, (2) Children who were treated for 1-3 days, (3) Children who indicated play therapy, and (4) Children who had IVs installed. While the exclusion criteria were (1) Children with very weak conditions, (2) Children with attention deficit hyperactivity disorder, and (3) Children with chronic diseases. The total sample of 28 people was divided into 2 groups, namely the treatment group of 14 people and the control group of 14 people. The sampling technique in this study was simple random sampling, that is, each subject in the population has the opportunity to be selected or not selected as the sample and has the same opportunity to be selected as the sample.

The instrument used in this study was the Facial Image Scale (FIS) Observation Sheet. The FIS instrument is a measuring tool used to determine a person's level of anxiety based on the expression addressed by the patient which was conducted by Buchanan and Niven in England in 2002. FIS uses a score system from 1 to 5 to measure anxiety levels. Score 1 shows facial expressions that are very happy or not anxious, Score 2 faces look happy or slightly worried, Score 3 shows moderate anxiety which is characterized by a flat face, Score 4 Severe anxiety or the child looks sad, and score 5 shows crying or very anxious expressions (Lubis et al., 2021).

The intervention was carried out after conducting a pre-test on the first day, the treatment group was given pair-assembling play therapy to the respondents, carried out once a day for 2 days

with a duration of 20 minutes each, then a post-test was carried out. The data that has been collected is then processed and analyzed using a statistical t-test with the help of SPSS version 27 with a significance value of $\alpha \leq 0.05$. If the results of the statistical test show $p \leq 0.05$, it means that there is an effect of pairing play therapy on reducing the anxiety of preschoolers.

RESULTS

General

Table 1. Distribution of respondents' characteristics

CHARACTERISTICS	Treatment Group		Control Group	
	f	(%)	f	(%)
GENDER				
Girl	9	64,3	8	57,1
Boy	5	35,7	6	42,9
Total	14	100,0	14	100,0
ON TREATMENT DAY				
1	6	42,9	8	57,1
2	8	57,1	6	42,9
Total	14	100,0	14	100,0
ADMISSION HISTORY				
Never	3	21,4	5	35,7
Ever	11	78,6	9	64,3
Total	14	100,0	14	100,0

(Source: Primary Data, 2023)

Table 1 shows that the majority of respondents in the treatment group (64.3%) and in the control group (57.1%) were female. Based on the day of treatment in the treatment group, most (57.1%) were on the 2nd day of treatment, while in the control group, most of the respondents (57.1%) were on the 1st day of treatment. Based on the admission history in the treatment group, almost all (78.6%) and in the control group most (64.3%) had experienced admission.

Table 2. Frequency distribution of respondents based on age

AGE	Mean	Median	SD	Min-Maks
Treatment Group	4,43	4,5	1,157	3-6
Control Group	4,36	4	1,150	3-6

Source: Primary Data, 2023

Table 2 shows the mean age of the respondents in both the treatment group and the control group is 4 years. In both groups, the minimum age was 3 years and the maximum age was 6 years.

Table 3. Frequency distribution of preschool children's anxiety levels in the treatment group and the control group

Group	Anxiety Level	n	%	Mean (M)	SD
Treatment before Play Therapy	Not Anxious	-	-	4,07	0,829
	Slightly Anxious	-	-		
	Moderate Anxious	4	28,6		
	Severe Anxious	5	35,7		
	Very Anxious	5	35,7		

Treatment after Play Therapy	Total	14	100,0	1,93	0,730
	Not Anxious	3	21,4		
	Slightly Anxious	6	42,9		
	Moderate Anxious	5	37,7		
	Severe Anxious	-	-		
	Very Anxious	-	-		
	Total	14	100,0		
Control before Play Therapy	Not Anxious	-	-	4,07	0,917
	Slightly Anxious	-	-		
	Moderate Anxious	3	21,4		
	Severe Anxious	6	42,9		
	Very Anxious	5	35,7		
	Total	14	100,0		
	Not Anxious	-	-		
Control after Play Therapy	Slightly Anxious	-	-	3,7	0,802
	Moderate Anxious	4	28,6		
	Severe Anxious	6	42,9		
	Very Anxious	4	28,6		
	Total	14	100,0		
	Not Anxious	-	-		
	Slightly Anxious	-	-		

(Source: Primary Data, 2023)

Table 3 shows that the mean before being given play therapy in the treatment group was 4.07 with a standard deviation of 0.829 and the mean in the control group was 4.07 with a standard deviation of 0.917. While the mean after being given play therapy in the treatment group was 1.93 with a standard deviation of 0.730 and the mean in the control group was 3.7 with a standard deviation of 0.802.

Specific

The level of anxiety in children before being given paper doll dress-up play therapy in the treatment group and the control group

Table 4. The level of anxiety in children before being given paper doll dress-up play therapy in the treatment group and the control group

Group	Mean	SD	SE	n	p-value
Treatment	4,07	0,829	0,221	14	1,000
Control	4,07	0,917	0,245	14	

(Source: Primary Data, 2023)

Based on the results of the independent t-test, the mean in the treatment group was 4.07 with a standard deviation of 0.829, while the mean in the control group was 4.07 with a standard deviation of 0.917. From the two groups, the result was $p = 1.000$ ($p > 0.05$) meaning that there was no the difference between the mean anxiety in the treatment group and the control group before being given the paper doll dress-up play therapy.

The level of anxiety in children after being given paper doll dress-up play therapy in the treatment group and the control group

Table 5. The level of anxiety in children after being given paper doll dress-up play therapy in the treatment group and the control group

Group	Mean	SD	SE	n	<i>p-value</i>
Treatment	1,93	0,730	0,195	14	0,000
Control	3,7	0,802	0,214	14	

(Source: Primary Data, 2023)

Based on the results of the independent t-test, the mean in the treatment group was 1.93 with a standard deviation of 0.730, while the mean in the control group was 3.7 with a standard deviation of 0.802. From the two groups, the result was $p=0.000$ ($p > 0.05$) meaning that there is a difference between the mean anxiety in the treatment group and the control group after being given paper doll dress-up play therapy.

The effect of play therapy to reducing children's anxiety in the treatment group and the control group

Table 6. The effect of play therapy to reducing children's anxiety in the treatment group and the control group

	Group	Mean	SD	SE	t	<i>p</i>
Treatment	Before play therapy	4,07	0,829	0,221	27	0,000
	After play therapy	1,93	0,730	0,195		
Control	Before play therapy	4,07	0,917	0,245	0.618	0,547
	After play therapy	3,7	0,802	0,214		

(Source: Primary Data, 2023)

Based on the results of the paired t test in table 6 above, it was obtained that the mean of the treatment group before being given paper doll dress-up play therapy was 4.07 and the mean after being given the paper doll dress-up play therapy was 1.93. While the mean of the control group before being given paper doll dress-up therapy was 4.07 and the mean after being given paper-doll therapy was 3.7. Based on the t-test, it was found that $p = 0.000$ in the treatment group, which means that there is a mean difference before and after being given the paper doll dress-up play therapy and $p=0.547$ in the control group, which means there is no mean difference before and after being given the paper doll dress-up play therapy.

DISCUSSION

The anxiety level before paper doll dress-up play therapy in preschool children in the children's inpatient ward of RSIA Kendangsari Surabaya

Based on the results of the study, it was found that almost half of the anxiety level before being given the paper doll dress-up play therapy in the treatment group experienced severe anxiety and very anxiety. While the level of anxiety in the control group was almost half experiencing severe anxiety.

Based on the results of the study, it was found that almost half of the anxiety level before being given the paper doll dress-up play therapy in the treatment group experienced severe anxiety and very anxiety. While the level of anxiety in the control group was almost half experiencing severe anxiety.

Research conducted by Mertajaya (2019), showed that preschool-age children before the play therapy intervention were carried out experienced severe anxiety. Factors that influence children's anxiety due to hospitalization are hospital conditions, hospital environment, typical hospital smells, medicines, medical devices, health workers, uniform colors and gestures of health workers such as doctors and nurses, as well as treatment actions/procedures carried out (Sulaeman et al., 2019).

In preschool children who experience hospitalization experience feelings of pressure, because they cannot interact with other friends, they assume that while in the hospital they will be detained and in a new environment. This condition causes boredom and even fear of being given injections or other medical procedures so children rebel when medical personnel visit them. As a result, both the treatment and control groups had a higher level of anxiety before any intervention was given.

The anxiety level after paper doll dress-up play therapy in preschool children in the children's inpatient ward of RSIA Kendangsari Surabaya

Based on the results of the study, after being given the paper doll dress-up play therapy intervention, the anxiety level in the treatment group was found to be almost half experiencing little anxiety. This shows a decrease in anxiety in preschool children compared to before the intervention was given.

Handajani et al. (2019), stated that out of 30 preschool-age children who were undergoing hospitalization, most of them became not anxious after playing therapy. Research conducted by Kaban et al. (2021) stated that there was a significant decrease in preschool-age children who experienced anxiety after being given play therapy.

In this study, researchers used paper doll dress-up play therapy which is considered suitable for preschool age because they can increase creativity as well as be a diversion therapy from the fear felt during hospitalization. By playing paper doll dress-up with the nurse, the child will feel safe and comfortable.

The effect of paper doll dress-up play therapy on reducing anxiety in preschool children in the children's inpatient ward of RSIA Kendangsari Surabaya

The results showed that preschool-aged children in the treatment group had an average difference in anxiety levels between before and after play therapy, which means that there was an effect of paper doll dress-up play therapy on reducing anxiety in preschool-aged children in the Children's Inpatient Ward of RSIA Kendangsari Surabaya.

Developmental disorders are also a negative effect of hospitalization. Research by Lilis Murtutik and Wahyun; Utami, Y (2014) in Setiawati & Sundari (2019), shows that the more often children are hospitalized, the higher the risk of gross motor development disorders. Need to pay attention to the needs and development of children with the facilities in the treatment unit with room decorations that are attractive and familiar to children as well as a playroom with a variety of playing tools. Play therapy is expected to provide an alternative to dealing with anxiety in children. According to Saifudin, Wirakhmi, & Haniyah (2022), the longer a child is treated, the better he gets to know his environment, new people, the atmosphere, and the medical care he receives at the hospital. Another study was also conducted by Pawiliyah & Marlenis (2019), stating that previous hospital admission experiences can give children an idea of what they are experiencing that this affects children's responses, such as painful experiences (invasive procedures) and coping mechanisms for this.

There was a significant difference between the treatment and control groups indicating that the play therapy intervention was more effective or more influential than pediatric patients who were only given a distraction in the form of watching television. Play therapy also significantly assists the approach process between nurses and pediatric patients, especially preschoolers, to create a safe and comfortable environment for pediatric patients. The child will feel safe and not be afraid of the nurse anymore. In this study, children became calmer when given nursing actions in the room after play therapy. Therefore, playing paper doll dress-up therapy is a non-pharmacological action that can be done to reduce anxiety in preschool-aged children during hospitalization.

CONCLUSION

The level of anxiety in the treatment group was severe anxiety and very anxiety, whereas in the control group it was severe anxiety. At the level of anxiety in the treatment group, after the paper doll dress-up play therapy was carried out, it decreased to a little anxiety, while in the control group, it was severe anxiety. Paper doll dress-up play therapy has an effect on reducing the anxiety of preschool-aged children in the Children's Inpatient Ward of RSIA Kendangsari Surabaya.

The level of anxiety in the treatment group was severe anxiety and very anxiety, whereas, in the control group, it was severe anxiety. At the level of anxiety in the treatment group, after the disassembly play therapy was carried out, it decreased to a little anxiety, while in the control group, it was severe anxiety. Disassembly play therapy affects reducing the anxiety of preschool-aged children in the Children's Inpatient Ward of RSIA Kendangsari.

Suggestions for the hospital are expected to be able to facilitate the disassembly game and create a play program unit so that nurses can use it in providing nursing care to preschool children in the form of non-pharmacological management to reduce anxiety levels.

REFERENCES

- Azmiyah, N. I. dkk. (2019). *Nubar - Nostalgia Semesta (Jatim #67)*. Rumah Media.
- Badan Pusat Statistik. (2020). *Profil Anak Usia Dini 2020*. Badan Pusat Statistik.
- Firmansyah, H. dkk. (2021). *Keperawatan Kesehatan Anak Berbasis Teori dan Riset*. Media Sains Indonesia.
- Handajani, Diani Octaviyanti; Yunita, Nourma; Maulidatif, E. (2019). Apakah Ada Pengaruh Terapi Bermain Puzzle Terhadap Tingkat Kecemasan Anak Usia Prasekolah Yang Mengalami Hospitalisasi Di RS Bhakti Rahayu Surabaya. *Jurnal Manajemen Kesehatan Indonesia*, 7(3), 198–204. <https://doi.org/10.14710/jmki.7.3.2019.198-204>.
- Kaban, N. B., & Suhermi; Maimunah, R. (2021). Terapi Bermain Puzzle Terhadap Tingkat Kecemasan Anak pada Usia 1-3 Tahun Yang Dihospitalisasi di Rumah Sakit. *Jurnal Kebidanan Flora*, 14(2), 68–74. <https://www.ojs.stikesfloramedan.ac.id/index.php/jkbf/article/view/223>.
- Lubis, I. A., Wibisono, W. L., Sjamsul, R. T., & Owen, R. R. (2021). Distraksi Visual Video Animasi Dan Virtual Reality Dalam Mengurangi Kecemasan Anak Usia 7-10 Tahun Pada Tindakan Anestesi Infiltrasi. *B-Dent: Jurnal Kedokteran Gigi Universitas Baiturrahmah*, 8(1), 9–18. <https://doi.org/10.33854/jbd.v8i1.786>.
- Mertajaya, I. M. (2019). Analisis Intervensi Terapi Bermain Puzzle Terhadap Kecemasan Pada Anak Usia Prasekolah Di Ruang Cempaka Anak Rumah Sakit Peln Jakarta. *Universitas Muhammadiyah Tangerang*, 4(1), 67–76. <http://jurnal.umt.ac.id/index.php/jkft/article/view/2017>.
- Nuliana, W. (2022). PENGARUH TERAPI BERMAIN TERHADAP PENURUNAN KECEMASAN PADA ANAK USIA PRASEKOLAH: LITERATUR REVIEW. *Jurnal Keperawatan Indonesia Timur (East Indonesian Nursing Journal)*, 2(1), 18–27. <https://doi.org/https://doi.org/10.32695/jkit.v2i1.260>.
- Nursalam. (2020). *Metodologi Penelitian Ilmu Keperawatan Pendekatan Praktis* (5th ed.). Salemba Medika.
- Pawiliyah; Marlenis, L. (2019). Pengaruh Terapi Bermain Mendongeng dengan Penurunan Tingkat Kecemasan pada Anak Usia Pra Sekolah Akibat Hospitalisasi. *Jurnal Keperawatan Silampari*, 3(1), 271–280. <https://doi.org/10.31539/jks.v3i1.788>.
- Pratiwi, E. A. dkk. (2021). *Konsep Keperawatan Anak*. Penerbit Media Sains Indonesia.
- Pratiwi, R. D. (2021). Pengaruh Terapi Bermain Ular Tangga Terhadap Kecemasan Pasien Anak Usia Prasekolah. *MCHC: The Journal of Mother and Child Health Concerns*, 1(1), 10–18. <http://e-jurnal.iphorr.com/index.php/mchc/article/view/70>.

- Saifudin, I., Wirakhmi, I. N., & Haniyah, S. (2022). Gambaran Pendampingan Orang Tua tentang Kecemasan Anak Prasekolah yang Mengalami Hospitalisasi di Rumah Sakit Orthopaedi Purwokerto. *Seminar Nasional Penelitian Dan Pengabdian Kepada Masyarakat (SNPPKM)*, 2(1), 445–452.
- Saputro, Heri; Fazrin, I. (2017a). *Anak Sakit Wajib Bermain di Rumah Sakit: Penerapan Terapi Bermain Anak Sakit; Proses, Manfaat dan Pelaksanaannya*. Forum Ilmiah Kesehatan.
- Saputro, Heri; Fazrin, I. (2017b). Penurunan Tingkat Kecemasan Anak Akibat Hospitalisasi dengan Penerapan Terapi Bermain. *Jurnal Konseling Indonesia*, 3(1), 9–12. <https://doi.org/https://doi.org/10.21067/jki.v3i1.1972>.
- Setiawati, E. S. (2019). Pengaruh Terapi Bermain Dalam Menurunkan Kecemasan Pada Anak Sebagai Dampak Hospitalisasi Di RSUD Ambarawa. *Indonesian Journal of Midwifery (IJM)*, 2(1), 17–22. <https://doi.org/10.35473/ijm.v2i1.146>.
- Silalahi, L. E. dkk. (2021). *Ilmu Keperawatan Dasar*. Yayasan Kita Menulis.
- Sulaeman, Thalia Kusmia A.; Ismanto, Amatus Y; Amir, H. (2019). Pengaruh Terapi Bermain Puzzle Terhadap Tingkat Kecemasan Anak Usia Prasekolah Akibat Hospitalisasi di Ruang Anak RSUD Kota Kotamobagu. 2019, 2(September), 18–26. <https://journal.iktgm.ac.id/index.php/nursing/article/view/48/29>.