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THE IMPACT OF AUDIOVISUAL DISTRACTION ON THE PAIN LEVEL OF INTRAVENOUS INFUSION FOR PRESCHOOL CHILDREN

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ABSTRACT
Installing infusion therapy is an invasive procedure carried out by medical personnel on patients who often experience pain. With audiovisual distraction therapy, it is hoped that pain can be reduced during infusion installation, especially for children who are prone to fear, as the impact of trauma on children when infusion therapy is carried out during treatment. This research aims to determine the effect of audiovisual distraction on the pain level of infusion installations in preschool children. This study used a quasy experiment design with a post-test-only non-equivalent control group design approach. Samples were selected using the accidental sampling technique, with a total of 60 preschool children (3-6 years) divided into a control group and a distraction intervention group. Pain levels were measured using the FLACC scale. Data analysis used the Mann-Whitney U-test statistical test. The results showed the effect of audiovisual distraction on the pain level of infusion installation in preschool children with a p value of 0.000. Providing audiovisual distraction therapy is very important as non-pharmacological pain management during IV insertion in children so that children do not experience trauma or fear.

Keywords: *Distraction; Infusion Insertion; Pain Level, Preschool*

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INTRODUCTION

A UNICEF survey shows that the incidence of children receiving hospitalization is approximately 84%. According to the National Socioeconomic Survey (SUSENAS), the number of preschool-age children in Indonesia is 20.72% of the total population (BPS, 2024). Based on this data, an estimated 35 per 100 children are hospitalized, and 45% experience stress (Islamiyah et al., 2024). Children who experience health complaints and undergo hospitalization in West Java were 3.4% (Hartini et al., 2023).

After an IV line is inserted, the child will continue to experience pain due to the sensation of discomfort manifested as a sense of pain caused by the real perception, threat, and fantasy of the injury. This is supported by the exaggerated pain response that occurs in toddlers and preschoolers because at this age, children cannot yet tolerate pain. Therefore, distraction therapy is necessary to reduce pain and prevent trauma (Wandini & Resandi, 2020; Ernawati, E., Sutrisno, S., & Gandini, A. L. A, 2023).

Publication of the official website of RSUD Dr. Chasbullah Abdulmadjid Bekasi City in December 2024 the number of visits by pediatric patients ranked the highest at 894 patients for one month. Based on the register report data, the number of pediatric patient visits at the Emergency Department of RSUD dr. Chasbullah Abdulmadjid Bekasi City was 315 children during December 2024. Preschool age children are 39% (123) of patients. Of the total number of visits during one month 95% of children underwent hospitalization and received IV insertion.

One effective non-pharmacological nursing intervention to reduce pain in children is visual or audiovisual distraction. The effectiveness of visual distraction in reducing pain levels during invasive procedures, such as needle injections (venipuncture), is explained by the Gate Control Theory (Özer et al., 2022; Wii et al., 2018). The results of previous studies show that the frequency of posttest results in the intervention group and control group is the majority of children with moderate pain scale, namely in the intervention group, moderate pain scale as many as 12 children (85.7%) and in the control group severe pain scale as many as 11 children (78.6%). The analysis used Independent T-test. The results of the Independent T-test test obtained a P value of 0.000 <0.05, it can be concluded that there is an effect of visual distraction on the level of pain during infusion in preschool children (3-6 years) (Marlina Lenni, Andi, 2023).

Intravenous infusion is the most common medical procedure performed on children, yet it universally elicits significant procedural fear and pain. The urgency of this research intravenous infusion is the most common medical procedure performed on children, but it universally causes significant procedural fear and pain. The urgency of this research lies in the need for non-pharmacological interventions such as audiovisual distraction (AVD), which are essential for breaking the cycle of anxiety and pain in children during medical procedures (Wii et al., 2018). Failure to manage this pain not only violates the principles of child-centered care but also has the potential to create negative procedural memory that hinders treatment compliance and cooperation during future medical procedures (Taddio & McMurtry, 2018). Based on the description above, the purpose of this study is to determine whether there is an Effect of Audiovisual Distraction on the Level of Pain of Infusion Installation of Preschool Children in the Emergency Room of Dr. Chasbullah Abdulmadjid Hospital, Bekasi City.

METHODS

Study Design

This study uses a quasy-experiment design with a post-test only non-equivalent control group design approach. where variables are measured after the intervention is implemented and there is no measurement before the intervention (no baseline), baseline measurement is carried out by comparing the measurement results of the intervention group with a comparison group that did not receive the intervention (Nasution, Ade, et al., 2023).

Setting

This study was conducted for four weeks in January 2024 and the research site was at the Emergency Room of Dr. Chasbullah Abdulmadjid Hospital, Bekasi City.

Research Subject

Sampling in this study used accidental sampling with a total sample of 60 pre-school age children (3-6 years) who were infused in the emergency room of RSUD dr. Chasbullah Abdulmadjid Bekasi City, 30 people in the intervention group and 30 people in the control group.

Instruments

Instruments to measure pain during infusion in children are measured directly with the FLACC scale (Face, Legs, Activity, Cry, Consolability). There are five aspects that are assessed, namely face, leg, activity, cry, consolability, each aspect has a score of 0 to 2, with a total score

of 0 to 10, Based on the validity and reliability tests, this instrument was declared valid with an r value of > 0.317 and reliable with a Cronbach's alpha value of 0.875. (Tasman et al., 2022).

Intervention

Of all respondents who will be given an IV were measured twice before and after the procedure using an observation sheet according to the standards set by the researcher. The animated video used was a 3D video such as Upin and Ipin, because this animated video works by combining cognitive education to build perceived control, behavioral modeling to increase awareness, and sensory attention focus to reduce pain transmission and perception, resulting in a more positive procedural experience for the patient.

Data Analysis

Data analysis using the Mann Whitney test is done because it compares two independent groups, such as comparing data between the treatment group and the control group and making it suitable for data that may not follow a normal distribution or when sample sizes are small (Chicco, D., Sichenze, A. & Jurman, G, 2025).

Ethical Consideration

This study provides interventions to respondents, namely by providing animated videos with a duration of 7 minutes during infusion, and has passed the ethical test at the ethics committee of health research at RSUD dr. Chasbullah Abdulmadjid with No.01/KEPK/RSCAM/I/2024.

RESULTS

Research on the effect of audiovisual on the pain level of pediatric infusion installation in the emergency room of the doctor's hospital. Chasbullah Abdul Madjid Bekasi City for 4 weeks obtained the following results:

Respondent Characteristics

Tabel 1. Distribution of Respondent Characteristics

No	Variable	Category	Group				Total	
			Control		Intervention			
			Total	%	Total	%	Total	%
1	Age	3 years	8	26.7	10	33.3	18	30
		4 years	7	23.3	10	33.3	17	28.3
		5 years	7	23.3	2	6.7	9	15
		6 years	8	26.7	8	26.7	16	26.7
		Total	**30**	**100**	**30**	**100**	**60**	**100**
2	Gender	Male	17	56.7	15	50	32	53.3
		Female	13	43.3	15	50	28	46.7
		Total	**30**	**100**	**30**	**100**	**60**	**100**
3	Category	Mild pain	1	3.3	19	63.3	20	33.3
		Moderate Pain	12	40	10	33.3	22	36.7
		Severe Pain	17	56.7	1	3.3	18	30
		Total	**30**	**100**	**30**	**100**	**60**	**100**

Based on the table above, it can be conveyed that most children aged 3 years are 18 respondents (30%), 32 respondents (53.3%) are male, and 22 respondents (36.7%) experience moderate pain.

Intervention Group Pain Level

Table 2. Intervention group pain levels

Respondent Characteristics		Pain Characteristics						Total	
		Mild Pain		Moderate Pain		Severe Pain			
		Total	%	Total	%	Total	%	Total	%
Age	**3 years**	2	6,7	7	23,3	1	3,3	10	33,3
	4 years	8	26,7	2	6,7	0	0	10	33,3
	5 years	2	6,7	0	0	0	0	2	6,7
	6 years	7	23,3	1	3,3	0	0	8	26,7
Total		**19**	**63,3**	**10**	**33,3**	**1**	**3,3**	**30**	**100**
Gender	**Male**	9	30	5	16,7	1	3,3	15	50
	Female	10	33,3	5	16,7	0	0	15	50
Total		**19**	**63,3**	**10**	**33,3**	**1**	**3,3**	**30**	**100**

Based on table 2, the results of this study show the results of the level of infusion pain in the audiovisual distraction intervention group, children who experience mild pain are 19 (63.3%) respondents, moderate pain is 10 (33.3%) and severe pain is 1 (3.3%) in 3-year-old children.

Pain Level of Control Group

Table 3. Pain level of control group

Respondent Characteristics		Pain Characteristics						Total	
		Mild Pain		Moderate Pain		Severe Pain			
		Total	**%**	**Total**	**%**	**Total**	**%**	**Total**	**%**
Age	**3 years**	0	0	0	0	8	26,7	8	26,7
	4 years	0	0	1	3,3	6	20	7	23,3
	5 years	0	0	6	20	1	3,3	7	23,3
	6 years	1	3,3	5	16,7	2	6,7	8	26,7
Total		**1**	**3,3**	**12**	**40**	**17**	**56,7**	**30**	**100**
Gender	**Male**	1	3,3	7	23,3	9	30	17	56,7
	Female	0	0	5	16,7	8	26,7	13	43,3
Total		**1**	**3,3**	**12**	**40**	**17**	**56,7**	**30**	**100**

Based on table 3, the results of this study show the results of the level of infusion pain in the control group, children who experience mild pain are 1 (3.3%) respondent, moderate pain is 12 (40%) and severe pain is 17 (56.7%) which is dominated in children aged 3 and 4 years.

Effect of Audiovisual Distraction Techniques on Pain

Tabel 4. Mann–Whitney U Test Results between Groups

Statistical Test	Value
Mann–Whitney U	62.500
Z	- 5.792
P-Value	0,000 (< 0.001)

Note: The results of the Mann–Whitney U test showed that there was a significant difference between the compared groups (U = 62.50; Z = -5.79; p < 0.001).

Based on the table above, the results of the Mann Whitney U test using SPSS 25 obtained a probability value (sig) score for the pain level of the intervention group and control group or a p value of 0.000. p value <0.05 (significance level) then H0 is rejected and H1 is accepted, meaning that there is an effect of audiovisual distraction on the level of pain of infusion in

preschool children in the emergency room of Dr. Chasbullah Abdulmadjid Hospital, Bekasi City.

DISCUSSION

The age characteristics of respondents as in tables 2 and 3 show that age affects the level of pain in children. The older the age of the child, the milder the pain response to infusion. Differences in developmental levels can affect how a child reacts to pain (Ningtyas, 2023). The results of this study were also reinforced by Kartono & Nurfitri, (2022) which showed a significant influence between age and the level of pain experienced by children. Researcher analysis of age is a factor that affects pain, especially in children. Children have difficulty understanding pain and assume that every thing the nurse does will cause pain. Children who do not yet have a large vocabulary have difficulty describing verbally and expressing pain to parents or nurses. Younger children have low pain tolerance and feel greater pain than older children.

Then, for responding gender characteristics, the results showed that there was no significant difference in responding to pain levels between men and women. Ningtyas (2023) mentioned gender to be one of the factors affecting pain in children, with the source of several studies mentioning that gender differences are not so influential on pain response. The study further explained gender to be a factor affecting pain in children due to sensitivity, expression, and situational experiences that affect how children react to pain. Similar to what Somantri & Manalu explained (2018), pain is a complex, individual, subjective, and common thing. The researcher's analysis of pain perception felt between boys and girls is subjective because the sensation felt is different for each individual. The child's preparation and cooperative attitude influenced the smoothness of the intervention and infusion procedures.

Based on the gate control theory, when the nurse presses the needle, it stimulates small nerve fibers (pain receptors), causing inhibitory neurons to be inactive and the gate is open, at the same time as providing distraction in the form of animated cartoon films, which stimulate large nerve fibers, causing inhibitory neurons and active neuron projections. But inhibitory neurons prevent projection neurons from sending signals to the brain, so the gate is closed and the pain stimulus received does not reach the brain (Nurafriani et al., 2019).

The pain response in children with severe pain levels shows a shaking chin, the child continues to cry or scream, some children kick their legs, the child looks stiff and difficult to persuade. In severe pain levels dominated by children aged 3 years, a total of 8 (26.7%) respondents, and for moderate pain dominated by children aged 5 and 6 years, a total of 11 respondents.

The afferent nerves translate the stimulus from the needle prick during infusion into nociceptive impulses. Impulses are channeled through the cornu dorsalis of the spinal cord and along the sensory tract to the brain. Then the brain receives the impulse as a sensation of pain that causes emotional and physiological responses such as crying, screaming, increased heart rate, avoidance, and trying to protect themselves (Bahrudin, 2018). Previous research, Purnamasari & Aprilyanti (2020), found that the average pain value of pregnant children when receiving infusions before the intervention of watching good animation was 9.83 on a severe pain scale. This can occur because pain is an unpleasant emotional experience and is felt differently by each individual

Based on the results of the study in Table 4, it shows that there is an effect of audiovisual distraction on the level of infusion pain in prenatal children in the emergency room of Dr. Chasbullah Abdulmadjid Hospital, Bekasi City with the results of the Mann Whitney U test statistical test with a p value of 0.000. This study is in line with research conducted by Akhyar and et al., (2021) with the title Effect of Visual Distraction Techniques on Children's Pain Levels During Infusion Installation in the Emergency Room of Ratu Zaleha Martapura Hospital, it was found that in the intervention group most experienced mild pain, in the control group most

experienced moderate pain, there was a significant difference between the intervention group and the control group with the Mann Whitney test result of 0.000.

The pain response in preschool-age children tends to be the same as the reaction of toddler-age children with angry behavior, strong emotions and physical resistance to the pain experience, but preschool-age children have a better response when given an explanation and distraction from the procedure to be performed (Ringo, L.S., 2023). Distraction is used to focus the child's attention to forget the pain. Through distraction techniques we can manage pain based on the theory that reticular activation inhibits pain stimulus. If a person receives a lot of sensory input, it can cause inhibition of pain impulses to the brain (pain is reduced or not felt at all by the patient). Happy stimuli from outside can also stimulate endorphin secretion, so that the pain stimulus felt by the patient gradually decreases. Therefore, stimulation of vision, hearing and touch may be more successful in reducing pain than stimulation of one sense alone (Mustofa et al., 2021). Watching movies or videos that children like, such as animated films or music videos, can be an effective visual distraction medium (Somantri & Manalu, 2018).

IMPLICATION AND LIMITATIONS

Implication

Researcher analysis of audiovisual distraction has an influence on children when undergoing infusion to distract children's attention from pain, when supported by good concentration and cooperative abilities in children, responding to the pain felt will be lighter. The child can undergo IV insertion calmly and the accompanying parents are also calm. Distraction performed on children also provides benefits to nurses as health workers who often install infusions, especially in the emergency room. Nurses can easily and quickly install infusions, because children no longer cry, thrashing, trying to escape and hitting nurses during infusion. The pain felt in children can be diverted by audiovisual distractions, and the infusion goes smoothly.

limitations

The limitations of this study only look at the variable of audiovisual distraction intervention with pain levels, whereas there are many factors that affect a person's pain response including age, previous infusion experience and family support.

CONCLUSION

The effect of audiovisual distraction on the level of pain of infusion in prenatal children in the emergency room of Dr. Chasbullah Abdulmadjid Hospital, Bekasi City is evidenced by the results of the Mann Whitney U test statistical test with a p value of 0.000. Audiovisual distraction is effective when given to children while undergoing infusion to distract children's attention from pain.

SUGGESTIONS

Appropriate suggestions for hospitals to be applied as a non-pharmacological management to reduce the pain level of infusion in pediatric patients.

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DECLARATION OF INTEREST

The authors declare no conflict of interest in the preparation and publication of this research.

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REFERENCES

Akhyar, M., Marlinda, E., Zainab, H., & Prayogi, B. (2021). Effect of Visual Distraction Technique on Children's Pain Level during Infusion Insertion in the Emergency Room of Ratu Zaleha Martapura Hospital. Journal of Citra Keperawatan, 09 (2), 73-80. https://doi.org/10.31964/jck.v9i2.193

Badan Pusat Statistik (BPS). (2024). *Profil Anak Usia Dini 2024.* Jakarta: Badan Pusat Statistik

Bahrudin, M. (2018). Patofisiologi Nyeri (PAIN). Saintika Medika , 13 (1), 7. https://doi.org/10.22219/sm.v13i1.5449

Chicco, D., Sichenze, A. & Jurman, G. (2025). A simple guide to the use of Student's *t*-test, Mann-Whitney *U* test, Chi-squared test, and Kruskal-Wallis test in biostatistics.*BioData Mining* **18**, 56. https://doi.org/10.1186/s13040-025-00465-6

Ernawati, E., Sutrisno, S., & Gandini, A. L. A. (2023). Pengaruh Distraksi Menonton Kartun Terhadap Nyeri Pada Anak Yang Di Pasang Infus Di Rsd Dr. H. Soemarno Sosroatmodjo Tanjung Selor. *Aspiration of Health Journal*, *1*(2), 273-280. https://doi.org/10.55681/aohj.v1i2.107

Faradilla, A. & Indah, P (2023). *Audiovisual Distraction Therapy to Overcome Anxiety Due to Hospitalization of Preschool-Aged Children*. Jakarta: CV Mitra Cendikia Media.

Fatmawati, L., Syaiful, Y., & Ratnawati, D. (2019). the effect of audiovisual watching cartoons on the level of anxiety during injection procedures in premature children, S1 Thesis Nursing Program Nursing Studies STIKES Jenderal Achmad Yani Yogyakarta. Email: gandasuprobo27@gmail.com. Journal of Health Sciences, 12 (02), 15-29. https://doi.org/10.33086/jhs.v12i02.996

Haris, H. ., Nurafriani, & Asdar, F. . (2019). Pengaruh Distraksi Visual Terhadap Tingkat Nyeri Pada Anak Usia Pra Sekolah Saat Pemasangan Infus Di Blud Rsud H. Padjonga Daeng Ngalle Kabupaten Takalar. *Diagnosis Jurnal Ilmiah Kesehatan*, *14*(2), 192-196. https://doi.org/10.35892/jikd.v14i2.158

Hartini, W., Ahnindah, I., Buntet, AK, & Cirebon, P. (2023). Puzzle Play Therapy Lowers Anxiety Levels in Preschool-Aged Children Experiencing Hospitalization. E-Journal of STIKES YPBI Majalengka, 11 (1), 87-95. https://doi.org/10.33024/mnj.v7i8.21570

Irwan, M. (2020). Pain Management with Distraction Techniques in Pediatric Infusion Insertion: A Literature Review. Journal of Health Education and Literacy, 4 (1), 20-26. https://doi.org/10.31605/j-healt.v2i1

Islamiyah, I., Novianti, A. D., & Anhusadar, L. (2024). Pengaruh Terapi Bermain Puzzel untuk Penurunan Kecemasan Hospitalisasi pada Anak Usia Prasekolah. Murhum: Jurnal Pendidikan Anak Usia Dini , 5 (1), 87–98. https://doi.org/10.37985/murhum.v5i1.409

Kadek Asriani, N., Lestiawati, E., Natalia Retnaningsih, L., & ecosystem, P. (2017). The Effect of Cold Compress on the Pain Level of School-Age Children During Infusion Installation at the Inpatient Preparation Polyclinic of Rsud Panembahan Senopati Bantul. Respati Yogyakarta Journal of Nursing, 4 (1), Phone number 70. http://nursingjurnal.respati.ac.id/index.php/JKRY/index

Kartono, J., & Nurfitri, F. (2022). Comparison of Infusion Insertion Pain Using Card Visual Distraction Techniques. Journal of Panca Bhakti Lampung Health, 10 (1), 35. https://doi.org/10.47218/jkpbl.v10i1.164

Marlina Lenni, Andi, H. (2023). The Effect of Visual Distraction on Pain Levels During Infusion Insertion in Children Aged 3-6 Years in the Flamboyant Room of RSD dr. H.Soemarno Sosroatmodjo. 01 (01), 146-152. https://ejournal.itka.ac.id/index.php/aohj

Mustofa, I. H., Verawati, M., & Sari, R. M. (2021). Comparative Study of Pain Scale During Infusion Installation in Children Given Audio Visual Distraction Techniques Watching Cartoon Animation and Deep Breath Relaxation Techniques at Rsi Siti Aisyah Madiun City. Journal of Health Sciences, 5 (1), 1. https://doi.org/10.24269/hsj.v5i1.664

Nasution, Ade, et al. (2023). Introduction to Health Methodology. Banten: Sada Kurnia Pustaka.

Ningtyas, NWR (2023). Pain Management Anthology. Central Java: CV Pena Persada.

Özer, B., Yücel, E., & Gök, D. G. (2022**).** Effects of Virtual Reality and Audiovisual Distraction on Anxiety, Pain, and Satisfaction During Venipuncture in Children: A Randomized Controlled Study. *Pain Management Nursing, 23*(1), 78–86. https://doi.org/10.1016/j.pmn.2021.09.006

Purnamasari, ERW, & Aprilyanti, N. (2020). Watching rainbow animation decreases pain scale during invasive procedures in republican children. Jurbnal E-Klinik (ECl)Urnal Health, XIII (2), 193-203. https://e-jurnal.universitasalirsyad.ac.id/index.php/jka/article/view/89/97

Ringgo, LS (2022). Buku Ajar Anak DIII Keperawatan Jilid I. Jakarta: Mahakarya Citra Utama.

Santy, WH, & Arief, YS (2023). Intervensi Bahavioral Berbasis FCE Menurunkan Nyeri dan Kecemasan Balita Selama Prosedur Invasif. Surabaya: Pers Universitas Airlangga.

Somantri, B., & Manalu, Bahasa Indonesia: L. HAI. (2018) Gangguan Visual Kartu Mengurangi Tingkat Nyeri Saat Pemasangan Infus Pada Anak Usia Prasekolah. *Jendela Olahraga*, *3* (2), 1–8. https://doi.org/10.26877/jo.v3i2.2381

Tasman, S. G. R., Putri, FA, & Maulina, T. (2022). Validasi dari itu Skala Wajah, Kaki, Aktivitas, Menangis, dan Kemampuan Menghibur (FLACC) Versi Bahasa Indonesia pada Pasien Bibir Sumbing dan/atau Langit-langit Sumbing Pascaoperasi. *Jurnal Kedokteran Gigi Terbuka* , *16* (1), 1–6. https://doi.org/10.2174/18742106-v15-e2202090

Taddio, A., & McMurtry, C. M. (2018**).** Childhood pain: Consequences and recommendations for management. *Clinical Therapeutics, 40*(8), 1272–1280. https://doi.org/10.1016/j.clinthera.2018.06.009

Wii, M. R., Fariadi, S., & Sumardiyono, S. (2018). Audiovisual distraction for reducing procedural anxiety and pain in children: A meta-analysis. *Pediatric Pain Research, 5*(2), 59–67. https://doi.org/10.1188/06.paj.02.0000

Wandini, R., & Resandi, R. (2020). Pemberian tehnik distraksi menonton kartun animasi untuk menurunkan tingkat nyeri prosedur invasif pada anak. Holistik Jurnal Kesehatan, 14(3), 479-485. https://doi.org/10.33024/hjk.v14i3.1708

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