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The Effect of Play Therapy on Children's Anxiety Level Age 4-6 years During Hospitalization at the Kronjo Health Center

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ABSTRACT

Play therapy is a form of play experience that is planned before the form of dealing with action to help their strategies against anxiety, fear and teach them about the actions taken during hospitalization. Research Objectives: to determine the effect of play therapy on the anxiety of preschool-aged children during treatment at the Kronjo Public Health Center, Tangerang Regency 2022. Research method: pre-experimental with a two-group randomized design. The sample in this study amounted to 30 people and the sampling technique used was random sampling technique. The data of this study used primary data by filling out a questionnaire. The data collected is then processed computerized. Results: from this study that there was a significant difference between the anxiety of preschool children before and after play therapy (p value = 0.003 smaller than a = 0.05). Conclusion: this study can be said that play therapy has a significant effect on the level of preschool age children.

Keywords: Anxiety, Children, Play Therapy

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INTRODUCTION

Anxiety in preschool children who are sick and hospitalized, is a form of disorder, namely the unfulfillment of safe and comfortable needs in the form of inadequate emotional needs of children (Guan dkk., 2020). This needs to be addressed as early as possible (G. Chen dkk., 2020). The impact of delays in handling anxiety, children will

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refuse care and treatment (Wang dkk., 2020). This condition will have a major effect on the process of care and treatment and healing of sick children.

Hospitalization is one of the causes of anxiety. Anxiety in children is something that must be addressed immediately, because it greatly disrupts growth and development Various impacts of hospitalization and anxiety experienced by preschoolage children, will risk disrupting the growth and development of children and have an impact on the healing process (J. Chen dkk., 2020). Anxiety that is resolved quickly and well will make children more comfortable and more cooperative with health workers so that it will not hinder the treatment process (Garg dkk., 2020). If anxiety lasts for a long time and is not resolved, it will cause a reaction of disappointment in parents, which creates a detached attitude in the child, so that the child begins to not care about the absence of parents and prefers to stay silent (apathy), refuses to be given action and the worst will traumatize the child after discharge from the hospital.

To overcome the worsening of anxiety levels in children, nurses in providing interventions must pay attention to the needs of children according to their growth and development (Rinott dkk., 2020). Preschool children need parental assistance during the treatment period, the need for a sense of security and comfort, and their activity needs. In providing nursing care to children, it is expected to be able to provide action without the risk of trauma to children, either physical trauma or psychological trauma (Ashina dkk., 2021). Play in preschool is an important activity, which is an important part of the development of the first years of childhood. Play will make children release from the tension and stress experienced (De Santiago-Martín dkk., 2020). Through play programs, children can show what they feel during their illness.

The results of the UNICEF survey in 2012 the prevalence of children experiencing hospitalization was around 89%. Children in the United States are estimated to experience more than 5 million hospitalizations and more than 50% of these children experience anxiety and stress (Barbagallo & Sacerdote, 2018). National Health Survey (SUSENAS), the number of preschool children in Indonesia is 72% of the total population of Indonesia, it is estimated that 35 per 100 children undergo hospitalization and 45% of them experience anxiety. In addition to requiring special care compared to other patients, the time required to care for pediatric patients 20%-45% more than adults (Black dkk., 2019). Children who are hospitalized will affect their physical and psychological conditions.

The morbidity rate of children in Indonesia reaches more than 45% of the total population of children in Indonesia (Jain dkk., 2019). There is an increase in hospitalized children according to Basic Health Research in 2018 the hospitalization rate in Indonesia increased by 13% compared to 2017 (Ministry of Health, 2018). As for Banten Province, in the research of Mujiayanti and Rismawati (2019) conducted at Banten General Hospital, it was found that around 70% experienced anxiety, while based on the results of Sari and Afrina's research (2019) conducted at Balaraja Tangerang Hospital, it was found that 70.8% of preschool-aged children (3-6 years) who were hospitalized at Balaraja Tangerang Hospital experienced moderate anxiety.

Based on the results of a preliminary study conducted at the Kronjo Health Center, during the last 2 months from December 2021 to January 2020, data on the number of patients aged 4-6 years were obtained as many as 15 patients. But the total data for children aged 4-6 years in 2021 is 57 children (Bilal dkk., 2019). Observations found that many children cried, especially during treatment. Apart from crying, pediatric patients also do not want to separate from their parents / guardians and avoid when treatment will be carried out (Klok dkk., 2020). The Kronjo Health Center does not yet have a playroom that is used for the implementation of play therapy.

From the description above, the authors are interested in conducting research with the title "The Effect of Image Recognition Play Therapy on Anxiety Levels in 4-6 Year Old Preschool Children during Hospitalization at Kronjo Health Center in 2022".

RESEARCH METHODOLOGY

The research method used is quantitative method, which is known as data collection techniques with an interview system, and observation. The research took place at the Kronjo health center which was aimed at preschool children aged 4-6 years, where the purpose of this research was to determine the effect of providing animal image recognition play therapy on anxiety levels in preschool children aged 4-6 years during hospitalization at the Kronjo Health Center in 2022 (Middeldorp dkk., 2020). This study used a quantitative research approach, namely the quasi-experimental method with the research design used (nonequivalent control groups design) on preschool-age children during hospitalization at the Kronjo health center (Dobson & Giovannoni, 2019). The descriptive analysis method was carried out to describe the results of quantitative studies systematically, factually, accurately, regarding the facts and characteristics related to the research substance. In this case, it is done to analyze the effect of play therapy on children's anxiety levels.

RESULT AND DISCUSSION

Kronjo Community Health Center is located in Kronjo Sub-district, located west of the capital city of Tangerang Regency, with an area of 4,334.71 Ha. Of the total area of Kronjo sub-district (Rubin dkk., 2020). The boundaries of the Kronjo sub-district are the northern part of the Java Sea, the western part is bordered by the Mekar Baru sub-district, the southern part is bordered by the Sukamulya sub-district and the eastern part is bordered by the Kemiri sub-district of Tangerang Regency and the Kronjo sub-district has 10 working area villages, the first is Kronjo village where Kronjo village has a cup monument which is the center point for the community around Kronjo village, After Kronjo village from the center point, take the direction of the East there is a river where the border of Kronjo village to Pegedangan Ilir village, Pegedangan Ilir village is divided into two namely Pegedangan Ilir and Pegedangan Udik and from the point of the cup monument in the West there is Muncung village, Bakung village, Pegenjahan

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village located in the West, Belukbuk village, Sand village, and Cirumpak village located in the South.

General Data

Child Gender Data Table

Gender	Frequency (n)	Percentage
		(%)
Male	18	60,0
Female	12	40,0
Total	30	100

Source: Primary data, 2022

Based on table 4.1 shows that most of them are male as many as 30 children (60.0%).

Parent Education Table

Frequency (n)	Percentage
	(%)
6	20,0
23	76,7
1	3,3
30	100
	6 23

Source: Primary data, 2022

Based on table 4.3 shows that most of the parents' education is high school as many as 23 people (76.7%).

Table of Parents' Age

		\mathcal{C}
Age	Frequency	Percentage (%)
	(n)	
18-25	4	13,3
26-30	18	60,0
31-40	8	26,7
Total	30	100

Source: Primary data, 2022

Based on table 4.1 shows that most of the parents are aged 26-30 years as many as 18 people (60.0%).

Special Data

Anxiety Level Before Given Image Recognition Therapy

Table 4. 6 Frequency of Anxiety Level in Preschool Age Children Before Given Animal Image Recognition Therapy

Frequency	Percentage
(n)	(%)
1	3,3
29	96,7
30	100
	(n) 1 29

			Pre	Post
		Correlation Coefficient	1.000	.523*
Spear	Pre	Sig. (2-tailed)	•	.003
		N	30	30
man's		Correlation Coefficient	.523**	1.000
rho	Post	Sig. (2-tailed)	.003	
		N	30	30

Source: Primary data, 2022

Based on table 4.6 shows that the level of anxiety in children before being given animal image recognition therapy is mostly classified as high/panic as many as 29 children (96.7%).

Anxiety Level After Given Image Recognition Therapy

Table 4. 6 Frequency of Anxiety Levels in Preschool Age Children After Being Given Animal Image Recognition Therapy

\sim	1.		
	Anxiety Level	Frequency (n)	Percentage (%)
	after therapy		
_	Mild Anxiety	3	10,0
	Moderate	27	90,0
	Anxiety		
	Total	30	100

Source: Primary data, 2022

Based on table 4.6 shows that the level of anxiety in children after being given animal image recognition therapy is mostly classified as moderate anxiety as many as 27 children (90.0%).

Static Tabulation test results A

The table above shows that it is known that the significant value or sig. (2-tailed) is 0.003 (Turner dkk., 2019). because the sig value (2-tailed) is smaller than 0.05, it means that there is a significant relationship between the variables before being given play therapy and after being given play therapy This shows that the p-value = 0.003 is smaller than the critical value of a = 0.05, which means that there is a significant influence between before being given play therapy and after being given animal image recognition play therapy (0.003 < 0.05).

Discussion

Effect of Animal Image Recognition Play Therapy on children before given therapy

Based on the results of the study of the effect of image recognition play therapy at the kronjo health center before being given anxiety response play therapy provides meaningful results where the effect of play therapy on anxiety responses in preschool children is indicated by a p value = 0.003 smaller than α (0.05) (Lumley dkk., 2021). The test results were reinforced by research conducted at the kronjo health center which revealed that there was an effect of giving play therapy coloring pictures on the anxiety level of preschool children during hospitalization at the kronjo health center with a significance of P value = (0.003 < 0.05).

This is in accordance with the theory of Nursalam (2005) cited by Steven, ea al, (2000). Hospitalization means that there are several psychological changes that can cause children to be hospitalized. Hospitalization in pediatric patients can cause anxiety and stress at all age levels (Hajek dkk., 2019). The cause of this anxiety is influenced by many factors, both factors from officers (nurses, doctors and other health workers), new environments and families who accompany them during treatment (Powles dkk., 2020). Families often feel anxious about their child's progress, medication, hospital rules and conditions, and the cost of care. Although the impact does not last on the child, psychologically the child will feel changes in behavior from parents who accompany them during treatment (Murthy dkk., 2020). The child will be more stressed and this affects the healing process, namely the decrease in immune response (Villar dkk., 2020). It has been shown that patients who experience mental shock will be susceptible to disease (Karavani dkk., 2019), because in stressful conditions there is suppression of the immune system. Pediatric patients who are teraupetik and attentive nurses will accelerate the healing process.

In addition, other factors that affect the level of anxiety during hospitalization experience unfamiliar habits, unfamiliar environment, parents who lack emotional support will show anxiety (Rodriguez-Wallberg dkk., 2023). Anxiety in parents will make children's stress increase (Critchley dkk., 2020). By Thus, nursing care is not only focused on the child but also on the parents.

This is also in accordance with the theory of word (2009) cited by (Manson dkk., 2019). Children who are given play therapy usually tend to experience severe anxiety, but after being given play therapy, anxiety decreases (Shah dkk., 2019). Play therapy is a therapy using games that are given and used by children to deal with fears and anxieties, recognize foreign environments, learn to recognize nursing procedures. But play is a fun activity for children so as to create a familiar atmosphere and feelings of happiness.

The results of this study are in accordance with research conducted by (maria anita yusiana 2019). Which results in the conclusion that there is an effect of play therapy with a decrease in the stress of hospitalization of preschool children before play therapy gets a value (66.7%) and after play therapy the child gets a value of 100% (33.3%). This occurs due to stress during hospitalization.

Based on the results of the research that has been stated above and consistent from the results of current research with previous research, it can be assumed that the provision of play therapy in children shows there are changes in children's anxiety responses before being given therapy and after being given play therapy. The results of this study are also reinforced by research conducted by (Yusnita pratiwi 2012). Which states that there is a decrease in anxiety before and after being given therapy, namely from 6 people who experienced moderate anxiety then decreased by 3 people after being given therapy.

The Effect of Play Therapy on the Introduction of Animal Images in Children after being given play therapy

Different results after being given play therapy, children will be easy to play, express feelings through play, eliminate fear in the hospital. Therefore, to overcome the anxiety response in children, the role of nurses in providing maximum nursing care is needed, one of which is by providing animal image recognition games (Gnocchi dkk., 2022). At pre-school age, the child's psyche seems calm, as if preparing for the changes that will come. So play therapy for pre-school children to reduce anxiety levels is very necessary because at this time the child begins to provide self-criticism, awareness of the will, full of considerations arising from the environment.

This is in accordance with the theory of word (2009) cited by (stuart and sundeen) (Wisnu dkk., 2021). Stating that a moderate level of anxiety allows a person to decide on one important thing and put aside other things and mild anxiety is related to ordinary tensions in everyday life that cause a person to remain alert (Shibeshi dkk., 2021). The treated child was initially in the focus of his illness and unfamiliar environment (Yustikasari dkk., 2021), but after therapy the child began to accustomed to their environment and willing to play with their peers.

This is also in accordance with the theory of Nursalam (2008). Providing play therapy to sick children during hospitalization is an effort to facilitate children in order to meet their growth and development needs in accordance with the function of play. Playing will provide a release of stress tension, allowing the expression of emotions and the release of socially acceptable impulses. Encourages experimentation and testing of frightening situations in a safe way and facilitates indirect verbal and non-verbal communication about needs, fears and desires.

The results of this study are in line with research conducted by (muhamad idris 2018). The results of data analysis showed a significant decrease from children who were at the level of severe anxiety before being given play therapy 46.7% to 20% who were at the level of severe anxiety after play therapy. This can be due to children being a little less cooperative when play therapy is performed.

Hypothesis testing of the effect of play therapy on the introduction of animal images in children before and after being given play therapy in the kronjo health center of Tangerang district 2022.

Based on the results of statistical tests obtained pre-test and post-test anxiety responses provide meaningful results where the effect of play therapy on anxiety responses in pre-school children is indicated by a p value = 0.003 smaller than α (0.05). The test results were reinforced by research conducted at the kronjo health center which

revealed that there was an effect of giving play therapy coloring pictures on the anxiety level of preschool children during hospitalization at the kronjo health center with a significance of P value = (0.003 < 0.05).

Different results after being given play therapy, children will easily play, express feelings through play, eliminate fear in the hospital. Therefore, to overcome the anxiety response in children, the role of nurses in providing maximum nursing care is needed, one of which is by providing animal image recognition games. At pre-school age, the child's psyche seems calm, as if preparing for the changes that will come. So play therapy for pre-school children to reduce anxiety levels is very necessary because at this time the child begins to provide self-criticism, awareness of the will, full of considerations arising from the environment.

CONCLUSION

Based on the results of research that has been done, it can be concluded that:

The level of anxiety in children before being given animal image recognition therapy is mostly classified as high/panic, as many as 30 children (96.7%).

The level of anxiety in children after being given play therapy is mostly classified as moderate, namely 27 children (90.0%).

There is an effect of giving animal image recognition play therapy on reducing anxiety levels in preschool children at the Kronjo Health Center obtained a Sig value. (0.003<0.05).

So it can be concluded that there is a difference in the average anxiety test results between patients who are given the introduction of animal images and those who are not given the introduction of animal images.

REFERENCES

- Ashina, M., Buse, D. C., Ashina, H., Pozo-Rosich, P., Peres, M. F. P., Lee, M. J., Terwindt, G. M., Halker Singh, R., Tassorelli, C., Do, T. P., Mitsikostas, D. D., & Dodick, D. W. (2021). Migraine: Integrated approaches to clinical management and emerging treatments. *The Lancet*, 397(10283), 1505–1518. https://doi.org/10.1016/S0140-6736(20)32342-4
- Barbagallo, M., & Sacerdote, P. (2018). Ibuprofen in the treatment of children's inflammatory pain: A clinical and pharmacological overview. *Minerva Pediatrica*, 71(1). https://doi.org/10.23736/S0026-4946.18.05453-1
- Bilal, M., Adeel, M., Rasheed, T., Zhao, Y., & Iqbal, H. M. N. (2019). Emerging contaminants of high concern and their enzyme-assisted biodegradation A review. *Environment International*, 124, 336–353. https://doi.org/10.1016/j.envint.2019.01.011
- Black, E., Khor, K. E., Kennedy, D., Chutatape, A., Sharma, S., Vancaillie, T., & Demirkol, A. (2019). Medication Use and Pain Management in Pregnancy: A Critical Review. *Pain Practice*, 19(8), 875–899. https://doi.org/10.1111/papr.12814
- Chen, G., Wu, D., Guo, W., Cao, Y., Huang, D., Wang, H., Wang, T., Zhang, X., Chen, H., Yu, H., Zhang, X., Zhang, M., Wu, S., Song, J., Chen, T., Han, M., Li, S.,

- Luo, X., Zhao, J., & Ning, Q. (2020). Clinical and immunological features of severe and moderate coronavirus disease 2019. *Journal of Clinical Investigation*, 130(5), 2620–2629. https://doi.org/10.1172/JCI137244
- Chen, J., Qi, T., Liu, L., Ling, Y., Qian, Z., Li, T., Li, F., Xu, Q., Zhang, Y., Xu, S., Song, Z., Zeng, Y., Shen, Y., Shi, Y., Zhu, T., & Lu, H. (2020). Clinical progression of patients with COVID-19 in Shanghai, China. *Journal of Infection*, 80(5), e1–e6. https://doi.org/10.1016/j.jinf.2020.03.004
- Critchley, H. O. D., Babayev, E., Bulun, S. E., Clark, S., Garcia-Grau, I., Gregersen, P. K., Kilcoyne, A., Kim, J.-Y. J., Lavender, M., Marsh, E. E., Matteson, K. A., Maybin, J. A., Metz, C. N., Moreno, I., Silk, K., Sommer, M., Simon, C., Tariyal, R., Taylor, H. S., ... Griffith, L. G. (2020). Menstruation: Science and society. *American Journal of Obstetrics and Gynecology*, 223(5), 624–664. https://doi.org/10.1016/j.ajog.2020.06.004
- De Santiago-Martín, A., Meffe, R., Teijón, G., Martínez Hernández, V., López-Heras, I., Alonso Alonso, C., Arenas Romasanta, M., & De Bustamante, I. (2020). Pharmaceuticals and trace metals in the surface water used for crop irrigation: Risk to health or natural attenuation? *Science of The Total Environment*, 705, 135825. https://doi.org/10.1016/j.scitotenv.2019.135825
- Dobson, R., & Giovannoni, G. (2019). Multiple sclerosis a review. *European Journal of Neurology*, 26(1), 27–40. https://doi.org/10.1111/ene.13819
- Garg, S., Kim, L., Whitaker, M., O'Halloran, A., Cummings, C., Holstein, R., Prill, M., Chai, S. J., Kirley, P. D., Alden, N. B., Kawasaki, B., Yousey-Hindes, K., Niccolai, L., Anderson, E. J., Openo, K. P., Weigel, A., Monroe, M. L., Ryan, P., Henderson, J., ... Fry, A. (2020). Hospitalization Rates and Characteristics of Patients Hospitalized with Laboratory-Confirmed Coronavirus Disease 2019—COVID-NET, 14 States, March 1–30, 2020. MMWR. Morbidity and Mortality Weekly Report, 69(15), 458–464. https://doi.org/10.15585/mmwr.mm6915e3
- Gnocchi, M., D'Alvano, T., Lattanzi, C., Messina, G., Petraroli, M., Patianna, V. D., Esposito, S., & Street, M. E. (2022). Current evidence on the impact of the COVID-19 pandemic on paediatric endocrine conditions. *Frontiers in Endocrinology*, *13*, 913334. https://doi.org/10.3389/fendo.2022.913334
- Guan, W., Ni, Z., Hu, Y., Liang, W., Ou, C., He, J., Liu, L., Shan, H., Lei, C., Hui, D. S. C., Du, B., Li, L., Zeng, G., Yuen, K.-Y., Chen, R., Tang, C., Wang, T., Chen, P., Xiang, J., ... Zhong, N. (2020). Clinical Characteristics of Coronavirus Disease 2019 in China. *New England Journal of Medicine*, 382(18), 1708–1720. https://doi.org/10.1056/NEJMoa2002032
- Hajek, P., Phillips-Waller, A., Przulj, D., Pesola, F., Myers Smith, K., Bisal, N., Li, J., Parrott, S., Sasieni, P., Dawkins, L., Ross, L., Goniewicz, M., Wu, Q., & McRobbie, H. J. (2019). A Randomized Trial of E-Cigarettes versus Nicotine-Replacement Therapy. New England Journal of Medicine, 380(7), 629–637. https://doi.org/10.1056/NEJMoa1808779
- Jain, N., Brock, J. L., Malik, A. T., Phillips, F. M., & Khan, S. N. (2019). Prediction of Complications, Readmission, and Revision Surgery Based on Duration of Preoperative Opioid Use: Analysis of Major Joint Replacement and Lumbar Fusion. *Journal of Bone and Joint Surgery*, 101(5), 384–391. https://doi.org/10.2106/JBJS.18.00502
- Karavani, G., Schachter-Safrai, N., Revel, A., Mordechai-Daniel, T., Bauman, D., & Imbar, T. (2019). In vitro maturation rates in young premenarche patients.

- Fertility and Sterility, 112(2), 315–322. https://doi.org/10.1016/j.fertnstert.2019.03.026
- Lumley, S. F., O'Donnell, D., Stoesser, N. E., Matthews, P. C., Howarth, A., Hatch, S. B., Marsden, B. D., Cox, S., James, T., Warren, F., Peck, L. J., Ritter, T. G., De Toledo, Z., Warren, L., Axten, D., Cornall, R. J., Jones, E. Y., Stuart, D. I., Screaton, G., ... Eyre, D. W. (2021). Antibody Status and Incidence of SARS-CoV-2 Infection in Health Care Workers. *New England Journal of Medicine*, 384(6), 533–540. https://doi.org/10.1056/NEJMoa2034545
- Manson, J. E., Cook, N. R., Lee, I.-M., Christen, W., Bassuk, S. S., Mora, S., Gibson, H., Albert, C. M., Gordon, D., Copeland, T., D'Agostino, D., Friedenberg, G., Ridge, C., Bubes, V., Giovannucci, E. L., Willett, W. C., & Buring, J. E. (2019). Marine n–3 Fatty Acids and Prevention of Cardiovascular Disease and Cancer. *New England Journal of Medicine*, 380(1), 23–32. https://doi.org/10.1056/NEJMoa1811403
- Murthy, R. K., Loi, S., Okines, A., Paplomata, E., Hamilton, E., Hurvitz, S. A., Lin, N. U., Borges, V., Abramson, V., Anders, C., Bedard, P. L., Oliveira, M., Jakobsen, E., Bachelot, T., Shachar, S. S., Müller, V., Braga, S., Duhoux, F. P., Greil, R., ... Winer, E. P. (2020). Tucatinib, Trastuzumab, and Capecitabine for HER2-Positive Metastatic Breast Cancer. *New England Journal of Medicine*, *382*(7), 597–609. https://doi.org/10.1056/NEJMoa1914609
- Powles, T., Park, S. H., Voog, E., Caserta, C., Valderrama, B. P., Gurney, H., Kalofonos, H., Radulović, S., Demey, W., Ullén, A., Loriot, Y., Sridhar, S. S., Tsuchiya, N., Kopyltsov, E., Sternberg, C. N., Bellmunt, J., Aragon-Ching, J. B., Petrylak, D. P., Laliberte, R., ... Grivas, P. (2020). Avelumab Maintenance Therapy for Advanced or Metastatic Urothelial Carcinoma. *New England Journal of Medicine*, 383(13), 1218–1230. https://doi.org/10.1056/NEJMoa2002788
- Rinott, E., Kozer, E., Shapira, Y., Bar-Haim, A., & Youngster, I. (2020). Ibuprofen use and clinical outcomes in COVID-19 patients. *Clinical Microbiology and Infection*, 26(9), 1259.e5-1259.e7. https://doi.org/10.1016/j.cmi.2020.06.003
- Rodriguez-Wallberg, K. A., Sergouniotis, F., Nilsson, H. P., & Lundberg, F. E. (2023). Trends and outcomes of fertility preservation for girls, adolescents and young adults with Turner syndrome: A prospective cohort study. *Frontiers in Endocrinology*, *14*, 1135249. https://doi.org/10.3389/fendo.2023.1135249
- Rubin, G. D., Ryerson, C. J., Haramati, L. B., Sverzellati, N., Kanne, J. P., Raoof, S., Schluger, N. W., Volpi, A., Yim, J.-J., Martin, I. B. K., Anderson, D. J., Kong, C., Altes, T., Bush, A., Desai, S. R., Goldin, O., Goo, J. M., Humbert, M., Inoue, Y., ... Leung, A. N. (2020). The Role of Chest Imaging in Patient Management during the COVID-19 Pandemic: A Multinational Consensus Statement from the Fleischner Society. *Radiology*, 296(1), 172–180. https://doi.org/10.1148/radiol.2020201365
- Shah, V., Nabwera, H. M., Sosseh, F., Jallow, Y., Comma, E., Keita, O., & Torondel, B. (2019). A rite of passage: A mixed methodology study about knowledge, perceptions and practices of menstrual hygiene management in rural Gambia. *BMC Public Health*, *19*(1), 277. https://doi.org/10.1186/s12889-019-6599-2
- Shibeshi, B. Y., Emiru, A. A., & Asresie, M. B. (2021). Disparities in menstrual hygiene management between urban and rural schoolgirls in Northeast, Ethiopia. *PLOS ONE*, *16*(9), e0257853. https://doi.org/10.1371/journal.pone.0257853

- Turner, N. A., Sharma-Kuinkel, B. K., Maskarinec, S. A., Eichenberger, E. M., Shah, P. P., Carugati, M., Holland, T. L., & Fowler, V. G. (2019). Methicillin-resistant Staphylococcus aureus: An overview of basic and clinical research. *Nature Reviews Microbiology*, 17(4), 203–218. https://doi.org/10.1038/s41579-018-0147-4
- Villar, J., Ferrando, C., Martínez, D., Ambrós, A., Muñoz, T., Soler, J. A., Aguilar, G., Alba, F., González-Higueras, E., Conesa, L. A., Martín-Rodríguez, C., Díaz-Domínguez, F. J., Serna-Grande, P., Rivas, R., Ferreres, J., Belda, J., Capilla, L., Tallet, A., Añón, J. M., ... Villar, J. (2020). Dexamethasone treatment for the acute respiratory distress syndrome: A multicentre, randomised controlled trial. *The Lancet Respiratory Medicine*, 8(3), 267–276. https://doi.org/10.1016/S2213-2600(19)30417-5
- Wang, Z., Yang, B., Li, Q., Wen, L., & Zhang, R. (2020). Clinical Features of 69 Cases With Coronavirus Disease 2019 in Wuhan, China. *Clinical Infectious Diseases*, 71(15), 769–777. https://doi.org/10.1093/cid/ciaa272
- Wisnu, N. T., Tutik, H., & Handayani, T. E. (2021). Early Detection Instruments for Children with Special Needs. *Open Access Macedonian Journal of Medical Sciences*, 9(E), 1261–1266. https://doi.org/10.3889/oamjms.2021.7206
- Yustikasari, Y., Gemiharto, I., & Ayuningtyas, F. (2021). The Development of Communication Model for the Empowerment of Highly Poor Villages in Pangandaran Regency, West Java, Indonesia. *IOP Conference Series: Earth and Environmental Science*, 819(1), 012038. https://doi.org/10.1088/1755-1315/819/1/012038

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