



COMMUNITY DIAGNOSIS: AN OVERVIEW OF THE INCIDENCE OF PEDICULOSIS CAPITIS INFECTION AT DHARMA LAKSANA ORPHANAGE

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ABSTRACT

Pediculus capitis or head lice are ectoparasites that live on the human scalp. Children are more often affected by *Pediculus capitis*. One of the factors causing *Pediculus capitis* is poor personal hygiene. The purpose of this study was to analyze descriptively the incidence of *Pediculus capitis* infection at Dharma Laksana Orphanage with a community diagnosis approach. This was a cross-sectional study with a sample of 40 orphanages. The variables of this study were level of knowledge, education, personal hygiene, occupancy density, gender, age, and *Pediculus capitis* incidence. Questionnaires were distributed to the Dharma Laksana Orphanage community at one time with the questionnaire explained first. Data was collected and processed using SPSS and analyzed univariately (descriptively). A total of 62.5% of the orphanage community experienced the incidence of *Pediculus capitis*. Most members of the orphanage community have poor knowledge (67.5%) and poor personal hygiene (57.5%) regarding the prevention of *Pediculus capitis*. Intervention in the form of counseling through posters and videos about *Pediculus capitis* and the administration of 1% permethrin (*peditox*) to reduce the spread of *Pediculus capitis* are needed.

Keywords: education level; knowledge level; orphanage; personal hygiene; pediculosis capitis

First Received

18 August 2023

Revised

29 August 2023

Accepted

14 September 2023

Final Proof Received

20 October 2023

Published

18 November 2023

How to cite (in APA style)

Mahayani, I., & Yumna, N. (2023). Community Diagnosis: an Overview of the Incidence of Pediculosis Capitis Infection at Dharma Laksana Orphanage. *Indonesian Journal of Global Health Research*, 5(4), 717-722. <https://doi.org/10.37287/ijghr.v5i4.2367>.

INTRODUCTION

Orphanages are social welfare business institutions that have the responsibility of providing social welfare services for children who are abandoned or far from their parents by providing substitute services for parents or guardians of children in meeting physical, mental and social needs so that foster children can get wide, appropriate and adequate opportunities to develop their personalities as expected, namely as part of the next generation of ideals nation (Dewantara & Nurgiansah, 2021). Orphanages are non-profit social institutions that accommodate, educate and care for orphans, orphans and abandoned children. Indonesia has made significant child protection efforts through the deinstitutionalization of orphanages and community development aimed at reducing the dependence of poor parents and underprivileged families on orphanages (Karyadiputra et al., 2019; McLaren & Qonita, 2020; Rianita Putri, 2020; Widiyanto et al., 2022).

Orphanages are institutions that provide several dormitory facilities that are used together, therefore orphanage residents are vulnerable to contracting various kinds of health problems both from medical and non-medical problems. One of the orphanages in the Mataram City area is the Dharma Laksana Orphanage. This orphanage has around more than 53 foster children with an age range of 11-19 years, which are equipped with school building facilities

from kindergarten, elementary, junior high, and high school. In addition to the school building, other facilities include women's and men's bedrooms, and a warehouse for storage.

Children who belong to orphanages are a specific community group. Community according to Duarsa et al. (2022) is a part of society consisting of a group of people who have the same characteristics including the same hobbies or preferences, or work. Communities have various forms, one of which is an orphanage. Community diagnosis is needed as a systematic effort that includes solving community health problems as a primary unit that focuses on establishing diagnosis in a community. Community diagnosis begins with analyzing the situation, identifying problems, causing problems, prioritizing problems to alternative problem solving. Problems that exist in the orphanage community generally arise from lack of hygiene factors. One of the problems that could potentially arise is *Pediculosis capitis* or head lice, which are ectoparasites that live on the human scalp. This infection arises from a low level of personal hygiene, especially the hair. Clinical symptoms in patients *Pediculosis capitis* in the form of itching around the scalp. This is caused by saliva or saliva of lice and scratching which results in excoriation and crusting in the scalp area which facilitates secondary infections (Anggraini et al., 2018; Novatria et al., 2019; Rianita Putri, 2020). Seeing from the possibility of these problems, researchers are interested in analyzing quantitatively descriptively related to the picture of infection incidence *Pediculosis capitis* at Dharma Laksana Orphanage with a community diagnosis approach.

METHOD

This was a cross-sectional study conducted at Dharma Laksana Orphanage, West Nusa Tenggara in June-July 2023. The population in this study was the community of foster children in Dharma Laksana Orphanage. Study subjects were selected using consecutive sampling where each subject who met the inclusion criteria was selected until the required number of samples was reached. The number of study subjects in this study was 40 respondents. Data on demographics, knowledge level, occupancy density, and personal hygiene were collected using adapted questionnaires from related journals. Observation sheets are used to assess occupancy density and carry out head lice removal using a serite comb to ensure the presence of the parasite. (Kuesioner diabdopsi dari penelitian yang dilakukan Hanik Fadilah, 2015 yang sudah dilakukan validasi dan reliabilitasi dengan content validity dengan pakar parasitologi)The collected data were analyzed using univariate analysis to obtain a description of the frequency.

RESULTS

Table 1.
Characteristics of Dharma Laksana Orphanage Community

Characteristic	f	%
Gender		
Male	20	50
Female	20	50
Age		
≤ 13	12	30
> 13	28	70
Education		
Elementary school	2	5
Junior high school	20	50
Senior high school	18	45
College	0	0

The results of this analysis are presented in the form of tables obtained from respondent

characteristics data consisting of 40 orphanage children who are members of the Dharma Laksana orphanage community. Based on the information in the table, it is known that most communities consist of male (50%) and 20 people (50%) female, with the highest range of >13 years at 28 people (70%), and most of them were junior high school (50%).

Table 2.
Results of univariate analysis

Variables	Frequency	
	f	%
Knowledge Level		
Poor	27	67,5
Good	13	32,5
<i>Personal Hygiene</i>		
Good	17	42,5
Poor	23	57,5
Occupancy Density		
Eligible	29	72,5
Not Eligible	11	27,5
<i>Pediculosis capitis</i>		
Positive	25	62,5
Negative	15	37,5

DISCUSSION

This study refers to community diagnoses using the Delbecq Method. The Delbecq method is a method non-scoring which systematically collects opinions from a group of the population through a medium of presentation, be it PowerPoint, posters, and so on (Duarsa et al., 2022). This method is formulated in Focus Group Discussion (FGD) to discuss and formulate priority issues. Everyone has the right to give an opinion on priority criteria in determining the problems that are considered the most problematic with various existing opinions. After the FGD was conducted, it was found that the priority problem faced by the Dharma Laksana Orphanage community was infection *Pediculosis capitis* (Duarsa et al., 2022). Level of knowledge regarding *Pediculosis capitis* In this community tends to have less knowledge (67.5%). This is in line with the results of research conducted by Anggraini et al. (2018) and Rahmawati et al (2020) which explains that knowledge can influence events *Pediculosis capitis*. Low knowledge of *Pediculosis capitis* Especially regarding symptoms, mode of transmission, as well as treatment affect how the infection occurs. Knowledge can be used to transform a person's circumstances and behavior into positive behavior. Have knowledge of *Pediculosis capitis* and apply that knowledge to help prevent and treat *Pediculosis capitis* (Nurmatialila et al., 2019).

The majority of the study subjects were in junior high school (50%). The high and low education of a person can affect the occurrence *Pediculosis capitis*. In addition, the level of education also affects healthy behavior in preventing transmission *Pediculosis capitis* (Hapsari, 2021). Level of knowledge regarding Personal hygiene In this study, the results were worse. This is because: Personal hygiene is a factor that can influence the occurrence *Pediculosis capitis*. Personal hygiene Bad is the main factor that can make it easier for infection to enter the limbs, be it skin, hair or other limbs (Hardiyanti et al., 2019). The occupancy density in this study showed more qualified. This shows that this study is not in line with the theory that the more occupants in a room, the easier it is to be a source of disease. This is because, because the distance from individuals to other individuals is limited. This is also not in line with the results of Trisyandi's research in 2017 at the Asyiyah

Orphanage in Padang City, showing a relationship between room humidity and the incidence of pediculosis capitis in the Asiyah Orphanage in Padang City. The condition of the room that tends to be humid will affect the incidence of a disease. There is an imbalance between the environment and the host, so microorganisms easily multiply and infect humans. Environmental conditions that do not meet health requirements can increase the risk of spreading diseases, especially infectious diseases such as pediculosis capitis (Puspitasari et al., 2021).

Based on univariate data, it was found that the cause of the problems found in the orphanage community was a lack of knowledge about Pediculosis capitis and personal hygiene. Therefore, it is necessary to increase knowledge related to Pediculosis capitis and related to personal hygiene behavior by intervening in the orphanage community. In this study, researchers also provided assistance in the form of 1) Educational videos about the importance of maintaining personal hygiene and surroundings to avoid the spread of Pediculosis capitis; 2) Posters containing knowledge about Pediculosis capitis; and management in the form of Peditox (Permethrin 1%) with external use.

CONCLUSION

The incidence of Pediculosis capitis infection at Dharma Laksana Orphanage can occur because the level of education, knowledge, and personal hygiene at Dharma Laksana Orphanage is still lacking. Problem solving in orphanage communities can be done by providing information about the causes, symptoms and how to reduce symptoms and how to prevent the problem intervened regarding Pediculosis capitis. It is necessary to conduct regular education using educational media to increase community knowledge, as well as the administration of Peditox (Permethrin 1%) to reduce the spread of problems in the Dharma Laksana orphanage community.

REFERENCES

- Anggraini, A., Anum, Q., & Masri, M. (2018). Hubungan Tingkat Pengetahuan dan Personal Hygiene terhadap Kejadian Pedikulosis Kapitis pada Anak Asuh di Panti Asuhan Liga Dakwah Sumatera Barat. *Jurnal Kesehatan Andalas*, 7(1), 131. <https://doi.org/10.25077/jka.v7i1.791>
- Duarsa, A. B. S., Tajuddin, M., Anditjarina, D., Fikri, L. H., & Arifin, Z. (2022). *Buku Ajar Kedokteran Komunitas ((1st ed.))*. Program Studi Pendidikan Dokter.
- Hapsari, R. R. (2021). Pediculosis Capitis In Female Student's Life At Pondok Pesantren PPAI An-Nahdliyah Kabupaten Malang. *Media Gizi Kesmas*, 10(1), 24–31. <https://doi.org/10.20473/mgk.v10i1.2021.24-31>
- Hardiyanti, N. I., Kurniawan, B., Mutiara, H., Kedokteran, F., Lampung, U., Parasitologi, B., Kedokteran, F., & Lampung, U. (2019). Hubungan Personal Hygiene Dengan Angka Kejadian Pediculosis Capitis Pada Santriwati Madrasah Tsanawiyah Pesantren Ummul Mukminin Makassar (2). *Agromedicine*, 6, 38–45.
- Karyadiputra, E., Mahalisa, G., Sidik, A., & Wathani, M. R. (2019). Pengembangan Kreativitas Anak Asuh Berbasis Ti Dalam Menanamkan Nilai Wirausaha Pada Asrama Putera Panti Asuhan Yatim Piatu Dan Dhu'Afa Yayasan Al-Ashr Banjarmasin. *Jurnal Pengabdian Al-Ikhlas*, 4(2), 186–190. <https://doi.org/10.31602/jpaiuniska.v4i2.1956>

- Kurnia, R., Teresa, A., Mutiasari, D., Jelita, H., & Augustina, I. (2020). Hubungan Tingkat Pengetahuan dan Perilaku Penggunaan Sampo Terhadap Kejadian Pedikulosis Kapitis di Panti Asuhan X Palangka Raya. *Jurnal Kedokteran Universitas Palangka Raya*, 8(1), 965–972. <https://doi.org/10.37304/jkupr.v8i1.1501>
- McLaren, H., & Qonita, N. (2020). Indonesia's orphanage trade: Islamic philanthropy's good intentions, some not so good outcomes. *Religions*, 11(1), 1–11. <https://doi.org/10.3390/rel11010001>
- Novatria, Anwar, & Sitorus. (2019). Pengaruh Faktor Sanitasi terhadap Kejadian Pedikulosis Kapitis di Panti Asuhan Kota Palembang. *Jurnal Epidemiologi Kesehatan Komunitas*, 0(0), 73–77.
- Nurmatialila, W., Widyawati, & Utami, A. (2019). Hubungan Antara Tingkat Pengetahuan Mengenai Pedikulosis Kapitis Dan Praktik Kebersihan Diri Dengan Kejadian Pedikulosis Kapitis Pada Siswa Sdn 1 Tunggak Kecamatan Toroh Kabupaten Grobogan. *Diponegoro Medical Journal (Jurnal Kedokteran Diponegoro)*, 8(3), 1081–1091.
- Puspitasari, octavia shinta, Agustina, T., Ichsan, B., & Basuki, sri wahyu. (2021). Hubungan Kepadatan Hunian Dan Perilaku Pencegahan Penyakit terhadap Kejadian Pediculosis Capitis Siswa SMA di Pondok Pesantren. *Jurnal Kedokteran Universitas Muhammadiyah Surakarta*, 336.
- Rianita Putri, F. K. (2020). Identifikasi Paparan Pediculus Humanus Capitis pada Anak Asuh di Panti Asuhan Identification of Pediculus Humanus Capitis Exposure in Foster Children at the Orphanage FITRIANI KAHAR Jurusan Analis Kesehatan Poltekkes Kemenkes Semarang Jl . Wolter Monginsi. *Jurnal Laboratorium Medis*, 02(02), 56–60.
- Widiyanto, A., Atmojo, J. T., Duarsa, A. B. S., Kurniawan, H. D., Mubarok, A. S., Al Firdaus, M. F., ... & Martaliza, L. P. G. (2022). Pendidikan Kesehatan tentang Perilaku Hidup Bersih dan Sehat di TPQ Ar-Rohmah Dusun Kebak, Kecamatan Kebakkramat, Kabupaten Karanganyar. *Jurnal Peduli Masyarakat*, 4(1), 41-46.

