

Identification of Diseases Occurring in Toddlers in the Work Area of the Lohia Health Center for the January-May 2023 period

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ABSTRACT

This research will be conducted in June 2023 at the Lohia Health Center. The population in this study were all toddlers in the working area of the Lohia Health Center, Lohia District, Muna Regency, totaling 109 toddlers at the beginning of January-May 2023. The sampling technique in this study used total sampling, namely toddlers in the work area at the Lohia Health Center, Muna Regency, totaling 109 toddlers. in early January-May 2023. Secondary data is data obtained from the working area of the Lohia Health Center in the form of data on the number of diseases in toddlers. There are 4 types of diseases that are often experienced by toddlers in the Lohia Health Center Work Area, namely ISPA 72.48%, Diarrhea 8.26%, Dermatitis 13.76% and Allergies 5.5%. If reviewed based on the results obtained that diseases that often occur in toddlers in the Lohia Health Center Work Area are caused by several factors, namely environmental factors that are not clean, maternal knowledge factors about skin care in toddlers and genetic factors

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1. INTRODUCTION

Toddlers are children aged 0-59 months at this time characterized by a process of growth and development that is very rapid and is accompanied by changes that require nutrients in greater quantities with high quality (Ariani, 2017). According to WHO, the age group for toddlers is 0-60 months. A balanced intake of nutrients is necessary during infancy for growth and development (WHO, 2016). The health of a toddler is greatly influenced by the nutrients that are absorbed in the body, the lack of nutrients that are absorbed by the body results in being susceptible to disease because nutrition has a big influence on the body's immunity. Some of the diseases that are often suffered by toddlers include fever, diarrhea, vomiting, smallpox, measles and skin infections.

According to the World Health Organization (WHO 2019) estimates that ARI cases experienced by toddlers, especially in developing countries, show high numbers, namely 151.8 million cases per year, according to WHO (2020) it is known that ARI in toddlers aged 1-5 years there are 1,988 cases with a prevalence of 42.91%. Meanwhile, according to WHO (2021) it is known that ARI in toddlers aged 1-5 years has 678 cases. Diarrhea according to data from the United Nations Children's (UNICEF) and the World Health Organization (WHO, 2019) estimates that cases of diarrhea have increased by 40% or around 1,591,944 million cases. According to data from the United Nations Children's (UNICEF) and the World Health Organization (WHO, 2020) diarrhea is the second cause of death in children under 1-5 years, with as many as 1.7 billion cases of diarrhea occurring each year and causing around 760,000 million cases. to less than 1 per 1000 live births. In Indonesia, diarrhea is the second leading cause of death in children under 5 years of age. Whereas in 2021 the diarrhea morbidity rate according to (WHO) will reach around 1000%. According to the World Allergy Organization (WHO, 2019) 22% of the world's population suffers from allergies and continues to increase every year, according to (WHO 2020) the prevalence of allergies that occur in toddlers aged 1-5 years is around 10-30% in toddlers, according to (WHO, 2021) the prevalence of allergies reaches 20%. While dermatitis according to (WHO 2019) reaches 15% per year, according to (WHO 2020) it reaches 20% per year, while according to (WHO, 2021) the prevalence of allergies reaches 2.4%. Whereas in 2021 the diarrhea morbidity rate according to (WHO) will reach around

1000%. According to the World Allergy Organization (WHO, 2019) 22% of the world's population suffers from allergies and continues to increase every year, according to (WHO 2020) the prevalence of allergies that occur in toddlers aged 1-5 years is around 10-30% in toddlers, according to (WHO, 2021) the prevalence of allergies reaches 20%. While dermatitis according to (WHO 2019) reaches 15% per year, according to (WHO 2020) it reaches 20% per year, while according to (WHO, 2021) the prevalence of allergies reaches 2.4%. Whereas in 2021 the diarrhea morbidity rate according to (WHO) will reach around 1000%. According to the World Allergy Organization (WHO, 2019) 22% of the world's population suffers from allergies and continues to increase every year, according to (WHO 2020) the prevalence of allergies that occur in toddlers aged 1-5 years is around 10-30% in toddlers, according to (WHO, 2021) the prevalence of allergies reaches 20%. While dermatitis according to (WHO 2019) reaches 15% per year, according to (WHO 2020) it reaches 20% per year, while according to (WHO, 2021) the prevalence of allergies reaches 2.4%.

The Southeast Sulawesi Provincial Health Office estimates that the estimated number of ISPA cases in toddlers is 56,735 cases in 2019, in 2020 the number of ISPA sufferers in toddlers is 67,099 cases, while in 2021 there has been a decrease in ISPA cases to as many as 33,731 cases. The prevalence of diarrhea in toddlers in Southeast Sulawesi Province in 2019 reached 5.6%, in 2020 the prevalence of diarrhea morbidity reached 43%, while in 2021 it reached 593 cases. Allergic events are conditions that occur when the body's immune system reacts excessively to something that triggers an allergy or also known as an allergen. Other research data also mentions that there are more and more allergic incidents in toddlers reported by various regions in Indonesia, reaching 3% to 60% of cases.

From the results of a preliminary study conducted in March at the Lohia Health Center, it was found that in 2021 the number of diseases in toddlers would reach 95 people, in 2022 the number of diseases in toddlers would reach 78 people, while in 2023 the number of diseases in toddlers would reach 109 people. From the survey data that I have conducted, in 2021-2023 it is known that 282 toddlers have ARI, Diarrhea, Allergies, and Dermatitis.

2. METHODS

This study uses a descriptive research design, which is a research method that is carried out with the main objective of making a description or descriptive. This research will be conducted in June 2023 at the Lohia Health Center. The population in this study were all toddlers in the working area of the Lohia Health Center, Lohia District, Muna Regency, totaling 109 toddlers at the beginning of January-May 2023. The sampling technique in this study used total sampling, namely toddlers in the work area at the Lohia Health Center, Muna Regency, totaling 109 toddlers. in early January-May 2023. Secondary data is data obtained from the working area of the Lohia Health Center in the form of data on the number of diseases in toddlers.

3. RESULTS AND DISCUSSION

Based on the research results obtained regarding the identification of diseases that occur in toddlers in the working area of the Lohia Public Health Center for the period January-May 2023 with 109 samples of toddlers registered in the working area of the Lohia Health Center can be seen as follows:

Sample Characteristics

Based on the research results it is known that the distribution of sample characteristics based on can be seen in the following tables:

Table 1. Sample Characteristics in terms of Toddler Age

| Toddler Age | Toddler Age | |
|-------------|-------------|------------|
| | Frequency | Percentage |
| 1 year | 21 | 19.27% |
| 2 years | 26 | 23.85% |
| 3 years | 24 | 22.02% |

| | | |
|---------------|------------|-------------|
| 4 years | 21 | 19.27% |
| 5 years | 17 | 15.60% |
| Amount | 109 | 100% |

Based on the results of the study, it was found that out of 109 samples, it consisted of toddlers aged 1 to 5 years, with the largest sample being 2 years old, namely 26 people or 23.85%. The distribution of sample data can also be seen in Figure 1.

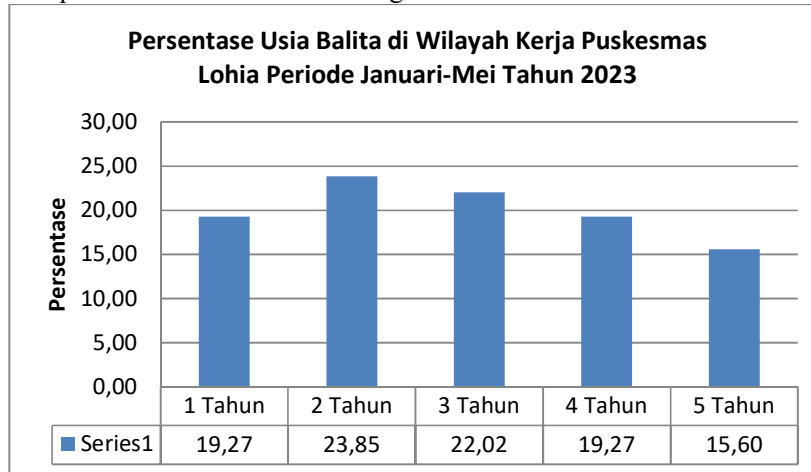


Figure 1. Sample characteristics in terms of toddler age

Then it is known that out of 109 toddlers divided into 72 people with female sex and 37 people with male sex as can be seen in Table 2 and Figure 2.

Table 2. Sample Characteristics in terms of Toddler's Gender

| Gender | | |
|--------|-----------|------------|
| Gender | Frequency | Percentage |
| Woman | 72 | 66.06% |
| Man | 37 | 33.94% |
| Amount | 109 | 100% |

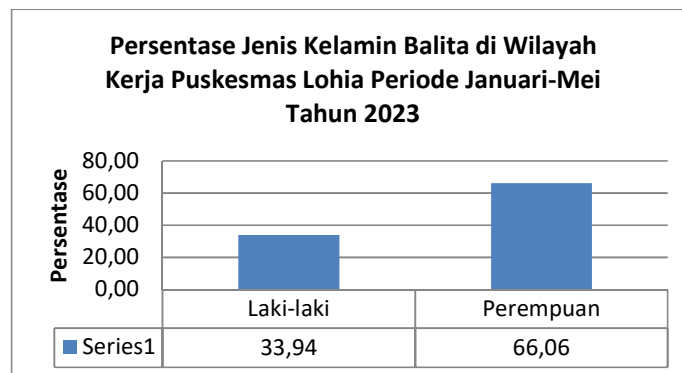


Figure 2. Characteristics of the Sample in terms of Gender

Based on the research results obtained by analyzing secondary data found at the Lohia Health Center, it is known that there are 4 types of diseases that are often experienced by toddlers in the Lohia Health Center Work Area. The data is shown in Table 3 and Figure 3

Table 3. Classification of Diseases that Often Occur in Toddlers at the Lohia Health Center January-May 2023

| No | The type of disease | F | % |
|----|---------------------|------------|-------------|
| 1 | ISPA | 79 | 72.48% |
| 2 | Diarrhea | 9 | 8.26% |
| 3 | Allergy | 6 | 13.76% |
| 4 | Dermatitis | 15 | 5.5% |
| | Total | 109 | 100% |



Figure 3. Types of Diseases that Often Occur in Toddlers in the Work Area of the Lohia Health Center January-May 2023

Further investigation, researchers made data collection on samples in the working area of the Lohia Health Center by grouping the age of the toddler and the sex of the toddler with the disease suffered by the toddler. The grouping can be seen in table 4 and table 5

Table 4. Grouping of Toddler Diseases based on Toddler Age

| Age | ISPA | Diarrhea | Dermatitis | Allergy |
|---------|------|----------|------------|---------|
| 1 year | 14 | 3 | 3 | 1 |
| 2 years | 20 | 3 | 3 | 1 |
| 3 years | 17 | 1 | 6 | 2 |
| 4 years | 14 | 1 | 1 | 2 |
| 5 years | 14 | 1 | 2 | |
| Total | 79 | 9 | 15 | 6 |

Table 5. Grouping of Toddler Diseases based on Gender

| | ISPA | Diarrhea | Dermatitis | Allergy |
|-------|------|----------|------------|---------|
| Woman | 47 | 7 | 11 | 6 |
| Man | 32 | 2 | 4 | 0 |
| Total | 79 | 9 | 15 | 6 |

Acute Respiratory Infection (ARI) is an infectious disease of the respiratory tract, either the upper (nose) or lower (alveoli) respiratory tract, and can cause mild to severe illness that can cause death (Lebuan & Somia, 2017).

Based on the results of the research, it was found that the disease that often occurs in toddlers in the working area of the lohia health center is ISPA, which is as many as 79 toddlers. This is in line with the statement of Riskesdas (2007) that the highest incidence of ISPA often occurs in toddlers, namely 25.5%. Children aged 1-5 years are more susceptible to ISPA because these children have an immature immune response so they are more susceptible to ISPA (Haryabi, 2010).

According to the World Health Organization (2018) the number of under-five deaths caused by ARI worldwide ranks highest. At the Under Five Mortality Rate (UMFR) level, ISPA is around 41/1000 children, while according to the Infant Mortality Rate (IFR) level, ISPA is 45/1000 children. The incidence of ARI in developed countries is caused by a virus, while in developing countries it is caused by bacteria.

In the results of the study, it was found that there were more female toddlers suffering from ISPA, namely 47 toddlers and the remaining 32 boys suffering from ISPA. Based on the theory states that boys are more susceptible to ISPA because they have more active activities compared to girls (Hidayat, 2014). However, in reality the respondents in this study were female toddlers so that when compared with other diseases the male toddlers in the Lohia health center area experienced more ISPA than other diseases.

Then the second most common disease suffered by toddlers in the working area of the Lohia Health Center after ARI is dermatitis. Dermatitis is a specific chronic inflammatory skin disease that occurs due to a personal or family history of atopy characterized by itching caused by skin hyperactivity which clinically manifests as eczematous lesions with a typical distribution of lesions (Raihan et al, 2020).

Based on the results of the study that out of the 15 toddlers who experience dermatitis are caused by several factors. Among them are food factors, body hygiene and inherited skin diseases from the genetics of the father and mother of the toddler. The cause of dermatitis is not known for certain. Various factors are thought to play a role in triggering atopic dermatitis. Generally, children with dermatitis have a family history of the same complaint, this indicates a role for genetic factors. In addition, dermatitis is closely related to other atopic diseases such as allergic rhinitis and bronchial asthma. Other factors that play a role in the pathogenesis of dermatitis are decreased function of the skin barrier, immunological factors, and other triggering factors such as food, aeroallergens, staphylococcus aureus infection and stress (Pandalake, 2014).

Diarrhea that occurred in toddlers in the working area of the lohia health center totaled 9 toddlers. Diarrheal disease is still a health problem, especially in children. Less than 80% of diarrhea-related deaths occur in the first 2 years of life. The main cause of death in diarrhea is due to dehydration as a result of loss of fluids and electrolytes (Paulino et al, 2022). Diarrhea that occurs in toddlers in the Lohia Health Center Work Area occurs in 9 toddlers. Lack of parental supervision of sweet foods or snacks consumed by toddlers is a frequent reason. So it becomes an important concern for parents in supervising toddlers.

4. CONCLUSION

If it is reviewed, based on the results obtained, the diseases that often occur in toddlers in the Lohia Health Center Work Area are caused by several factors, namely environmental factors that are less clean, factors of mother's knowledge regarding skin care in toddlers and genetic factors. This is an important thing that must be considered by health workers and the community in the Lohia area to be able to prevent diseases that can be dangerous for toddlers. Things that can be done are for the community and health workers in the Lohia area to carry out routine environmental clean-up activities, to conduct outreach to identify, identify and prevent ARI, diarrhea, dermatitis and allergies.

REFERENCES

- [1] Putri Ariani, A. 2017. Ilmu Gizi Dilengkapi dengan Standar Penilaian Status Gizi Dan Daftar Komposisi Bahan Makanan. Yogyakarta : Nuha Medika.
- [2] World Health Organization. 2016. Level And Trends In Child Malnutrition.

- [3] World Health Organization. 2019. Pencegahan Dan Pengendalian Infeksi Saluran Pernapasan Akut (ISPA) Yang Cenderung Menjadi Pandemi Dan Pandemi Di Fasilitas Pelayanan Kesehatan.
- [4] World Health Organization. 2020. Level And Trends In Child Malnutrition.
- [5] Lebuan, A. W, & Somia, A. 2017, Faktor Yang Berhubungan Dengan Infeksi Saluran Pernapasan Akut Pada Siswa Taman Kanak-Kanak Di Kelurahan Daging Puri Kecamatan Denpasar Timur Tahun 2014', Vol. 6 No. 6, Juni 2017, hlm 1-8.
- [6] RISKESDAS. 2007. Riset Kesehatan Dasar
- [7] Haryani S. 2010. Faktor-faktor yang berhubungan dengan kejadian ISPA pada Balita di Wilayah Kerja Puskesmas DTP Jamanis Kabupaten Tasik Malaya.FKM UNSIL. ISBN. 978-602-96943-1-4.
- [8] Nur Hidayat. 2014. Faktor-Faktor Yang Berhubungan Dengan Kejadia Penyakit Ispa Pada Balita Di Kelurahan Paienan Tigo Kecamatan Koto Tengah Kota Padang.
- [9] Raihan Indika , Linda Adriani dan Wulandari . 2020. Faktor Yang Mempengaruhi Kejadian Dermatitis Pada Bayi. Darussalam Indonesian Journal of Nursing and Midwifery September, 2020 Volume 1, Nomor 1, Page 42-53
- [10] Pandalake. 2014. Etiopatogenesis Dermatitis Atopik. Jurnal Biomedik (JBM), Volume 6, Nomor 2, Juli 2014, hlm. 76-83
- [11] Paulino Nugraha, Elvi Juliansyah dan Rika Yuanita Pratama. 2022. Faktor-Faktor Yang Berhubungan Dengan Kejadian Diare Pada Balita Di Kelurahan Kapuas Kanan Hulu Kecamatan Sintang. Jurnal Kesehatan Masyarakat Vol 1 No 1 Oktober 2022.