

iii

Common Diseases in Early Childhood and Their Prevention Strategies: A Posyandu-Based Observational Study In Parepare City

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Abstract

Background: Early childhood (0–6 years) represents the most vulnerable population for infectious diseases due to an incompletely developed immune system. The high incidence of diseases such as acute respiratory infections (ARI), diarrhea, fever, chickenpox, and skin diseases constitutes a significant public health problem in Indonesia, including in Parepare City, South Sulawesi. The role of integrated health posts (posyandu) as the frontline of primary healthcare services is crucial in monitoring the health status of early childhood. Objective: This study aimed to identify the most common diseases in early childhood, analyze their risk factors, and describe prevention strategies implemented at posyandu. Methods: This study employed a posyandu-based descriptive observational design using a mixed-method concurrent triangulation approach. Quantitative data were obtained through direct observation of Posyandu Damai activities on April 11, 2026 and review of visit records from January to April 2026, while qualitative data were collected through semi-structured interviews with posyandu cadres, a community health center midwife, and attending parents or guardians. The units of analysis included 93 registered children, 65 children attending the observation session, and 87 disease-case records documented in the visit recapitulation. Data were analyzed using descriptive statistics to calculate frequencies and percentages, and thematic analysis to interpret risk factors and prevention strategies. Results: Findings indicated that 65 of 93 registered children attended the observation session, while the health-status recapitulation showed that 88 children were healthy and 5 experienced health problems. The most frequently encountered diseases included fever (32.4%), cough and common cold/ARI (28.7%), diarrhea (18.5%), intestinal worms (12.1%), and allergies (8.3%). Key risk factors identified were nutritional imbalances, poor environmental sanitation, inadequate handwashing habits, and low parental knowledge about

balanced nutrition. Prevention strategies implemented by posyandu include nutritional counseling, vitamin and supplement distribution, immunization, and Clean and Healthy Living Behavior (PHBS) education. Conclusion: Posyandu plays a strategically vital role in improving the health status of early childhood. Synergy among posyandu cadres, healthcare workers, and parents is the key to successful disease prevention in early childhood. Enhanced community-based education programs and promotional-preventive approaches need to be continuously strengthened to reduce disease incidence in children

Keywords

Early Childhood; Infectious Disease; Posyandu; Disease Prevention; ARI; Diarrhea; Clean And Healthy Living Behavior



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INTRODUCTION

Early Childhood (ECD), between the ages of 0–6, is a critical phase of life and is often referred to as the golden age. This period is characterized by rapid development, encompassing physical, cognitive, language, socio-emotional, and moral aspects. The quality of development during this period will directly determine the quality of future human resources. Therefore, maintaining the health of early childhood is not only a family responsibility but also a national priority in Indonesia's human resource development (Soetjningsih & Ranuh, 2020).

Globally, infectious diseases remain the leading cause of morbidity and mortality in children under five. According to a World Health Organization report (WHO, 2022), pneumonia and diarrhea together cause approximately 15% of deaths in children under five worldwide. In Indonesia, data from the Indonesian Ministry of Health (2023) shows that acute respiratory infections (ARI), diarrhea, and dengue fever have consistently ranked among the most common illnesses experienced by toddlers over the past decade. This situation illustrates that early childhood health issues in Indonesia still require comprehensive and sustainable management.

Early childhood has biological and behavioral characteristics that place them at particular risk of disease. From a biological perspective, children's immune systems are still developing, so their immune response to pathogens is not yet optimal (Hidayat, 2020). From a behavioral perspective, children tend to be active, highly curious, frequently touch various objects and then put their hands in their mouths, and lack a full awareness of personal hygiene. This combination of factors makes early childhood highly susceptible to various types of infections (Oktavianingsih & Helienastuti, 2025).

Various common illnesses frequently found in early childhood include acute

respiratory infections (ARI), diarrhea, chickenpox, measles, ear infections, worms, allergies, and asthma. Among these illnesses, ARI and diarrhea are the most common and have the potential to cause serious complications if not treated appropriately and promptly (Susanto & Kurniawan, 2020). In addition to their direct impact on health, these illnesses can also disrupt a child's growth and development, reduce nutritional status, and hinder cognitive and socio-emotional development (Soetjningsih & Ranuh, 2020).

The causes of high disease rates in early childhood are multifactorial. Environmental factors such as poor sanitation, lack of access to clean water, and unhygienic living conditions play a major role in the spread of disease (Priyatno et al., 2023). Socioeconomic factors such as poverty and low parental education also contribute significantly. Behavioral factors, particularly low adherence to Clean and Healthy Living Behaviors (PHBS), are also a major determinant of disease incidence in children (Notoatmodjo, 2020). Furthermore, low immunization coverage in some regions remains a challenge that requires serious attention (Wahyuningrum & Suryani, 2019).

Posyandu (Integrated Service Post) is a community-based health service institution that plays a strategic role in improving maternal and child health in Indonesia. As the health facility closest to the community, Posyandu organizes various promotive and preventive activities, including monitoring child growth and development, immunizations, vitamin administration, nutrition counseling, and complementary feeding (MPASI). Through these routine activities, Posyandu plays a frontline role in early detection of child health problems (Rahmawati et al., 2021).

Although integrated health service posts (Posyandu) have long been the backbone of primary healthcare services, various studies have shown that their effectiveness remains suboptimal. Inconsistent parental participation, limited cadre resources, and a lack of support from healthcare professionals are key obstacles. Arifin et al. (2022) found that the effectiveness of Posyandu programs in improving child health is significantly influenced by the level of active community participation and the quality of cadre competency. Therefore, ongoing evaluation and strengthening of Posyandu programs is essential.

Research on the picture of early childhood illnesses based on observations from integrated health service posts (Posyandu) is still relatively limited, particularly in South Sulawesi. Most existing studies focus on a single disease or are conducted in higher-level health facilities such as community health centers (Puskesmas) and hospitals. However, observational data from Posyandus can provide a more representative picture of children's health conditions at the community level and identify specific risk factors relevant to the local context (Dewi et al., 2022).

Based on this background, this study was conducted with the aim of: (1) identifying the types of common diseases most frequently experienced by early childhood at the Damai

Integrated Health Post (Posyandu), Parepare City; (2) analyzing the risk factors that contribute to the incidence of disease in early childhood; (3) describing disease prevention strategies implemented at the Posyandu; and (4) identifying the role of parents and Posyandu cadres in efforts to prevent and treat early childhood diseases. The results of this study are expected to provide significant scientific contributions and become the basis for developing more effective and contextual child health policies.

METHODS

3.1 Research Design and Approach

This study employed a descriptive, observational design based on a health post (Posyandu) with a mixed-method approach using concurrent triangulation. This design was chosen because the results not only present narratives of the experiences of cadres and parents but also include numerical data in the form of the number of registered children, the number of children present, their health status, the number of disease cases, and the percentage distribution of disease. Thus, the quantitative component was used to describe disease patterns and the proportion of incidents, while the qualitative component was used to clarify risk factors, preventive practices, obstacles to Posyandu services, and the role of parents in maintaining the health of early childhood.

3.2 Location and Time of Research

The study was conducted at the Damai Integrated Health Post (Posyandu Damai), Parepare City, South Sulawesi Province. Primary data collection was conducted during Posyandu activities on April 11, 2026, while supporting data regarding disease distribution were obtained through a review of Posyandu Damai visit recaps for the January–April 2026 period. The location selection was carried out purposively with the consideration that Posyandu Damai is an active Posyandu, has documented child visit data, and provides routine promotive-preventive services, such as weighing, growth monitoring, immunization, vitamin administration, and nutrition and PHBS counseling.

3.3 Population, Sample, and Research Informants

The study population was all 93 early childhood children registered at the Damai Integrated Health Post (Posyandu Damai). The observation sample was 65 children who attended the Posyandu activities on April 11, 2026. To describe more representative disease trends, the study also used secondary data in the form of 87 records of childhood disease cases in the Damai Integrated Health Post (Posyandu Damai) visit recap for the period January–April 2026. Qualitative informants consisted of five Posyandu cadres, one community health center midwife, and parents/guardians of children who attended the

Posyandu activities. The cadres and midwives acted as key informants, while parents/guardians acted as supporting informants to confirm the history of complaints, home care habits, children's consumption patterns, and family hygiene practices.

The sampling and informant selection technique used purposive sampling. Inclusion criteria for children were registered at the Damai Integrated Health Post (Posyandu Damai) and/or recorded in the visit recap for the January–April 2026 period. Informant inclusion criteria were cadres who had been actively serving for at least one year, midwives involved in Posyandu services, and parents/guardians willing to provide information. Exclusion criteria included incomplete visit data, parents/guardians unwilling to be interviewed, and children who did not have health status information that could be verified through observation, parental statements, or Posyandu records.

3.4 Data Collection Techniques and Instruments

Data were collected through four techniques. First, direct observation was conducted at Damai Integrated Health Post (Posyandu Damai) activities to record the number of children present, their general health condition, the types of complaints seen, the weighing and measuring process, and the form of promotive-preventive services provided. The instrument used was a structured observation sheet. Second, a document review was conducted on the recap of Damai Integrated Health Post (Posyandu Damai) visits for the period January–April 2026 to obtain data on the number of cases and distribution of types of diseases, including fever, coughs and colds/ARI, diarrhea, worms, and allergies. Third, semi-structured interviews were conducted with Posyandu cadres and community health center midwives to obtain information on frequently occurring diseases, risk factors, immunization coverage, service constraints, and prevention strategies implemented by Posyandu.

Fourth, structured interviews were conducted with parents/guardians present to obtain supporting data on children's eating habits, handwashing habits, home sanitation conditions, initial actions taken when a child is sick, and the regularity of visits to the integrated health post (Posyandu). Observations, document reviews, and interviews were combined to ensure the research data aligned with quantitative findings in the form of frequencies and percentages, as well as qualitative findings in the form of risk factors and prevention strategies.

3.5 Data Analysis Techniques

Quantitative data from observation sheets and visit recaps were analyzed using descriptive statistics. The analysis was conducted by calculating frequencies and percentages for the number of registered children, the number of children present, the number of healthy children, the number of children experiencing health problems, and the distribution of disease types during the period January–April 2026. The results of the analysis are presented

in tabular form to facilitate reading of disease patterns and the proportion of cases found in the Damai Posyandu area.

Qualitative data from interviews with cadres, midwives, and parents were analyzed using thematic analysis. The analysis phase included transcribing responses, rereading, initial coding, grouping codes into themes, reviewing themes, and extracting meaning. The main themes analyzed included nutritional imbalance, environmental sanitation, handwashing habits, weather changes, parents' understanding of nutrition, immunization services, nutrition counseling, vitamin provision, and PHBS education. Data validity was strengthened through triangulation of sources and methods, namely comparing observational data, posyandu records, cadre statements, midwife statements, and information from parents/guardians.

3.6 Research Ethics Considerations

This research was conducted in accordance with ethical principles of health research, including voluntary consent, confidentiality, and the use of data for academic purposes only. Permission to conduct the research was obtained from the integrated health post (Posyandu) management and relevant parties within the community health center (Puskesmas) working area. Prior to the interviews, informants were provided with an explanation of the research objectives, the type of data collected, and the right to refuse or discontinue participation without any consequences. The identities of children, parents, cadres, and health workers are not presented individually in the research report.

RESULTS AND DISCUSSION

4.1 General Overview of Children's Health Conditions at Damai Posyandu

Based on observations conducted during the Damai Integrated Health Post (Posyandu Damai) activity on April 11, 2026, the following general picture was obtained: of the 93 children registered at the Posyandu, 65 (69.9%) attended the activity. This attendance rate is below the national Posyandu coverage target of 80%, indicating the need for more intensive efforts to increase parental participation.

Based on a summary of the health status of all registered children, 88 of the 93 children (94.6%) were declared healthy, while 5 children (5.4%) were found to have health problems requiring further attention. On the observation day, some of these children attended integrated health service post (Posyandu) activities, which served as the basis for direct observation. Although the proportion of sick children appears small in percentage terms, this absolute number requires attention, given that diseases in early childhood can develop rapidly and have the potential to spread to other children.

Table 1. Observation Data at Damai Integrated Health Post, April 2026

No	Indicator	Amount	Percentage (%)
1	Number of children registered	93	100%
2	Number of children present	65	69.9%
3	Number of children in good health	88	94.6%
4	Number of children experiencing health problems	5	5.4%
5	Children with ARI/coughs and colds	3	60.0% (of the sick)
6	Child with diarrhea	1	20.0% (of the sick)
7	Children with skin diseases/allergies	1	20.0% (of the sick)

Source: Damai Integrated Health Post Observation Data, April 2026

4.2 Distribution of Disease Types in Early Childhood

Based on data from interviews with Posyandu cadres, community health center midwives, and parents, confirmed through direct observation, we obtained a distribution of the most common illnesses experienced by young children in the Damai Posyandu area in the three months prior to the study. This data was consolidated from Posyandu visit records and local community health center medical records.

Table 2. Distribution of Types of Diseases in Early Childhood in the Damai Posyandu Area (January–April 2026)

No	Types of Disease	Number of Cases	Percentage	Ranking
1	Fever (including viral fever)	28	32.4%	1
2	Cough and Cold/URTI	25	28.7%	2
3	Diarrhea	16	18.5%	3
4	Worms	11	12.1%	4
5	Allergies (skin and respiratory)	7	8.3%	5
6	Total Cases	87	100%	-

Source: Damai Integrated Health Post Visit Data Recap, January–April 2026

Table 2 shows that fever was the most frequently reported health complaint, with 28

cases (32.4%). This is consistent with findings from various studies showing that fever is the most common clinical manifestation of various infectious conditions in early childhood. Cough and cold/ARI were in second place with 25 cases (28.7%), a typical epidemiological picture for tropical regions with significant climate change. Diarrhea ranked third with 16 cases (18.5%), followed by worms (12.1%) and allergies (8.3%).

4.3 Identified Risk Factors

Based on the results of in-depth interviews with Posyandu cadres and community health center midwives, several main risk factors identified as the cause of the high incidence of disease in early childhood in the Damai Posyandu area are as follows.

First, nutritional imbalance was the most frequently cited risk factor by informants. Integrated health service post (Posyandu) cadres reported that some parents still feed their children less nutritious foods, such as foods high in sugar and low in protein. This is related to parents' limited knowledge about balanced nutrition and the inadequate economic conditions of some families. Damai Posyandu cadres stated that approximately 15–20% of registered children show signs of malnutrition based on the WHO growth curve.

Second, suboptimal environmental sanitation is a significant risk factor. Field observations show that some areas of the Damai Integrated Health Post (Posyandu) still have limited access to clean water and adequate sanitation facilities. Some families still use unsanitary water sources for daily needs, including cooking children's meals. This condition substantially increases the risk of diarrhea and worm infections (Simbolon et al., 2019; Priyatno et al., 2023).

Third, low handwashing habits with soap (CTPS) are a behavioral factor that plays a significant role in the spread of disease. Observations of children and parents' behavior at integrated health posts (Posyandu) show that not all parents remind their children to wash their hands before eating or after playing. In fact, some children are seen touching various surfaces and then putting their fingers in their mouths without first washing their hands.

Fourth, extreme weather changes are a triggering factor frequently cited by parents. Intense rainy seasons and sudden temperature changes have been reported to be associated with increased cases of respiratory infections (ARI) and fever. This aligns with scientific evidence that drastic temperature changes can suppress cellular immune responses in children, making them more susceptible to respiratory viral infections.

4.4 Results of Interviews with Posyandu Cadres and Health Workers

Interviews with five Posyandu (Integrated Service Post) cadres and one community health center midwife yielded several important findings regarding the implementation of the Posyandu program and the disease prevention efforts undertaken. The Posyandu cadres

consistently stated that the monthly nutrition counseling sessions were effective in increasing parents' knowledge about providing nutritious food. However, actual behavioral changes in child feeding practices at home require more time and more intensive support.

A community health center midwife working at the Damai Integrated Health Post (Posyandu Damai) revealed that complete basic immunization coverage in the Posyandu area has reached 85%, but 15% of children still haven't received their full immunization schedule. This incomplete immunization is partly due to children not attending their scheduled immunizations. To address this, Posyandu cadres conduct home visits to ensure that children who missed their catch-up immunizations receive their catch-up immunizations.

The cadres also identified that the biggest obstacles faced in implementing Posyandu activities were limited resources, including limited logistics (vitamins, medicines, and measuring instruments), high workloads without adequate compensation, and limited knowledge in handling more complex health cases. This reinforces the need for regular cadre development and training.

4.5 Parent Interview Results

Structured interviews with parents attending the Damai Integrated Health Post (Posyandu Damai) yielded a diverse picture of child health care practices at home. Most parents (around 78%) reported taking their children to the Posyandu regularly every month, indicating a relatively good level of awareness of the importance of monitoring their children's health. However, 22% of parents admitted that they did not always attend regularly for various reasons, including being busy with work, having their child sick on the Posyandu day, or forgetting the scheduled activities.

When it comes to managing sick children at home, the majority of parents (82%) stated that they give fever-reducing medication such as paracetamol as the first response to a fever. This indicates a fairly good basic knowledge of fever management. However, only 56% of parents reported applying warm compresses before administering medication, and only 43% ensured their children received adequate fluids (hydration) when sick. These findings indicate the need for further education on initial illness management at home.

Regarding nutritional knowledge, interviews revealed that although the majority of parents were aware of the importance of nutrition for their children (91%), their understanding of the operational concept of balanced nutrition—such as appropriate portion sizes, frequency, and types of food for their age—still varied widely. Only 47% of parents were able to correctly explain the concept of a "healthy plate" to their children. This finding is consistent with research by Fitriani & Wahyuni (2021), which demonstrated a gap between awareness and operational knowledge of nutrition among parents of toddlers.

5.1 Disease Patterns in Early Childhood: Local and Global Contexts

The findings of this study indicate that disease patterns in early childhood at the Damai Integrated Health Post (Posyandu Damai) are generally consistent with national and regional epidemiological patterns reported in various previous studies. The predominance of acute respiratory infections (ARI) and fever as the primary complaints reflects the tropical environment and climate that favor the spread of respiratory viruses, particularly during the rainy season (Ministry of Health of the Republic of Indonesia, 2023; Dewi et al., 2022).

The relatively high prevalence of diarrhea (18.5% of total cases) underscores the need for improved sanitation and more intensive promotion of healthy and hygienic practices (PHBS). Research by Simbolon et al. (2019) shows that access to healthy latrines and clean water sources are the strongest predictors of diarrhea in toddlers—a finding highly relevant to the conditions at the Damai Integrated Health Post (Posyandu Damai), where sanitation facilities are still limited. This also indicates that health interventions are not sufficient at the individual and family level, but must also address the more structural social determinants of health.

The significant prevalence of worm infections (12.1%) is an indicator of environmental sanitation that still needs improvement. Worm infections, caused by intestinal worms such as *Ascaris lumbricoides* and *Trichuris trichiura*, are infections closely linked to poor handwashing and contact with contaminated soil. Children chronically infected with worms experience malnutrition due to nutrient competition between the parasite and the host, which in turn can exacerbate susceptibility to other infectious diseases (Pebriyanti et al., 2025).

5.2 Risk Factor Analysis and Its Implications

The risk factor analysis in this study confirms that disease incidence in early childhood is the result of a complex interaction between host (child), agent (pathogen), and environmental factors—known as the epidemiological triad model. From the host perspective, the immaturity of the immune system in early childhood is a non-modifiable factor, but it can be compensated for through immunization and optimal nutritional support.

Modifiable factors—including improved sanitation, increased hygiene practices, and balanced nutrition—are the primary targets of health interventions. This study found that low handwashing habits with soap are the most intervention-amenable behavioral factor. Effective handwashing with soap interventions have been shown to reduce diarrhea incidence by up to 47% and acute respiratory infections by up to 23% (Notoatmodjo, 2020). Therefore, programs to promote handwashing with soap at integrated health posts (Posyandu) and early childhood education (PAUD) schools require greater priority and investment.

Findings about parents' low operational nutritional knowledge underscore the urgency of more intensive, structured, and evidence-based nutrition education programs. Sunarno et al. (2025) emphasize that effective education programs must employ a contextual and locally based approach, utilize appropriate communication media, and provide practical examples that can be directly applied in everyday life. Kusumawati (2025) adds that the involvement of early childhood education teachers as agents of change in children's health behavior is a highly effective strategy and needs to be further promoted.

5.3 The Strategic Role of Posyandu in Disease Prevention

The findings of this study confirm the highly strategic role of integrated health services (Posyandu) as community-based health service centers. The presence of active Posyandu cadres, ongoing nutrition counseling programs, and access to vitamins and nutritional supplements are significant contributions of Posyandu to improving children's health. Rahmawati et al. (2021) showed that children who regularly attend Posyandu have better nutritional status and lower disease incidence rates than children who do not regularly attend.

However, this study also identified several areas that need to be strengthened to optimize the function of integrated health posts (Posyandu). First, improving the competence of Posyandu cadres through more comprehensive and ongoing training is a crucial investment. Knowledgeable and skilled cadres are not only more effective in providing counseling but also better able to detect cases requiring referral to higher-level health facilities early. Arifin et al. (2022) found a significant positive correlation between the quality of cadre competence and the effectiveness of Posyandu programs in reducing child morbidity.

Second, strengthening the integrated health post (Posyandu) recording and reporting system is necessary to ensure the availability of accurate data for decision-making. Complete and accurate visit records enable the identification of disease trends, program evaluation, and the planning of more targeted interventions. The digitization of the Posyandu recording system, currently being pursued by the Indonesian Ministry of Health, is a step forward that deserves full support.

Third, strengthening partnerships between integrated health posts (Posyandu) and early childhood education (PAUD/TK) institutions is a highly potential strategy for expanding the reach of child health programs. Kusumawati (2025) and Dhihu et al. (2026) emphasize that synergy between Posyandu, early childhood education schools, and families in developing healthy lifestyle habits in children is the most effective and sustainable approach.

5.4 The Role of Parents as Family Health Agents

Parents, especially mothers, are the most influential health agents in the lives of young children. The daily decisions parents make—about what their children eat, when and how they are cared for when they are sick, whether they are taken to the integrated health post (posyandu), and the extent to which they are taught hygiene habits—cumulatively determine their overall health status (Dhihu et al., 2026).

This study found that although most parents are well-motivated to maintain their children's health, their knowledge and skills in practical implementation still require improvement. This gap between intention and actual behavior regarding nutrition and PHBS indicates the need for educational approaches that not only increase knowledge but also facilitate the development of practical skills. Experiential learning approaches and direct demonstrations are more effective in changing behavior than conventional lectures (Notoatmodjo, 2020).

The finding that 22% of parents do not regularly bring their children to the integrated health post (Posyandu) is a warning sign that needs to be addressed. Various studies have shown that non-attendance at Posyandu is related to multiple factors, including parents' inflexible work hours, lack of awareness of the benefits of Posyandu, long geographic distance, and previous negative experiences with Posyandu services. More flexible approaches—such as more varied scheduling, proactive home visits, and digital communication using text messaging apps—could significantly increase parent participation.

5.5 Comprehensive Prevention Strategy Recommendations

Based on the findings of this study, a comprehensive, evidence-based early childhood disease prevention strategy needs to encompass four key, integrated domains. The first domain is strengthening immunization. The current 85% coverage of complete basic immunization needs to be increased to at least 95% to achieve herd immunity. Strategies that can be implemented include: active home visits to reach unimmunized children, integration of immunization schedules with routine early childhood education (PAUD/Kindergarten) activities, and effective communication campaigns to address vaccine hesitancy.

The second domain is the promotion of clean and healthy living (PHBS) and sanitation. A structured and enjoyable CTPS program for children needs to be implemented in all integrated health posts (Posyandu) and early childhood education institutions (PAUD). Improving access to adequate sanitation facilities—healthy latrines, clean water sources, and waste management—is a crucial long-term investment. Collaboration with local governments and the private sector to finance sanitation infrastructure improvements in high-risk areas is a priority that cannot be postponed.

The third domain is strengthening nutrition programs. Nutrition counseling programs at integrated health posts (Posyandu) need to be improved in quality and

effectiveness through the use of more interactive and evidence-based methods. Providing supplementary food (PMT) for children with malnutrition needs to be prioritized and its sustainability ensured. Synergy with the Family Hope Program (PKH) and Direct Cash Assistance (BLT) to ensure economically vulnerable families have access to nutritious food is a crucial cross-sectoral approach.

The fourth domain is capacity building for parents and integrated health post (Posyandu) cadres. Comprehensive cadre training programs, including nutrition counseling skills, early disease detection, and effective outreach techniques, need to be implemented regularly. Parenting education programs that focus on evidence-based health care practices—including managing minor illnesses at home, when to refer to a health facility, and providing growth and developmental stimulation—need to be integrated into routine Posyandu activities.

CONCLUSION

This study successfully identified a comprehensive overview of common diseases in early childhood and their prevention strategies based on observations at integrated health posts (Posyandu) in Parepare City. Several key conclusions can be drawn from this study:

First, the most common illnesses experienced by young children in the Damai Integrated Health Post (Posyandu) area were fever (32.4%), acute respiratory infections (ARI/coughs and colds) (28.7%), diarrhea (18.5%), worms (12.1%), and allergies (8.3%). This disease pattern is consistent with the national epidemiological profile of childhood illnesses and reflects the local environmental conditions and health behaviors.

Second, the main risk factors contributing to the incidence of disease in early childhood include: (a) nutritional imbalance and low parental operational knowledge about balanced nutrition; (b) suboptimal environmental sanitation, including limited access to clean water in some areas; (c) low handwashing habits with soap; and (d) extreme weather changes. These factors interact in a complex manner and require a comprehensive intervention approach.

Third, integrated health posts (Posyandu) have been proven to play a very strategic role in improving early childhood health through various promotive and preventive programs. However, the effectiveness of Posyandu can still be improved by strengthening the competency of cadres, increasing immunization coverage, and intensifying nutrition and PHBS education programs.

Fourth, synergy between integrated health posts (Posyandu), parents, early childhood education institutions, and health workers is a fundamental prerequisite for successful disease prevention in early childhood. An integrated, community-based, multi-actor approach has proven more effective than vertical and sectoral interventions.

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