HAYYAN JOURNAL
Vol. 2 No. 1, February 2025, page. 25-30
ISSN: 3046-6679

The Effect Of Giving Olive Oil On Diaper Rash In Toddler In The Work Area Ponre Health Center Year 2024

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Received: December 19, 2024 *Accepted: January 25, 2025* *Online Published: February 24, 2025*

ABSTRACT

Babies have extensive and complex problems, especially skin problems. All babies have very sensitive skin. The relatively thinner skin conditions in babies cause babies to be more susceptible to infections, irritation and allergies. Skin disorders that often arise in babies include atopic dermatitis, seborrhea, boils, miliariasis (diarrhea), allergies, and inflammation in the form of a skin rash known as diaper rash. The aim of this research is to determine the effect of giving olive oil on diaper rash in toddlers in the Ponre Health Center working area in 2024. This research is a type of quasi-experimental research with a pretest-posttest control group design. Data analysis used univariable and bivariable analysis with the chi-square test. The research results showed that the experimental group showed a decrease in the average score from 2.08 (moderate) to 1.33 (mild) after administering olive oil. Meanwhile, in the control group, the average score only fell slightly from 2.09 to 2.02. Based on the chi-square test in the experimental group, it was found that the value of p=0.001<0.05 and based on the chi-square test in the control group, the value was found to be (p=0.112>0.05), which means that there is an effect of giving olive oil on diaper rash in toddlers. The conclusion of this research is that there is an effect of giving olive oil on diaper rash in toddlers in the work area of the Pontre Community Health Center in 2024

Keywords: *Diaper Rash, Olive Oil.*

I. INTRODUCTION

Babies have extensive and complex problems, especially skin problems. All babies have very sensitive skin. The relatively thinner skin conditions in babies cause babies to be more susceptible to infections, irritation and allergies. Skin disorders that often arise in babies include atopic dermatitis, seborrhea, boils, miliariasis (diarrhea), allergies, and inflammation in the form of a skin rash known as diaper rash. Diaper rash is an inflammation of the skin in the diaper area that is most often suffered by babies and children. Diaper rash is a skin disorder that occurs due to inflammation in areas covered by diapers, namely the genitals, around the anus, buttocks, thigh creases and lower abdomen. This disorder can affect both male and female babies. Outpatients suffering from this disorder number around 1 million children every year. More than 50% of patients are babies aged 3-20 months (Rukiyah 2010).

Based on data released by the World Health Organization (WHO) in 2012, the prevalence of skin irritation (diaper rash) in babies is quite high, 25% of the 6,840,507,000 babies born in the world mostly suffer from skin irritation (diaper rash) due to the use of diapers. The highest numbers are found at the age of 6-12 months (Ramba 2015). 2011 Baby Center and National Geography data shows that four million babies are born each year in

America using disposable diapers until the age of two and a half years. On average, each baby uses four diapers a day, so the need for diapers a year reaches 1,500. This can be interpreted as saying that at the age of two and a half years a baby needs 3796 diapers which are ready to be thrown away into the environment (Sharhanis, etal, 2011).

The incidence of diaper rash in Indonesia reaches 7-35%, which affects male and female babies under three years of age (Budiarj et al 2009). The Minister of Health's expert on Capacity Building and Decentralization, Dr Krisnajaya, MS estimates that the number of children under five years old in Indonesia reaches 10 percent of the population. If the population is 220-240 million people, then there are at least 22 million toddlers in Indonesia, and 1/3 of the number of babies in Indonesia experience diaper rash (Rahmat, et al. 2011).

Kumala (2006), states that the use of traditional medicine is generally considered safer than the use of modern medicine. This is because traditional medicine has relatively fewer side effects compared to modern medicine. One alternative traditional medicine that can be used in wound care is olive oil. Olive oil is a fruit oil obtained from olives (Oleo Europoea). It is a special oil because it has many benefits, including phenol and vitamin E which are useful as antioxidants, oleocanthal which is the power of olive oil; a compound similar to buprofen as an anti-inflammatory and vitamin K which plays a role in drying, healing wounds and bleeding in the body.

A study in the United States showed that olive oil has the same anti-inflammatory effect as the drug Ibuprofen in reducing pain and morning stiffness in rheumatoid arthritis. Research conducted by the Monell Chemical Sense Center in Philadelphia, shows how administering extra-virgin olive oil at a dose of 4 teaspoons per day for 12 weeks can reduce pain (Ahmad et al, 2010).

II. METHODS

This research uses a design. This type of research is a quasi-experiment with a pretest-posttest control group design. This research will measure the independent variable (giving olive oil) and the dependent variable (severity level of diaper rash). The pretest-posttest control group design is an experimental research design that is commonly used to assess the effects of certain interventions by comparing a group that received olive oil intervention with a control group that did not receive olive oil intervention. This research was conducted in the Ponre Community Health Center area in March 2024. The population in this study were all toddlers who experienced diaper rash in the Ponre Community Health Center working area. The sample in this study was 95 toddlers who met the inclusion and exclusion criteria in the Ponre Community Health Center working area (48 toddlers in the experimental group were given olive oil and 47 toddlers in the control group were given conventional care). Data collection in this research used primary data obtained using questionnaires and the IGA scale and then analyzed using univariable and brivariable analysis.

III. RESULTS AND DISCUSSION

A. RESULTS

1. Frequency Distribution of Diaper Rash Levels Before Intervention in the Experimental Group and Control Group

Table 1: Frequency Distribution of Diaper Rash Levels Before Intervention in the Experimental Group and Control Group

Diaper Rash Rate	Experimental (n=48)	Control (n=47)

	F	%	F	%
Light	10	20,8	9	19,1
Currently	24	50,0	25	53,2
Heavy	14	29,2	13	27,7
Total	48	100	47	100

From the table above, before the intervention, toddlers in both groups experienced moderate category diaper rash, namely 50% in the experimental group and 53.2% in the control group. This shows that the initial condition of diaper rash in the two groups is relatively comparable or homogeneous.

2. Frequency Distribution of Diaper Rash Levels After Intervention in the Experimental Group (Using Olive Oil)

Table 2: Frequency Distribution of Diaper Rash Levels After Intervention in the Experimental Group (Using Olive Oil)

Diaper Rash Rate	Experimental (n=48)	
	F	%
Light	34	70,8
Currently	12	25,0
Heavy	2	4,2
Total	48	100

From the table above, after giving olive oil there was a significant increase in the number of toddlers with mild diaper rash in the experimental group (70.8). Only 4.2% of toddlers still experience severe diaper rash. This shows the effectiveness of olive oil in reducing the severity of diaper rash.

3. Frequency Distribution of Diaper Rash Levels After Intervention in the Control Group (Not Using Olive Oil)

Table 3: Frequency Distribution of Diaper Rash Levels After Intervention in the Control Group (Not Using Olive Oil)

Diaper Rash Rate	Control (n=47)	
	F	%
Light	12	25,5
Currently	22	46,8
Heavy	13	27,7
Total	47	100

From the table above, in the control group only 25.5% of toddlers experienced mild rashes after intervention without olive oil and 27.7% still experienced severe

rashes. These results indicate that without olive oil intervention, the condition of diaper rash did not show significant improvement.

4. T-Test of Independence: Comparison of Diaper Rash Levels Before and After Intervention

Table 4: T-Test of Independence: Comparison of Diaper Rash Levels Before and After Intervention

Group	Average Rash Score Diaper Before	Average Rash Score Diaper After	Mark P	Information
Eksperimental (n=48)	2,08	1,33	0,001	Significant
Control (n=47)	2,09	2,02	0,112	Not Significant

From the table above, the experimental group showed a decrease in the average score from 2.08 (moderate) to 1.33 (mild) after administering olive oil. The p value = 0.001 <0.05, indicating significant results. Meanwhile, in the control group, the average score only fell slightly from 2.09 to 2.02 and the results were not significant (p=0.112>0.05). These results indicate that olive oil is effective in reducing the severity of diaper rash, while the group without intervention did not show any significant changes.

B. DISCUSSION

Diapers are diapers used to protect children's genitalia which have high absorbency and are made from plastic and a mixture of chemicals to accommodate metabolic waste such as feces and urine which are disposable. If these disposable diapers are not used properly and properly they will cause redness or a rash around the child's genitalia (Diena, 2009).

This research examines in order to answer the research and achieve the stated objectives, namely the Effect of Giving Olive Oil on Diaper Rash in Toddlers in the Ponre Health Center Working Area in 2024. The minimum sample used in this research is 95 samples.

In theory, olive oil (olive oil) is useful for softening the skin, maintaining moisture and skin elasticity, as well as facilitating the skin regeneration process. Olive oil is one of the 35 oils squeezed from olives. The benefits of olive oil are that olive oil contains emollients which are useful for treating damaged skin conditions such as psoriasis and eczema. Olive oil can remove rashes, especially on the buttocks of babies or children where redness occurs (Setyanti, et al, 2012).

Based on the research results, after giving olive oil, there was a significant increase in the number of toddlers with mild diaper rash in the experimental group (70.8). Only 4.2% of toddlers still experienced severe diaper rash and the results obtained were p=0.001<0.05. This shows the effectiveness of olive oil in reducing the severity of diaper rash.

The results of this study are in line with Nagili's (2013) research on "The effect of giving virgin coconut oil (VCO) on diaper rash shows the results of diaper rash showing a value (p value = 0.002). Based on research by Warsito (2012) regarding the effectiveness of nigella sativa oil (black cumin oil) to prevent diaper rash. The research results show the

p-value = 0.000 (p value <0.05). The research results are in line with the opinion of Budiono (2013). Which shows the effect of giving olive oil on diaper rash in toddlers with a value of (pvalue=0.001). So giving olive oil is effective in reducing diaper rash in toddlers.

The main cause of diapers is not yet known with certainty, but maceration and friction are the main factors underlying the occurrence of diaper rash. When a baby uses diapers, urine will be collected by the diaper. This can increase the humidity of the skin in the area covered by the diaper (causing the corneum to become wet). As a result of the status of the corneum being wet, the surface of the skin becomes more fragile and prone to abrasions.

Based on the research results, it was found that in the control group only 25.5% of toddlers experienced mild rashes after intervention without olive oil and 27.7% still experienced severe rashes and the results were obtained (p=0.112>0.05). These results indicate that without olive oil intervention, the condition of diaper rash did not show significant improvement.

The results of research by Umayanah (2015) explain the difference in healing of cubital wounds after being given olive oil and virgin coconut oil compared to the above, there was 1 incident of decubitus when using virgin coconut oil and no incidence of dequitus when using olive oil. because the probability value is greater than alpha 5% (P value = 0.775), the null hypothesis is accepted, which means there is no difference in the incidence of pressure ulcers between the Olive Oil and Virgin Coconut oil groups.

Clinical Implications: It is important for toddler care programs to integrate monitoring of the incidence of diaper rash. Toddlers with diaper rash that is not treated properly can develop a fungal infection characterized by spreading red spots and pus-filled spots around the rash. A practical non-pharmacological solution for treating and preventing diaper rash is to apply olive oil to areas of skin that experience skin irritation. The following is an explanation of olive oil.

IV. CONCLUSION

Before the intervention, toddlers in both groups experienced moderate category diaper rash, namely 50% in the experimental group and 53.2% in the control group. In the experimental group there was a significant relationship between the effect of giving olive oil to toddlers who experienced diaper rash. The p value = 0.001 <0.05, indicating a significant result. In the control group the average score only fell slightly from 2.09 to 2.02 and the results were not significant (p=0.112>0.05), indicating that the results were not significant.

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