# Use Of Herbal Medicine Materials In Healing Perineal Rupture Wounds In Baros Health Center, Serang, Banten 2022

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#### Abstract.

Introduction: Indonesia has many regions that still use plants as traditional medicines which are a hereditary inheritance which until now has been widely used in treating various diseases, both acute and chronic. At the Baros Health Center, data obtained on the healing of perineal wounds that experienced complications were 27% in 2020, increasing to 45% in 2021. The use of wound healing plants is widely used, including betel leaves and gotu kola leaves. In this study, it was tested which one was more effective in healing wounds among the herbal medicinal plants. Research Method: The design of this research is an analytic survey using cross sectional with chi square statistical test. Sampling was carried out by total sampling method from all samples of 30 respondents. Results: Obtained a cure rate in the group using betel leaf decoction of 68.7%, this is greater than the use of gotu kola leaves which only has a cure rate of 31.2%. The analysis obtained a p-value of 0.028 and an Odds ratio: 5.500, which means that the healing rate when using betel leaf is 5x faster than gotu kola leaves. Conclusion: Betel leaf is a plant that grows in Indonesia and is effective in helping accelerate the healing process of grade 2 perineal wounds compared to using gotu kola leaves.

Keywords: Perineal wound, gotu kola leaves, betel leaves and herbal medicinal ingredients.

#### I. INTRODUCTION

Indonesia is a country that is rich in natural resources and has more than 400 ethnic groups spread throughout Indonesia. The regions in Indonesia and the people of Indonesia still use plants as traditional medicine which is a hereditary heritage which is still widely used in treating various infections, acute diseases and chronic diseases. The average users of traditional medicines around the world are as follows: 20-28% of the entire world's population, that in various regions and regions of Indonesia, as much as 59.12% consume herbal medicines (Muhartono, 2020). In Banten Province consuming herbal medicines reached 83.29, in the Serang Regency area for traditional or herbal medicine it reached 60.3% of the entire population of Serang Regency (Serang Regency Health Service Report, 2020), while for Baros District 45.1% still use plant species as a method for traditional medicine (Baros District Report, 2020).

The benefit of wound care is to prevent infection in wound healing. Wound healing properly and quickly is influenced by several factors, including: nutrition, especially protein, heredity, medicines, infrastructure and culture in the area (Ruhiyah, Ai Yeyen et al, 2021). In the Baros area they still use types of plants or leaves as traditional medicine. As for this study, the authors used 2 types of plants, namely gotu kola leaves and betel leaves for healing perineal wounds in mothers giving birth in the Baros District, Serang Regency. Based on a preliminary study conducted at the Baros Health Center, data on perineal wound healing with complications were obtained by 27% in 2020, and increased to 45% in 2021. Therefore, the authors are interested in conducting research with the title "Use of Herbal Medicinal Ingredients in Healing of Perineal Rupture Wounds at the Baros Serang Banten Health Center in 2022".

### II. METHODS

The design of this study was cross sectional, by crossing the results between the use of herbal medicinal ingredients: gotu kola leaf decoction and betel leaf decoction for injuries caused by perineal rupture. In this study the dependent variable was perineal wound healing and the independent variable was the use of herbal medicinal ingredients. The sampling technique in this study was by accidental non-probability sampling technique with total sampling. Sampling was carried out by total sampling method from all samples of 30 respondents. chi square statistical test.

### III. RESULT AND DISCUSSION

#### **Univariate Analysis**

Frequency distribution of univariate variables, namely perineal wound healing and use of herbal medicinal ingredients: betel leaves and gotu kola leaves, as shown in the table below:

**Table 1.** Distribution of the Frequency of Use of Herbal Medicinal Materials at the Baros Health Center

Use of Herbal Medicinal Materials	f	%
Betel leaf decoction	15	50%
Gotu kola leaves decoction	15	50%

Based on the data in the table above, the distribution of respondents who used herbal medicinal ingredients: were given boiled water of herbal leaves, each of which was used to soak for 5 minutes before bathing, between betel leaves and gotu kola leaves. Each group was divided into 50% of the use of betel leaf decoction and gotu kola leaves.

Table 2. Healing Frequency Distribution Perineum Wound at Baros Public Health Center

Perineal Wound Healing	f	%
Healed	16	53.3%
Not yet healed	14	46.6%

Based on the table above, the distribution results were obtained for respondents who were given boiled water from herbal leaves who experienced perineal wounds and had been given the boiled water, categorized as cured or not, by observing the progress of the wound on the respondent by the researcher. It was found that 53.3% of patients recovered and 46.6% had not recovered

# **Bivariate Analysis**

**Table 3.** The Effect of Using Herbal Medicinal Materials on Perineal Wound Healing at the Baros Public Health Center

Herbal Medicinal Ingredients	Perineal Wound Healing		Amount	p-value	Odd ratio (OR)
	Healed	Not yet healed	%		
Betel	11 (68.7%)	4 (28.5%)	15 (50%)	.028	.028 5.500
gotu kola	5 (31.2%)	10 (71.4%)	15 (50%)		
Amount	16 (53.3%)	14 (46.6%)	30 (100%)		

Based on the table above, the results were: the distribution of 2 variables in this study, namely respondents who used decoction of leaves of herbal medicinal ingredients and seen from the development of grade II perineal wounds who experienced wounds that healed and did not heal. It was found that 68.7% of respondents recovered with the use of betel leaf and 31.2% gotu kola. While those who have not recovered are less in number when using betel leaf, as much as 28.5% and when using gotu kola which has not recovered as much as 71.4%. In this study, statistical tests were carried out using SPSS version 26 and the results obtained were a p value of 0.028, which means that there is a relationship between the administration of herbal medicinal ingredients and the healing of perineal wounds and an odds ratio of 5,500, which means that the use of betel leaf herbal ingredients in perineal wound healing is 5 times faster than with the use of gotu kola leaves.

### IV. DISCUSSION

Based on research conducted at the Baros Serang Banten Health Center in 2022 from November 2022 to December 2022 as many as 43 people gave birth, of which 10 people experienced Grade I Perineal Rupture (23%), Grade II 31 people (73%), and no Grades III and IV perineal ruptures occur. Usually the perineum is torn and the most common is degree II perineal rupture and occurs in the birth of the first child and not infrequently in the birth of the second child which is caused by several factors, both from maternal factors, namely birth spacing and parity and internal factors, namely baby's weight 2500-4000 grams (Saifuddin, 2008). According to the researchers, the incidence of perineal rupture does not only occur in primiparous parity mothers, but also occurs in multiparity parity mothers with degrees I to degrees IV. But in

this study, researchers found that most of the mothers had grade II perineal rupture and grade III and IV were not found. Based on the results of the study, it showed a p-value = 0.028 (<0.05), meaning that the hypothesis in this study was that there was a relationship between the use of herbal medicinal ingredients: boiled water from betel leaves was faster than the use of Centella asiatica leaves, which means the average perineal wound care days using betel leaf boiled water were lower than the average perineal wound treatment days using gotu kola leaf boiled water, so it can be concluded that green betel leaf is more effective than antiseptic drugs in treating perineal wounds during the puerperium. With the result that 68.7% experienced recovery compared to gotu kola leaves, only 35.5% recovered.

After statistical tests using SPSS version 26, a p-value of 0.028 was obtained, which means less than 0.05 and an odds ratio of 5,500, which means that the use of betel leaf is 5x faster than gotu kola leaves in healing grade 2 perineal wounds. Based on direct observations made by researchers and patient statements who said that perineal wounds using herbal medicinal ingredients: betel leaf boiled water heal faster. This study is in line with research (Wibawati, 2012), which showed that administration of betel leaf extract (piper betle) increased the time (three days faster than controls) for staphylococcus aureus-infected incision wound healing in white rats. This shows that within 3 days of wound control, those who used betel leaf boiled water recovered faster than gotu kola leaf boiled water. In this case it does not mean that the use of water decoction of gotu kola leaves causes the wound not to heal, but what can be assessed during the final assessment on the third day is whether the wound has healed or not healed. The tannin content in betel leaves and gotu kola leaves is useful for reducing fluid secretion in the vagina, thus accelerating the drying of wounds, protecting liver function, and preventing diarrhea. With its antiseptic properties, betel nut is also often used to heal foot wounds, because it contains an antiseptic to stop bleeding, which heals wounds on the skin. It is also used by postpartum mothers to treat perineal wounds by splashing or soaking them. The leaves contain eugenol which can prevent premature ejaculation, eradicate candida albicans fungus, and is analgesic so it can relieve pain in wounds. Meanwhile, the carvacrol content is disinfectant and antifungal so it can be used as an antiseptic to remove odor and vaginal discharge and prevent infection.

The chemical constituents of essential oils in betel leaves act as antiseptics and deodorizers such as kadinen, kavikol, cineol, eugenol, carvanol and tanning substances (syahidah, 2011). In addition, betel leaves contain arecoline in all parts which are useful for stimulating the central nervous and thinking power, increasing peristaltic movements. By increasing peristalsis, it means that it can improve blood circulation so that the oxygen content also becomes better and really helps the wound healing process. This substance is not found in gotu kola leaves which allows betel leaves to have a faster ability to heal wounds.

## V. CONCLUSION

The research was conducted on mothers who had given birth who had grade II perineal injuries at the Baros Serang Banten Health Center. The sample used was 30 people divided into 2 groups, namely 15 people each using herbal medicinal ingredients: boiled water from gotu kola leaves and boiled water from betel leaves which were washed on the wound in the perineum, while cleaning 2 times a day for 3 days and monitoring was carried out. The results of the analysis stated that there was a relationship between perineal wound healing and the use of herbal medicinal ingredients of betel leaves and gotu kola leaves. It was found that the healing process of betel leaf boiled water was faster than the use of gotu kola leaf boiled water.

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