

The Effectiveness Of Using Coconut Oil, Aloe Vera And Sirih Kapur To Prevent Striae Gravidarum In Third Trimester Pregnant Women In The Working Area Of The Cilograng Health Center In 2022

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Abstract.

Background : The prevalence of pregnant women with Striae Gravidarum generally ranges from 50-90%. Striae Gravidarum gives itchiness, heat, and dryness, as well as emotional disturbances, causing serious self-confidence problems (Sharon, Salter M, Alexa B, Kimball M, 2006 in Lubis research, Thaufik Wydiawati Suhartono. 2015) Based on research conducted by Uddin SS and Asimas on 80 samples of pregnant women in Pakistan in 2015, various physiologic skin changes were found during pregnancy, the majority of which were changes in pigmentation (70%), linea nigra (54.3%), and striae gravidarum (51.9%). The etiology of Striae Gravidarum is unknown, predispositions include hormonal, skin elasticity, and mechanical stretching. This is why there is no effective method to protect or treat Striae Gravidarum. *Writing purpose* : This study aims to determine the Effectiveness of the Use of Coconut Oil, Aloe Vera and Kapur Sirih to Prevent Striae Gravidarum in the Work Area of the Cilograng Health Center in 2022. *Research methods* : This research was carried out because the number of pregnant women who experienced striae gravidarum was 40 people, of the 3rd trimester pregnant women there were 65 people. This research will be conducted at the Cilograng Health Center, Lebak Regency. The subjects to be studied are mothers at the Cilograng Health Center, Lebak Regency. This research was carried out by Quasi Experiment with the Nonequivalent Control Group Design having two groups. *Research result* : It shows that from 10 respondents, the results of the analysis were obtained after the Strae Gravidae intervention using coconut oil, aloe vera, and whitening was 10.667 with a standard deviation of 714 and a standard error of 292. And the interval estimation results can be concluded that it is believed to be 95%. *Conclusions and recommendations* : It can be concluded that the effectiveness of coconut oil, aloe vera and whitening has an effect on striae gravidarum. It is hoped that this research will provide socialization about the prevention of striae gravidarum in third trimester pregnant women so that the prevention of striae gravidarum can be resolved quickly and does not cause striae gravidarum to become more severe in the Cilograng Health Center Work Area.

Keywords: Effectiveness, Aloe Vera And Sirih Kapur.

I. INTRODUCTION

The prevalence of pregnant women with Striae Gravidarum generally ranges from 50-90%. Striae Gravidarum gives itchiness, heat, and dryness, as well as emotional disturbances, causing serious self-confidence problems (Sharon, Salter M, Alexa B, Kimball M, 2006 in Lubis research, Thaufik Wydiawati Suhartono. 2015) Based on research conducted by Uddin SS and Asimas on 80 samples of pregnant women in Pakistan in 2015, various physiologic skin changes were found during pregnancy, the majority of which were changes in pigmentation (70%), linea nigra (54.3%), and striae gravidarum (51.9%). The etiology of Striae Gravidarum is unknown, predispositions include hormonal, skin elasticity, and mechanical stretching. This is what causes the absence of effective methods to protect or treat Striae Gravidarum (Grants, Nelly, Hala, 2007 in Lubis research, Thaufik Wydiawati Suhartono, 2015). One of the changes that occur in pregnant women is striae gravidarum. Striae gravidarum is a form of scarring of the skin due to stretching during pregnancy and weight gain during pregnancy. About 90% of women have striae gravidarum, especially in the last trimester of pregnancy. Some striae gravidarum disappear with time, while others remain permanently. (susilawati, Julia 2017). The impact that occurs as a result of striae gravidarum or what is called stretch marks if not treated is that the mother can experience skin problems such as easy bruising, feeling itching in the abdomen which then this itching feeling if scratched will cause wounds, skin irritation, inhibition of skin generation, skin rough and dry, thin skin, feeling insecure with the presence of striae gravidarum on the mother's abdomen which can affect her psychologically, namely discomfort and lack of confidence due to striae gravidarum (Varney, H 2015 in Widia Lidia and Heris, 2002).

Virgin Coconut Oil (VCO) or virgin coconut oil is a natural processed product that is starting to be widely used to improve health and Indonesian people process it themselves. VCO contains 92% saturated fatty acids consisting of 48-53% lauric acid (C12), 1.5-2.5% oleic acid and other fatty acids such as 8% caprylic acid (C: 8) and 7% capric acid (C: 10) (Henny, Salman, Sukma, 2008). The content of fatty acids, especially lauric and oleic acids in VCO, softens the skin. Aloe Vera (Aloe Vera) also has good absorption, because this aloe vera plant is very efficacious for skin care, and one of its benefits is to treat stretch marks on the skin. Aloe vera has a variety of important nutrients and active compounds that can be used in minor wounds. (Naviri, 2011.P: 261). Aloe Vera In terms of nutritional content, gel or egene, aloe vera contains several minerals, such as calcium, magnesium, potassium, sodium, iron, zinc, and chromium. Some of these vitamins and minerals can function as natural antioxidants, such as phenols, flavonoids, vitamin C, vitamin E, vitamin A, and magnesium. These antioxidants are useful for preventing premature aging, heart attacks, and various degenerative diseases (Astawan, 2008). Quantitatively, the protein in aloe vera is found in relatively small amounts, but qualitatively, the protein in aloe vera gel is rich in essential amino acids, especially leucine, lysine, valine, and histidine. Besides being rich in essential amino acids, aloe vera gel is also rich in glutamic acid and aspartic acid. Vitamins in aloe vera are fat soluble, besides that they also contain small amounts of folic acid and choline (Setiabudi, 2008). Lime betel is made from the processing of burnt limestone which is soaked in water within one to two weeks until it crumbles and forms a paste.

This betel lime in ancient times was used by parents as a mixture of ingredients to treat skin diseases such as getting rid of acne, eliminating body odor and whitening the armpits. Based on a preliminary study conducted in the work area of the Cilograng Health Center, during the last 1 month the number of pregnant women in the third trimester was 65 people who experienced striae gravidarum as many as 40 people. However, the data obtained does not describe the classification of striae gravidarum in patients (Cilograng Health Center, 2022). Based on the description above, the researcher is interested in examining the effectiveness of using coconut oil, aloe vera and whitening to prevent striae gravidarum in third trimester pregnant women at the Cilograng Health Center in 2022. because these ingredients are natural ingredients to prevent striae gravidarum in a more efficient manner and can be done independently At home.

II. METHODS

The research design used in this study was a quasi experiment with pre and post test design without control, the sample of this study were pregnant women whose gestational age was above 28 weeks according to research criteria as many as 10 respondents. The implementation stage was as follows: 1). the researcher selected and confirmed the respondents according to the inclusion criteria. 2). Researchers greet, introduce themselves, provide explanations to respondents about the purpose, benefits and procedures of the research (informed consent). 3). Researchers asked respondents to sign a consent form. 4). Researchers distributed coconut oil, aloe vera and whitening to third trimester pregnant women. 5). Researchers documented third trimester pregnant women who were given coconut oil, aloe vera, and whitening and who were not given coconut oil, aloe vera and whitening. 6).

Researchers explain how to use coconut oil, aloe vera and whitening in third trimester pregnant women. Directed respondents to apply coconut oil, aloe vera and whitening on the abdomen and thighs. 7), Apply evenly to the abdomen and thighs every day for 15 minutes, after 15 minutes, clean with a damp cloth for 1 week. 8). Therapy was carried out independently by third trimester pregnant women every day for 1 week, and was observed every 2 days by researchers. 9). After the intervention of applying coconut oil, aloe vera and whitening for 1 week, the researchers made another observation using the observation sheet and used it as post-test data. 10). Researchers recorded the results of observations after the intervention on the observation sheet. The researcher thanks the respondents for their involvement. In this study the test was carried out using the dependent T test (a different test of two mean dependent/paired sample T tests) to test whether there is a difference in the effectiveness of using coconut oil, aloe vera and whitening in third trimester pregnant women before and after being given coconut oil, aloe vera and betel leaf interventions. crocodiles and whitening.

III. RESEARCH RESULTS

Univariate analysis Gestational Age

Distribution of Respondents Based on Age of Pregnancy at the Cilograng Health Center Year 2022

No	Variable	Mean	SD	Minimum - Maximum
1	Gestational Age	31.10	2.470	28 – 35

Based on table 5.1, the results obtained from 5 respondents mean gestational age was 31.10 weeks, with a standard deviation of 2.470, with third trimester gestational age from 28 weeks to 35 weeks.

Striae Gravidarum

Distribution of Respondents Based on Striae Gravidarum before using coconut oil, aloe vera, and whitening at the Cilograng Health Center in 2022

Variable	Mean	SD	Minimum-Maximum
Strae Gravidarum	1.30	483	1 – 2

Based on label 5.2, it was obtained from 5 respondents that the average striae gravidarum before using coconut oil, aloe vera and whitening was 1.30. with a standard deviation of 483, with a low striae gravidarum level is 1 and a high striae gravidarum level is 2.

Dependent Samples Test

			Levene's Test for Equality of Variances		t-test for Equality of Means						
			F	Sig.	t	df	Sig.(2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
										Lower	Upper
MInyak_Kelapa	Equal variances assumed	10.667	.011	2.449	8	.040	.714	.292	.042	1.387	
	Equal variances not assumed			3.873	6.000	.008	.714	.184	.263	1.166	
Lidah_Buaya	Equal variances assumed	10.667	.011	2.449	8	.040	.714	.292	.042	1.387	
	Equal variances not assumed			3.873	6.000	.008	.714	.184	.263	1.166	
Kapur_Sirih	Equal variances assumed	10.667	.011	2.449	8	.040	.714	.292	.042	1.387	
	Equal variances not assumed			3.873	6.000	.008	.714	.184	.263	1.166	

Bivariate Analysis

Dependent T Test

Differences in Strae Gravidarum before and after using coconut oil, aloe vera and lime betel at Cilograng Health Center in 2022. Based on table 5.3 it shows that from 10 respondents, the results of the analysis were obtained after the Strae Gravidarum intervention using coconut oil, aloe vera, and whitening was 10.667 with a standard deviation of 714 and a standard error of 292. And the results of interval estimation can be concluded that it is believed to be 95%.

IV. DISCUSSION

Univariate analysis

1. Gestational Age

Based on the results of data analysis, it was found that the average gestational age of third trimester respondents in the working area of the Cilograng Health Center who was intervened (using coconut oil, aloe vera and betel leaf) was 31.10 weeks with third trimester gestational age from 28 weeks to 35 weeks. According to (Sarwono, 2016 in Ridwan Adilla Septia, 2019) pregnancy is divided into three

trimesters, where the first trimester lasts 12 weeks, the second trimester 13th to 27th week and the third trimester 28th to 40th week, the number of respondents at the age of mid pregnancy (middle age) as many as 5 people. According to (Bingan 2016) striae gravidarum is a line that is visible on the skin of the abdomen of pregnant women, striae gravidarum occurs in almost 90% of pregnant women. Striae gravidarum occurs due to stretching of the skin in line with the enlargement of the uterus and abdominal wall. The strokes that appear are similar in shape to squiggly lines on the surface of the skin with a slightly white color. Sometimes itching appears in and around it. The results of this study are in accordance with research conducted by Maria Isir, Bera Iriani Abdullah 2021 Respondent characteristics based on gestational age show that the most vulnerable are 27-40 weeks or third trimester.

2. Striae Gravidarum

Based on the results of data analysis, it was found that out of 10 respondents the average striae gravidarum before using coconut oil, aloe vera and whitening was 1.3 with a standard deviation of 483, with a low striae gravidarum level of 1 and a high striae gravidarum was 2. According to Varney, H 2015 in Widia Lidia & Heris, (2020) the effects and symptoms of striae gravidarum on pregnant women, namely itching in the abdomen which then itching if scratched will cause wounds, skin irritation, inhibition of skin regeneration, rough and dry skin, skin thinning. Feeling less confident with the presence of striae gravidarum on the abdomen of pregnant women which can affect her psychologically, namely discomfort and lack of confidence due to striae gravidarum, because mothers face many changes during pregnancy. This is in line with data from the World Health Organization (World Health Organization), the number of pregnant women in 2018 increased by 5% compared to the previous year or around 300,990, of which 198,800 striae gravidarum occurred or 66% during pregnancy.

Bivariate Analysis

1. The effectiveness of using coconut oil, aloe vera and betel leaf to prevent striae gravidarum in third-time pregnant women

The results of the research analysis conducted by researchers in the work area of the Cilograng Health Center on 10 third-trimester pregnant women respondents showed that the average striae gravidarum before using coconut oil, aloe vera and whitening was 1.3, striae gravidarum after using coconut oil, aloe vera and whitening is 10.667 with a standard deviation of 714 and an error score of 292. And the results of interval estimation can be concluded to be 95% reliable, from the results of the dependent sample test it can be concluded that there is effectiveness after using coconut oil, aloe vera and whitening to prevent the occurrence of striae gravidarum in third trimester pregnant women. The results of this study are in line with research conducted by Feny, Nia Desriva, (2020) regarding the effectiveness of giving coconut oil to prevent striae gravidarum in pregnant women. The results of the effect test using the paired sample T-test in the pre-test group showed $p = 0.162 < 0.05$ and in the post test group $p = 0.000 < 0.05$, thus it was concluded that there was an effectiveness of giving coconut oil (Virgin Coconut Oil) to striae in pregnant women. The results of this research are in line with the research by Evi Hasita et al (2019) regarding fading of stria marks (striae gravidarum) with aloe vera. The results of statistical tests using the T-test showed that the average time for fading of striae gravidarum using aloe vera (1.0000) statistical test obtained a significant value, $0.001 < 0.05$ so that it can be concluded that there is fading of stria marks (striae gravidarum) in pregnant women.

V. CONCLUSION

Based on the results of the research in the previous chapter regarding "the effectiveness of using coconut oil, aloe vera and whitening for the prevention of striae gravidarum in third trimester pregnant women at the Cilograng Health Center in 2022" a conclusion was drawn

1. The average gestational age in this study was 28 weeks to 32 weeks of gestation
2. Striae gravidarum in third trimester pregnant women before and after using coconut oil, aloe vera and whitening in the Cilograng Health Center work area in 2022 shows a significant change in striae gravidarum before and after the intervention.
3. From the results of the dependent T test there was a significant effect after using coconut oil, aloe vera and whitening in third trimester pregnant women at the Cilograng Health Center in 2022.

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