

**THE EFFECT OF MARTATARING CULTURE COUNSELING
AGAINST THE DEATH OF A BORNING MOTHER
IN HASUNDUTAN HUMBANG DISTRICT**

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ABSTRACT:

Causes of postpartum maternal death due to bleeding, eclampsia, infection, prolonged labor and complication abortion. Apart from the causes of death mentioned above, socially and economically it can also cause maternal and infant mortality. Different cultures and traditions in each region lead to differences in the handling of maternal / childbirth mothers. In Doloksanggul Subdistrict, Humbang Hasundutan Regency in 2017 became the media spotlight due to the death of postpartum mothers due to the culture and tradition of "martataring" in mothers and babies at home. Doloksanggul District, Humbang Hasundutan Regency. The research method used is a quasy experiment, namely research in regular, careful hypothesis testing. With the research design one group pre and post test design. The results of hypothesis testing showed a significant influence in the

Martataring Culture counseling on the prevention of the risk of death in postpartum mothers. The variable value $p = 0.000$ ($p < 0.05$) and the behavior variable $p = 0.002$ ($p < 0.05$), there is no influence on the attitude of postpartum mothers, the value of $p = 0.317$ ($p > 0.05$). Suggestion Respondents must provide information to clients and families about the dangers of using martataring as postpartum heat therapy.

INTRODUCTION:

North Sumatra in Indonesia's health profile in 2018 noted that there were 3,723,839 women of childbearing age, 336,528 the number of pregnant women and 321,232 the number of women who gave birth / post-partum. (Kemenkkes R.I., 2018). Based on these data, it can be seen that there is an increase in the number of population through childbirth / childbirth and the number of pregnant women. Based on the figures that show the number of pregnant women and mothers giving birth, the data regarding the infant mortality rate in 2017 is 13.4 per 1000, while the maternal mortality rate is 3.28 per 1000 in North Sumatra Province (Ministry of Health, 2017). This also shows that there is a cause of death for pregnant women and mothers who give birth / postpartum through a comparison between postpartum maternal deaths caused by various things.

According to Wahyuni & Wahyuningsih, (2016) the causes of maternal death can be caused by bleeding, eclampsia, infection, prolonged labor and complications abortion. Apart from the causes of death mentioned above, socially and economically it can also cause maternal and infant mortality. One example is maternal mortality caused by the low level of the family's economy, family education level, regional transportation and other factors that can indirectly cause maternal death. (Ersila et al., 2019; Fitri et al., 2018; (Wulandari et al., 2017).

Humbang Hasundutan Regency is a district with its capital in Doloksanggul. Doloksanggul is a sub-district that has 2 units of health center facilities and 9 independent midwife clinics. Profiles regarding fertile age and pregnant women in Doloksanggul District are 300 people of childbearing age and 180 pregnant women. Referring to the problems of maternal and infant mortality described above, it is necessary for the population of childbearing age and pregnant women to know the causes of maternal and infant mortality. This is of course very unfortunate if there is an increasing number of maternal and infant deaths, so it is necessary to do early prevention for this problem and different traditions in each region make the difference in the handling of mothers who give birth / postpartum mothers. In Doloksanggul District, Humbang Hasundutan Regency, in 2017 it became the media spotlight due to the death of Nifas mother due to culture and the tradition of "martataring" in mothers and babies at home. As reported on medan.tribunnews.com in 2017 in Doloksanggul District, the death of a mother was caused by "martataring / fireplace smoke"

This is of course a matter of concern for various parties, both from stakeholders such as health centers, midwife clinics, nurses and health workers to provide knowledge about the dangers of the culture of martataring / fireplace smoke to mothers and babies because it can cause death and data from Doloksanggul Hospital that Infants admitted to the hospital are due to respiratory disorders due to the influence of the martatarynx.

Martataring is usually carried out when the mother has finished giving birth and is brought home to rest. This martataring is done with the aim of warming the baby, accelerating wound healing if there is an episiotomy, and returning the uterus to normal and the mother, especially at night. The factor of cold weather on high altitude is believed and has become a culture in the community to warm mothers and babies with martataring. Martataring / heat therapy can cause smoke to fill the entire room or room where the mother and baby rest. As reported in the news.com tribune field in 2017, the cause of

death for infants due to the martataring was the result of respiratory failure due to the smoke arising from the martataring.

Based on observations made by the research team that in 2019 the people in Doloksanggul District still practically carry out the culture of martataring / fireplace smoke in the mother of the post-natal period. This is of course something that must be prevented as early as possible because it can cause death to mothers and babies.

Good knowledge about the importance of avoiding the martataring culture needs to be implemented in Doloksanggul District. This is due to the existence of traditions in society that have always been adhered to today and are trusted by the community. In this case, it is necessary for the research team as academics to take maximum precautions through the results of research and the facts that the danger of martataring can cause death in mothers and babies. The lack of literature regarding the culture of martataring in mothers and babies which can lead to death can of course be the cause of the failure of the academic community which is useful for society. Based on the above phenomena, this study will examine, "The Effectiveness of Counseling on Martataring Culture (Heat Therapy) Against the Risk of Death to Postpartum Women in Doloksanggul District, HumbangHasundutan Regency in 2019".

RESEARCH METHODS:

The method with a quantitative approach in this research is based on the philosophy of positivism, namely: The data used to research on a particular population or sample.

- a. The sampling technique was carried out randomly
- b. Data collection using research instruments
- c. Quantitative data analysis is based on statistical figures with the aim of testing predetermined hypotheses.

Quantitative assumptions consisting of:

- a. Ontological assumptions with both material and formal objects that can shape health
- b. Epistemological assumption of a science in an effort to obtain correct data as knowledge of the martataring culture
- c. Axiological assumption of a value as a science that is beneficial in the health of mothers and children.

RESULTS AND DISCUSSION:

Description of the Research Location:

Puskesmas Matiti is a Puskesmas Pembina (Puskesmas Kecamatan) which covers 18 villages + 1 sub-district, with 21 Poskesdes. The MatitiPuskesmas is not far from the Doloksanggul community settlements, the Matitipuskesmas is in a strategic location, which is in the middle of the Doloksanggul sub-district community settlements.

Research result

Description of Mother's Knowledge:

This section describes the implementation of research in the context of data collection. Data collection began in June with the agenda of taking data on the early ability of experimental post-partum mothers using the results of pretest questions, while data collection ended in July 2020 with the agenda of collecting research data using the results of posttest questions. The implementation of data collection in the experimental group was carried out for 2 meetings.

Based on the data obtained from this study, a table of results of knowledge of pregnant women is made as follows:

Table 4.1: Knowledge Results of Pregnant Women Before and After Extension

Knowledge level	Pre Test		Post test	
	n	%	n	%
Good	2	5.3	14	36.8
Enough	23	60.5	24	63.2
Less	13	34.2	0	0
Total	38	100	38	100

Based on table 4.1 above, it can be seen that before counseling (Pre Test) at the level of good knowledge there were 2 people (5.3%), 23 people (60.5%) were enough, and 13 people (34.2%) in less category after counseling, the mother's knowledge increased, namely the level of knowledge in the good category as many as 14 people (36.8%), enough as many as 24 people (63.2%) and less than none.

Description of the data on the attitudes of pregnant women before and after counseling:

Based on the data obtained from this study, a table of the results of the attitudes of pregnant women is made as follows:

Table 4.2: Results of Attitudes of Pregnant Women Before and After Extension

Attitude Level	Pre Test		Post test	
	n	%	n	%
Positive	37	97.4	38	100
Negative	1	2.6	0	0
Total	38	100	38	100

Based on table 4.2 above, it can be seen that before counseling (Pre Test) on the positive attitude variable as many as 37 people (97.4%), negative as many as 1 person (2.6%), after counseling on the results of the Post Test, the mother's attitude increased, namely that all were positive as much as 38 people (100%).

Description of the Behavior Results of Pregnant Women Before and After Education:

Based on the data obtained from the study, a table of behavioral results was created as follows:

Table 4.3: Behavior Results of Pregnant Women Before and After Education

Attitude	Pre Test		Post test	
	n	%	n	%
Good	12	31.6	22	57.9
Enough	26	68.4	16	42.1
Less	0	0	0	0

Total	38	100	38	100
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Based on table 4.3 above, it can be seen that before counseling (Pre Test) on the good attitude variable there were 12 people (31.6%), enough 26 people (68.4%) and the lacking category did not exist after counseling, the mother's attitude increased, namely the level of attitude category. either as many as 22 people (57.9%), enough as many as 16 people (42.1%) and less than none.

The results of the data normality test for the pre-test group and the post-test group:

The data processing of the effectiveness of the extension with the pre-test and post-test groups used the t test statistical test with a significant level of 5%, but before the t test was carried out, first the data normality was tested using the Shapiro Wilk test. The results of the data normality test are as follows;

Table 4.4 Results of Normality Test of Knowledge, Attitudes and Behavior Before and After Extension

	Group	Shapiro-Wilk			Keterangan
		Statistic	Df	Sig.	
Knowledge	Pre Test	.916	38	.007	Abnormal
	Post test	.861	38	.000	Abnormal
Attitude	Pre Test	.917	38	.008	Abnormal
	Post test	.950	38	.088	Normal
Behavior	Pre Test	.950	38	.091	Normal
	Post test	.968	38	.337	Normal

The normality test is carried out before the analysis test is carried out, the test is carried out to assess the distribution of data using computer software. The normality test was carried out using the Saphiro Wilk test. The results of the knowledge data normality test show that the data in the pre-test, post-test and difference data groups show that if the p-value is <0.05, the data is not normally distributed. In the results of the normality test of attitude data in the pre-test group, the p value was <0.05, so the data was immoral, while the post-test resulted in a p value> 0.05 so that the data were normally distributed.

In the behavior data normality test results, the data in the pre-test, post-test data groups obtained p value> 0.05 so that the data were normally distributed. The results of the normality test indicate that the data is not normally distributed so that the study does not meet the requirements to use the t-test so that the hypothesis test is carried out using non-parametric statistics. The hypothesis test used is the Wilcoxon and Man Whitney test with a confidence level of 95% and an error rate of 5%.

Wilcoxon test:

The Wilcoxon test was conducted to test the relationship between two paired groups in this study, namely pre-test and post-test data in the experimental group and pre-test and post-test data in the control group. The counseling given to both the experimental group and the control group is expected to influence the knowledge and attitudes of the respondents. The Wilcoxon test was conducted to determine the effect of counseling before and after it was given on the knowledge and attitudes of respondents in each group. The Wilcoxon test results are as follows:

Table 4.5 Results of the Wilcoxon Test Score of Knowledge, Attitudes and Behaviors of Pregnant Women Before and After Extension

		n	Mean Rank	Sum of Ranks
Post test - Pre test Pengetahuan	Negative Ranks	1	8.00	8.00
	Positive Ranks	20	11.15	223.00
	Ties	17		
	Total	38		
Post test - Pre Test Sikap	Negative Ranks	0	.00	.00
	Positive Ranks	1	1.00	1.00
	Ties	37		
	Total	38		
Post test - Pre test Perilaku	Negative Ranks	0	.00	.00
	Positive Ranks	10	5.50	55.00
	Ties	28		
	Total	38		

Based on table 4.5 above, that the negative Ranks or negative difference in the pre-test and post-test knowledge variables is 1 person. This shows that there is a decrease or reduction from the pretest score to the post test score. Mean Ranks or the average increase is 8.00 while the number of positive ranks or Sum Of Ranks is 8.00. Positive Rank or the positive difference between the pre-test and post-test knowledge variables 20, which means that 20 mothers experienced an increase in knowledge from the value of the pres test to the value of the post test. Mean Ranks or the average increase is 11.15 while the number of positive ranks or Sum Of Ranks is 223.00. The similarity of the pre-test and post-test scores on the knowledge variable was 17 people.

There was no negative difference in the post-test and post-test post-partum attitude variables. This shows that there is no decrease or reduction from the pretest score to the post-test score. Respondents with a positive difference between the pre-test and post-test 1 attitude variables, which means that 1 mother experienced an increase in attitude from the pres-test value to the post-test score. The mean Ranks or the average increase is 1.00 while the number of positive rankings or Sum Of Ranks is 1.00. The similarity of the pre-test and post-test scores on the attitude variable was 37 people.

There is no negative difference in the pre-test and post-test behavior variables. This shows that there is no decrease or reduction from the pretest score to the post-test score. Positive Rank or the positive difference between the pre-test and post-test knowledge variables of 10, which means that 10 mothers experienced an increase in behavior from the value of the pres test to the value of the post test. Mean Ranks or the average increase is 5.50 while the number of positive ranks or Sum Of Ranks is 55.00.

Table 4.6. Statistical Test Table

	Post test - Pre test Knowledge	Post test - Pre Test Attitude	Post test - Pre test Behavior
Z	-3.917 ^a	-1.000 ^a	-3.162 ^a
Asymp. Sig. (2-tailed)	.000	.317	.002

Based on table 4.6 above, it is known that the Asymp results. Sig. (2-tailed) on the knowledge variable has a value of 0.000. This proves that the value of 0.000 < 0.05, it can be concluded that the hypothesis is accepted, meaning that there is a difference between

the pre-test and post-test results so that it can be concluded that there is an effect of counseling on mother's knowledge.

Asymp results. Sig. (2-tailed) on the attitude variable has a value of 0.317. This proves that the value of $0.317 > 0.05$, it can be concluded that the hypothesis is rejected, meaning that there is no difference between the results of the pre-test and post-test so that it can be concluded that there is no influence of counseling on maternal attitudes. Asymp results. Sig. (2-tailed) on the behavior variable is 0.002. This proves that the value of $0.002 < 0.05$, it can be concluded that the hypothesis is accepted, meaning that there is a difference between the results of the pre-test and post-test so that it can be concluded that there is an influence of counseling on mother's behavior.

DISCUSSION:

Management of the Risk of Maternal Mortality Based on the Martataring Culture:

The low knowledge of pregnant women about overcoming the risk of death due to postpartum care based on culture and martataring habits (heat therapy) is caused by various factors. According to Notoadmodjo, one of the goals of education is to develop and increase knowledge. The higher a person's education level, the more knowledge will be obtained. The more information one hears and receives, the more it is known. After counseling, it can be seen that there is an increase in the knowledge score of pregnant women about overcoming the risk of death due to postpartum care based on culture and martataring habits (heat therapy).

In this study there was an increase in knowledge after counseling (p value = 0.000 ($p < 0.05$)), the mother was willing to receive information related to the impact of martataring risk, and was willing to cope with other methods that provide postpartum heat therapy, such as ginger / tea. ginger.

This research is relevant to research conducted by (Azeem et al., 2016) on 35 pregnant women at Public health center Metro, Metro District regarding the relationship between knowledge and attitudes of pregnant women towards participation in the class of mothers showing a significant increase in the respondent's knowledge score ($p = 0.001$) after getting health education with a duration of one hour. Kris et al., (2014) journal, which only examines knowledge about preeclampsia, namely with the title "The Effect of Health Education in Pregnant Women on Knowledge About Preeclampsia in the Work Area of the Sokaraja I Health Center" that in the knowledge of mothers obtained a value of $p = 0.000$ ($p < 0.05$). that there is a significant difference in knowledge between before being given health education and after being given health education to pregnant women.

Countermeasures Due to Postpartum Care Based on Martataring Culture:

Attitudes are influenced by personal experience, culture, mass media, certain institutions or institutions as well as emotional factors in the individual concerned. These forming factors occur because of the social interactions experienced by individuals, so that individuals interact to form attitudes. (Stimac et al., 2008). One of the components that make up an attitude is knowledge, because a good attitude comes after good knowledge. In this study, respondents whose knowledge had increased to be good and sufficient, it could be said that they also had a good and sufficient attitude in overcoming the risk of postpartum death due to martataring.

The attitude of pregnant women was measured using a questionnaire twice, namely before and after counseling. Based on the results, there was no effect of counseling on the attitudes of pregnant women in this study.

Research to see the effect of counseling on attitudes has been done before, one of which is research conducted by Hutaeruk et al., (2018). The results of this study indicated that there was a significant increase in attitude scores ($p = 0.001$) in the description of the implementation of the mother's class after receiving counseling and slide media. The results of the research on the effectiveness of counseling on overcoming the risk of maternal mortality due to martataring are not in accordance with the results of the above research.

Behavior of pregnant women at risk of death due to martataring treatment:

In this study, the behavior of postpartum mothers was observed twice, namely before and after counseling. There was an increase in maternal behavior after counseling.

According to the theory of Lawrence Falloon et al., (1988) the main factors of behavior include predisposing factors, where these factors include public knowledge and attitudes towards health, traditions and public beliefs on matters related to health, value systems. which is adopted by the community, education level, socio-economic level, employment, and so on. Even though a person has knowledge or gets good stimulus, if the traditions or beliefs from the culture in society have become habits, the habit will remain and will automatically take place. Habits provide predictable behavior patterns, because they are often associated with hereditary customs.

Asymp results. Sig. (2-tailed) on the behavior variable is 0.002. This proves that the value of $p = 0.002$ ($p < 0.05$), it can be concluded that the hypothesis is accepted, meaning that there is a difference between the results of the pre test and post test so that it can be concluded that there is an effect of counseling on the behavior of postpartum mothers.

In this study, in practice the martataring culture cannot be abandoned by the community, the tofu community, however, culture and habits are still attached and carried out. The community is willing to receive information about martataring risk management by using ginger as an alternative to postpartum heat therapy. Using heat therapy (martataring) by adjusting the distance so that the device used to warm it is not used in a room with insufficient ventilation, to reduce the risk of infection.

CONCLUSION AND IMPACT:

Conclusion:

The effectiveness of counseling on Martataring Culture (Heat Therapy) on the prevention of the risk of death in postpartum mothers are:

1. Knowledge of pregnant women Before counseling, 2 (5.3%) had good knowledge, 23 (60.5%) had sufficient knowledge of pregnant women, and 13 (34.2%) had insufficient knowledge. Increased after extension, 14 (36.8%) had good knowledge and 24 (63.2%) had sufficient knowledge.
2. The attitudes of pregnant women before counseling (Pre Test) on the positive attitude variable were 37 people (97.4%) and 1 person (2.6%) negative after the counseling, the attitudes of the mothers increased, namely all the attitudes of mothers in the positive category were 38 people (100 %) while the attitude of the negative category mothers did not exist.
3. The behavior of pregnant women before counseling (Pre Test) on the good attitude variable was 12 people (31.6%), enough for 26 people (68.4%) and the lacking category did not exist after counseling, so the mother's attitude increased, namely the level of attitude in the good category as many as 22 people (57.9%), enough as many as 16 people (42.1%) and less.

4. The results of hypothesis testing show that there is a significant effect of the effectiveness of counseling on Martataring Culture (Heat Therapy) on the prevention of risk of death in pregnant women based on knowledge and behavior. In the knowledge variable the value of $p = 0.000$ ($p < 0.05$) and the behavior variable $p = 0.002$ ($p < 0.05$), there was no influence of counseling on the attitudes of pregnant women, the value of $p = 0.317$ ($p > 0.05$).

Impact:

1. For Respondents Pregnant women are expected to provide impactful information to clients and their families about the dangers of using charcoal (martataring) as postpartum heat therapy.
2. For Maternal and Child Health Services in Puskesmas, the promotion program impacts risk mitigation of using martataring (heat therapy) with health-based methods such as ginger, use of hot jars, expanding the reach of promotional targets by visiting pregnant women to their homes, to recite more recitation. in the understanding of mothers in the dangers of using charcoal (martataring).
3. For Researchers Furthermore, by conducting further research on the effect of counseling on attitudes and behavior of pregnant women have an impact on overcoming the risk of death in pregnant women.

REFERENCES:

- Azeem, A., IdnaIdris, M. Y., Nik-Ghazali, N., Ahmed NJ, S., & Al-Rashed, A. A. (2016). Conjugate heat and mass transfer in square porous cavity. *Indian Journal of Pure & Applied Physics (IJPAP)*, 54(12), 777–786.
- Ersila, W., Prafitri, L. D., & Zuhana, N. (2019). Perbedaan Efektivitas Massage Efflurage Dan Kompres Dingin Terhadap Nyeri Persalinan Di Puskesmas Kabupaten Pekalongan. *Jurnal SIKLUS*, 8, 107–115.
- Falloon, T. J., Green, D. H., Hatton, C. J., & Harris, K. L. (1988). Anhydrous partial melting of a fertile and depleted peridotite from 2 to 30 kb and application to basalt petrogenesis. *Journal of Petrology*, 29(6), 1257–1282.
- Fitri, L., Noviawanti, R., & Sasrawita, S. (2018). Efektivitas Stimulasi Kutan Slow Stroke Back Massage terhadap Penurunan Intensitas Nyeri Bersalin. *Jurnal Endurance: Kajian Ilmiah Problema Kesehatan*, 3(2), 232–237.
- Hutauruk, T. R., Lahjie, A. M., Simarangkir, B., Aipassa, M. I., & Ruslim, Y. (2018). The prospect of the utilization of non-timber forest products from Setulang Village forest based on local knowledge of the Uma Longh community in Malinau, North Kalimantan, Indonesia.
- Kris, M. G., Johnson, B. E., Berry, L. D., Kwiatkowski, D. J., Iafrate, A. J., Wistuba, I. I., Varella-Garcia, M., Franklin, W. A., Aronson, S. L., & Su, P.-F. (2014). Using multiplexed assays of oncogenic drivers in lung cancers to select targeted drugs. *Jama*, 311(19), 1998–2006.
- Stimac, J., Nordquist, G., Suminar, A., & Sirad-Azwar, L. (2008). An overview of the Awibengkok geothermal system, Indonesia. *Geothermics*, 37(3), 300–331.
- Wahyuni, S., & Wahyuningsih, E. (2016). Pengaruh Massage Effleurage terhadap Tingkat Nyeri Persalinan Kala I Fase Aktif pada Ibu Bersalin di RSUD Muhammadiyah Delanggu Klaten 2015. *INVOLUSI Jurnal Ilmu Kebidanan*, 5(10).

Wulandari, P., Kustriyani, M., & Chasanah, U. (2017). Pengaruh Pemberian Kompres Hangat terhadap Intensitas Nyeri pada Ibu Bersalin Kala I Fase Aktif di Rb. Mardi Rahayu Semarang. *Prosiding Seminar Nasional & Internasional*, 1(1).