The Effectiveness Of Acupressure In First Trimester Pregnant Women With Emesis Gravidarum At TPMB Nurseha In 2023

Olivia Nency[1*], Nurseha[2]

[1,2]Abdi Nusantara College of Health Sciences, Indonesia
*Corresponding Author:
Email: olivia.nency123@gmail.com

Abstract.

Background: Pregnant women with emesis gravidarum who use acupressure can reduce or even avoid the use of anti-nausea drugs which have the potential to have side effects. This can be considered as an effective non-pharmacological alternative in treating emesis gravidarum. Purpose of Writing: Knowing the Effectiveness of Acupressure in First Trimester Pregnant Women with Emesis Gravidarum at TPMB Nurseha in 2023. Research Method : This research is a quasi-experimental research with pretest posttest with control group design. The independent variable in this study is doing acupressure and the dependent variable is Emesis Gravidarum. taken by purposive sampling. Data analysis was carried out univariately and bivariately, to find out differences in Emesis Gravidarum level scores at the pretest and posttest in each treatment group using the Paired t-test, if not normally distributed then use the Wilcoxon. Research Results: Based on research results it is known that Asymp. Sig (2 – Talled) in the intervention group is 0.000 because 0.000 <0.05, it can be concluded that the hypothesis is accepted. This means that there is a difference before and after acupressure is done on emesis gravidarum. While the results of the study found Asymp. Sig (2 – Talled) in the control group is 0.163 because 0.163 > 0.05, it can be concluded that the hypothesis is rejected. This means that there is no difference before and after acupressure on emesis gravidarum. So it can be concluded that there is Effectiveness of Acupressure in First Trimester Pregnant Women with Emesis Gravidarum at TPMB Nurseha in 2023.

Keywords: *Acupressure in First Trimester Pregnant Women and Emesis Gravidarum.*

I. INTRODUCTION

Emesis Gravidarum is the onset and excessive vomiting that occurs during pregnancy, usually starting in the first trimester and may continue into the second trimester. This condition affects about 50 – 80% of pregnant women and usually peaks between 9-12 weeks of pregnancy. The causes of Emesis Gravidarum are not fully understood, but hormonal factors are believed to play an important role. The increase in levels of the hormone HCG (Human Chorionic Gonadotropin) and estrogen during pregnancy can affect the vomiting center in the brain, which causes symptoms of nausea and vomiting. Symptoms of Emesis Gravidarum can vary, ranging from mild nausea to repeated vomiting that interferes with daily activities.According to Retnowati, Y. (2019). Factors that cause Emesis Gravidarum are due to hormonal, occupational, parity and psychosocial factors. Psychological factors that influence pregnancy from within the mother are the background of the mother's personality and are influenced by hormonal changes that occur during pregnancy, namely the hormones adrenaline and norepinephrine will increase. The hormone norepinephrine causes dysregulation of the body's biochemistry, resulting in physical tension in pregnant women. Psychological problems may predict some women to experience nausea and vomiting in pregnancy, or worsen symptoms they already have. This can be caused by fear and anxiety. According to Manuaba, the feeling of nausea and vomiting tends to be more severe in the first pregnancy. Emotionally, mothers who are pregnant for the first time tend to be more sensitive to anxiety and fear, which eventually upset the stomach.According to Mariza, A., & Ayuningtias, L. (2019). The management of nausea and vomiting in pregnancy depends on the severity of the symptoms.

Treatment ranges from mild changes in diet to approaches with antimietic medication, hospitalization, or parenteral nutrition. Treatment consists of pharmacological and non-pharmacological therapy. Pharmacological therapy is carried out by administering antimietics, antihistamines, and corticosteroids. Non-pharmacological therapy is carried out by regulating diet, emotional support, acupressure and ginger.According to Mariza, A., & Ayuningtias, L. (2019). Acupressure has been shown to

be effective in reducing the symptoms of nausea and vomiting in pregnant women with Emesis Gravidarum in the first trimester. This method involves applying pressure to specific points on the body using a finger or an instrument. Several acupressure points that are often used to treat nausea and vomiting in pregnant women are P6 (Neiguan) which is located on the wrist, and PC6 (Pericardium 6) which is located inside the arm. By pressing on these points, certain nerves can be stimulated, thereby helping to relieve nausea. Clinical research has shown that acupressure at point P6 or PC6 can reduce the intensity and frequency of nausea and vomiting in pregnant women with emesis gravidarum. Emesis Gravidarum is generally considered a normal and transient symptom during the first trimester of pregnancy. However, in a minority of cases, this condition can become more severe and risk interfering with the nutrition and hydration of pregnant women. When this severe nausea and vomiting causes significant weight loss or dehydration, it is necessary to seek medical attention and appropriate management.

Emesis Gravidarum usually starts between 4 to 6 weeks of pregnancy and reaches a peak between 9 to 13 weeks of pregnancy. These symptoms can vary from mild to severe, with some women experiencing repeated vomiting throughout the day.Based on the register data for pregnant women at TPMB from January to March 2023, 10 pregnant women experienced Emesis Gravidarum from 35 pregnant women. Researchers conducted an experiment, one of which was pregnant women who experienced Emesis Gravidarum using non-pharmacological treatment. Non-pharmacological treatment is a type of treatment without using drugs. The implementation carried out by researchers was based on previous research by Mariza, A., & Ayuningtias, L. (2019). i.e. Find point P6 (Neiguan): This point is located on the wrist, about two fingers above the crease of the wrist between the protruding tendons. Then use your middle finger or thumb to gently press on point P6 with a comfortable pressure. Apply pressure slowly or use a circular motion. Apply gentle pressure on point P6 for about one to two minutes. After that, feel what arises when doing acupressure. Perform acupressure on point P6 several times a day or as needed. This acupressure can be done during nausea or whenever you feel the need to relieve symptoms. After being carried out by pregnant women who experienced Emesis Gravidarum, they felt a change in their initial taste after 15 minutes of acupressure, thus researchers were interested in proving the efficacy of this acupressure. Therefore, the current research title is the Effectiveness of Acupressure in First Trimester Pregnant Women with Emesis Gravidarum at TPMB Nurseha in 2023

II. METHODS

This research was conducted to determine the effectiveness of acupressure in first trimester pregnant women with Emesis Gravidarum. This research was conducted by TPMB Nursehar during April-May 2023. This research was a quasi-experimental study with pretest posttest with control group design. The independent variable in this study is doing acupressure and the dependent variable is Emesis Gravidarum. taken by purposive sampling. Data analysis was carried out univariately and bivariately, to determine differences in the Emesis Gravidarum level scores in the pretest and posttest in each treatment group using the Paired t-test.

III. RESULT AND DISCUSSION

A. Univariate data

1. Frequency Distribution of Emesis Gravidarum Levels Before and After in First Trimester Pregnant Women in the Intervention Group at TPMB Nurseha in 2023

Table 1. Frequency Distribution of Emesis Gravidarum Levels Before and After in First Trimester Pregnant Women in the Intervention Group

No	Before			No	After		
	Emesis Gravidarum	F	%		Emesis Gravidarum	F	%
1	No Emesis	0	0	1	No Emesis	9	56,3
2	Light Emesis	6	37,5	2	Light Emesis	7	43,7
3	Moderate Emesis	10	62,5	3	Moderate Emesis	0	0
Total		16	100	Total		16	100

Table 1 shows the frequency distribution of the level of emesis gravidarum in pregnant women in the 1st trimester before intervention (acupressure was performed) in which the majority of moderate emesis gravidarum levels were 10 people (62.5%) and mild emesis gravidarum levels were 6 people (37.5%). Then the level of emesis gravidarum in pregnant women in the first trimester after the intervention (acupressure) was carried out, the majority did not get emesis gravidarum as many as 9 people (56.3%) and the level of mild emesis gravidarum was 7 people (43.7%)

2. Frequency Distribution of Emesis Gravidarum Levels Before and After 12 Hours in First Trimester Pregnant Women in the Control Group at TPMB Nurseha in 2023

Table 2. Frequency Distribution After or End of Examination Pain Scale Intervention and Control Group

No	Before			No	After		
	Emesis Gravidarum	F	%		Emesis Gravidarum	F	%
1	No Emesis	0	0	1	No Emesis	0	0
2	Light Emesis	6	37,5	2	Light Emesis	4	25
3	Moderate Emesis	10	62,5	3	Moderate Emesis	12	75
Total		16		Total		16	100

Table 2 shows the frequency distribution of the level of emesis gravidarum in pregnant women in the first trimester at the beginning of the assessment in the control group (no acupressure was done). The majority found moderate emesis gravidarum levels as many as 10 people (62.5%) and mild emesis gravidarum levels as many as 6 people (37.5%). Then the level of emesis gravidarum in first trimester pregnant women after 12 hours from the start of the assessment in the control group (no acupressure was done) obtained the majority of moderate emesis gravidarum as many as 12 people (75%) and mild emesis gravidarum level as many as 4 people (25%)

3. Average POQE Score in 1st Trimester Pregnant Women in the Intervention Group at TPMB Nurseha in 2023

Table 3. Average POQE Score in First Trimester Pregnant Women in the Intervention Group

No	Action	POQE scores			
		n	M	SD	Beginning-End
1	Before	16	8,31	2,676	5-12
2	After		3,19	1,471	2-6

Based on Table 5.3, it is known that of the 16 pregnant women who experienced emesis gravidarum before the intervention (acupressure was performed) they obtained an average score (mean) of 8.31, a standard deviation of 2.676, a POQE score for emesis gravidarum assessment, namely a minimum POQE score of 5 (mild emesis gravidarum) and a maximum POQE score of 12 (moderate emesis gravidarum). Then after the intervention (acupressure was carried out) the average value (mean) was 3.19, the standard deviation was 1.471, the POQE score for emesis gravidarum assessment was a minimum POQE score of 2 (not experiencing emesis gravidarum) and a maximum POQE score of 6 (mild emesis gravidarum).

4. Average POQE Score in First Trimester Pregnant Women in the Control Group at TPMB Nurseha in 2023.

Table 4. Average POQE Score in First Trimester Pregnant Women in the Control Group

No	Action	POQE Scores			
		n	M	SD	Beginning-End
1	Awal	16	9,44	3,183	5-13
2	Akhir		9,88	2,553	6-13

Based on Table 4, it is known that of the 16 pregnant women who experienced emesis gravidarum, the POQE assessment was carried out in the control group (no acupressure) obtained an average value (mean) of 9.44, standard deviation of 3.183, POQE score for emesis gravidarum assessment, namely a minimum POQE score of 5 (mild emesis gravidarum) and a maximum POQE score of 13 (moderate emesis gravidarum). Then after 12 hours from the start of the POQE assessment in the control group (no acupressure was done) the average value (mean) was 9.88, the standard deviation was 2.553, the POQE score for emesis gravidarum assessment was a minimum POQE score of 6 (mild emesis gravidarum) and a maximum POQE score of 13 (moderate emesis gravidarum).

B. Data Normality Test Results

The normality test aims to determine whether the research data used for the average comparison test is normally distributed or not. Data normality is a requirement that must be met in a parametric statistical test of average comparison through paired sample t test. If the normality requirements are not met, the paired sample t test is changed to a non-parametric statistical test via the Wilcoxon test.

Table 5. Data Normality Test Results

		Pretest intervensi	Posttest intervensi	Pretest Kontrol	Posttest Kontrol
N		16	16	16	16
Normal Parameters[a,b]	Mean	8,31	3,19	9,44	9,88
	Std. Deviation	2,676	1,471	3,183	2,553
Most Extreme Differences	Absolute	0,188	0,353	0,195	0,235
	Positive	0,188	0,353	0,172	0,182
	Negative	-0,166	-0,210	-0,195	-0,235
Tes Statistik		0,188	0,353	0,195	0,235
Asymp. Sig. (2-tailed)		.134	.000	0,105	0,018

Table 5 shows the asymp values. sig. for the pretest intervention group score data was 0.134 > 0.05 or otherwise normally distributed and posttest 0.00 <0.05 or declared not normally distributed. Likewise for the pretest control group score data which was 0.05 > 0.05 or declared normally distributed and posttest 0.00 <0.05 or otherwise not normally distributed. Because the results of the study used a non-parametric statistical test through the Wilcoxon test as the basis for taking the results of the hypothesis test because one of them was not normally distributed.

C. Results of Bivariate Analysis

1. Results of the Wilcoxon test in the intervention group

Table 6. Wilcoxon test results in the intervention group

Acupressure		N	Mean Rank	Sum Of Rank	Sig. (2-tailed)
After Before	Negative Ranks	16	8,50	136,00	
	Positive Ranks	0	0.00	0.00	0,000
	Ties	0			
	Total	16			

Based on the Wilcoxon Test, the majority of the 16 intervention group respondents obtained the negative ranks or reduction before and after acupressure was 16, the mean rank was 8.50 and the sum rank was 136.00 meaning that 60 people experienced a decrease in emesis gravidarum before and after. However, there was no Ties value (similarity) between before and after and there was no positive rank rating or addition of emesis gravidarum.

2. Wilcoxon test results in the control group

Table 7. Wilcoxon test results in the control group

Acupressure		N	Mean Rank	Sum Of Rank	Sig. (2-tailed)
After Before	Negative Ranks	2	3,00	6,00	
	Positive Ranks	5	4,40	22,0	0,161
	Ties	9			
	Total	16			

Based on the Wilcoxon test, it was found that the majority of the 16 control group respondents had negative ranks or reductions before and after acupressure was done for 2 people, the mean rank was 3.00 and the sum rank was 6.00 meaning that 2 people experienced a decrease in emesis gravidarum before and after. However, it was found that the Ties value (similarity) between before and after was 9 people, the value remained before and after. Then it was found that there was a positive rank rating or the addition of emesis gravidarum by 5 people. the mean rank is 4.40 and the sum rank is 22.0

3. The Effectiveness of Acupressure in First Trimester Pregnant Women with Emesis Gravidarum at TPMB Nurseha in 2023

Based on the research results, it is known that Asymp. Sig (2 – Talled) in the intervention group is 0.000 because 0.000 <0.05, it can be concluded that the hypothesis is accepted. This means that there is a difference before and after acupressure is done on emesis gravidarum. While the results of the study found

Asymp. Sig (2 – Talled) in the control group is 0.163 because 0.163 > 0.05, it can be concluded that the hypothesis is rejected. This means that there is no difference before and after acupressure on emesis gravidarum. So it can be concluded that there is Effectiveness of Acupressure in First Trimester Pregnant Women with Emesis Gravidarum at TPMB Nurseha in 2023

Discussion

The results of the study can be concluded that there is the Effectiveness of Acupressure in First Trimester Pregnant Women with Emesis Gravidarum at TPMB Nurseha in 2023. The results of this study are in line with Mariza, A., & Ayuningtias, L. (2019) with statistical test results obtained pvalue = 0.000, which means that there is an effect of giving acupressure point p6 on emesis gravidarum. In his research Nausea and vomiting or what is called emesis gravidarum is a common complaint in young pregnancies. The occurrence of pregnancy causes hormonal changes in women because there is an increase in the hormones estrogen, progesterone, and the release of placental HCG. Nausea and vomiting can also be caused by hormonal changes and the state of the body to prepare for a new position or home for the fetus. In this study, emesis gravidarum had at least a minimum value of 6 and a maximum value of 13, the frequency of nausea and vomiting can be caused by the body's response to objects, smells, or food consumed, besides that the handling and management of nausea and vomiting is very necessary for pregnant women, such as providing warm food, snacks or crackers, as well as non-pharmacological management (herbal medicine) in the hope that nausea and vomiting can be overcome, and not interfere with the mother's nutritional intake.In addition, the results of this study are also in line with previous research by Widyaastuti, et al (2018) complementary acupressure therapy is effective for dealing with emesis gravidarum in first trimester pregnant women at the Gambirsari Health Center, Surakarta with Asymp.sig results. (2-tailed) obtained a value of 0.005 <0.05, this means that there is a significant difference between the results of the post test and the results of the pre test. Where this means that acupressure can significantly reduce the mother's total RINVR score. The calculation of nausea and vomiting is done using the RINVR (Rhodes Index of Nausea, Vomiting and Retching) questionnaire with the lowest score of 0 and the highest score of 32.

In this questionnaire, 3 things are measured to determine the nausea and vomiting index, namely by calculating the nausea score, vomiting score and nausea vomiting score. In his research, he explained that nausea is an unpleasant feeling that exists before vomiting. This is usually accompanied by sweating, increased salivation, and rhythmic contractions of the abdominal wall muscles. In other sources Nausea is a condition in which a person has a pressing and uncomfortable feeling before vomiting, but does not always cause vomiting. Nausea is produced by stimulating a group of deep nerve cells, called the vomiting center. If the stimulus is intense enough, nausea will be followed by vomiting. Vomiting is a reflex that cannot be controlled to forcefully expel stomach contents through the mouth. The symptom that often occurs with vomiting is nausea. In some cases, vomiting will stop when the contents of the stomach have been expelled. However, in some cases vomiting does not always have to be accompanied by nausea.The study is also in line with the previous study by Sumarni & Mutoharoh (2023) in his research. The results of the study before implementing acupressure at the Neiguan point found that most experienced the severity of nausea and vomiting in the moderate category (score 7-12) and 16.7% in the severe category. Then the results of the application can be concluded that pregnant women who experience nausea and vomiting in pregnancy after acupressure is performed at the Neiguan point, the average decrease in nausea and vomiting scores from 10 to 7 or there is an average decrease of 4 points. So it is recommended to increase education about the discomforts of pregnancy, especially nausea and vomiting and how to reduce complaints of nausea and vomiting, one of which is with non-pharmacological therapy, namely with acupressure at the Neiguan point.Based on the results of previous research conducted several years before, it was found that there was no gap between the current research and previous research.

So the researchers assumed that by carrying out non-pharmacological actions on pregnant women who experience emesis gravidarum by means of doing P6 (Neiguan) acupressure which is located on the wrist, and PC6 (Pericardium 6) which is located inside the arm. By pressing on these points, certain nerves can be stimulated, thereby helping to relieve nausea. Clinical studies have shown that acupressure at points P6 or PC6 can reduce the intensity and frequency of nausea and vomiting in pregnant women with emesis

gravidarum.The researcher took action until the feeling of vomiting disappeared, but when in a matter of 12 hours the result was a reduced frequency of nausea and vomiting in pregnancy which was proven by the results of the data - average POQE score assessment, namely from 16 pregnant women who experienced emesis gravidarum before intervention (acupressure was carried out) obtained an average value (mean) of 8.31, standard deviation 2.676, POQE score for emesis gravidarum assessment, namely a minimum POQE score of 5 (mild emesis gravidarum) and the maximum value of POQE score is 12 (moderate emesis gravidarum). Then after the intervention (acupressure was carried out) the average value (mean) was 3.19, the standard deviation was 1.471, the POQE score for emesis gravidarum assessment was a minimum POQE score of 2 (not experiencing emesis gravidarum) and a maximum POQE score of 6 (mild emesis gravidarum).So the researchers hope that these results have proven a reduction in emesis gravidarum so that it can be concluded that P6 (Neiguan) acupressure located on the wrist, and PC6 (Pericardium 6) can reduce emesis gravidarum in pregnant women.

IV. CONCLUSION

Based on the results and discussion of the research results, it can be concluded that:

1. The frequency distribution of the level of emesis gravidarum in pregnant women in the 1st trimester before intervention (acupressure was performed) obtained the majority of moderate emesis gravidarum levels as many as 10 people (62.5%) and mild emesis gravidarum levels as many as 6 people (37.5%). Then the level of emesis gravidarum in pregnant women in the first trimester after the intervention (acupressure) was carried out, the majority did not get emesis gravidarum as many as 9 people (56.3%) and the level of mild emesis gravidarum was 7 people (43.7%)
2. The frequency distribution of the level of emesis gravidarum in pregnant women in the first trimester of early assessment in the control group (no acupressure was done) obtained the majority of moderate emesis gravidarum levels as many as 10 people (62.5%) and mild emesis gravidarum levels as many as 6 people (37.5%). Then the level of emesis gravidarum in first trimester pregnant women after 12 hours from the start of the assessment in the control group (no acupressure was done) obtained the majority of moderate emesis gravidarum as many as 12 people (75%) and mild emesis gravidarum level as many as 4 people (25%)
3. It is known that of the 16 pregnant women who experienced emesis gravidarum before the intervention (acupressure was performed) they obtained an average score (mean) of 8.31, a standard deviation of 2.676, a POQE score for emesis gravidarum assessment, namely a minimum POQE score of 5 (mild emesis gravidarum) and a maximum POQE score of 12 (moderate emesis gravidarum). Then after the intervention (acupressure was carried out) the average value (mean) was 3.19, the standard deviation was 1.471, the POQE score for emesis gravidarum assessment was a minimum POQE score of 2 (not experiencing emesis gravidarum) and a maximum POQE score of 6 (mild emesis gravidarum).
4. It is known that of the 16 pregnant women who experienced emesis gravidarum, the POQE assessment was carried out in the control group (no acupressure) obtained an average value (mean) of 9.44, standard deviation of 3.183, POQE score for emesis gravidarum assessment, namely a minimum POQE score of 5 (mild emesis gravidarum) and a maximum POQE score of 13 (moderate emesis gravidarum). Then after 12 hours from the start of the POQE assessment in the control group (no acupressure was done) the average value (mean) was 9.88, the standard deviation was 2.553, the POQE score for emesis gravidarum assessment was a minimum POQE score of 6 (mild emesis gravidarum) and a maximum POQE score of 13 (moderate emesis gravidarum).
5. Based on the research results, it is known that Asymp. Sig (2 – Talled) in the intervention group is 0.000 because 0.000 <0.05, it can be concluded that the hypothesis is accepted. This means that there is a difference before and after acupressure is done on emesis gravidarum. While the results of the study found Asymp. Sig (2 – Talled) in the control group is 0.163 because 0.163 > 0.05, it can be concluded that the hypothesis is rejected. This means that there is no difference before and after acupressure on emesis gravidarum. So it can be concluded that there is Effectiveness of Acupressure in First Trimester Pregnant Women with Emesis Gravidarum at TPMB Nurseha in 2023

REFERENCES

[1] Damayanti, I. (2020). Utilization Of Acupressure To Overcome Gravidarum Emissions In First Trimester Pregnant Women. Suparyanto And Rosad (2015, 5(3), 248–253.

[2] Gahayu P., & Dwienda Ristica, O. (2021). Application Of The Acupressure Technique To Reduce Complaints Of Nausea Vomiting In The First Trimester Of Pregnancy At Pmb Siti Juleha Pekanbaru In 2021. ***Current Midwifery Journal,*** 1(2), 70–78. Https://Doi.Org/10.25311/Jkt/Vol1.Iss2.461

[3] Hidayati, R. (2019). Risa Hidayati I,. The Relationship Between Maternal Anxiety Level And Emesis Gravidarum In First Trimester Pregnant Women At Payung Sekaki Health Center, Iii(1), 36–43..

[4] Juwita, L. (2018). Literature Review: Complementary Therapy Of Acupressure At Pericardium Point 6 In Overcoming Nause And Vomiting In Pregnancy (Literature Review: Complementary Therapy Of Acupressure On Point Of Pericardium 6 For Overcoming Nausea And Vomiting In Early Pregnancy. ***Jurnal Ners Lentera,*** 3(1), 40–50. Http://Journal.Wima.Ac.Id/Index.Php/Ners/ Articles/Views/712

[5] Lestari, A. D., Sadila, A. S., Nara, A. D., Ayu, A., Putri, F., Febriani, A. N., & Barokah, A. F. (2022). Acupressure Reduces Nausea, Vomiting In Pregnancy: Literature Review. ***Journal Of Midwifery,*** 3(1), 8–15.

[6] Maheswara, A. N., Wahyuni, E. S., Istiqomah, & Kustiyati, S. (2020). Literature Review: Complementary Acupressure Therapy At Pericardium 6 Points In Reducing Nausea And Vomiting In Pregnancy. ***Lantern Nursing Journal***, 3(1), 40–50.

[7] Mariza, A., & Ayuningtias, L. (2019). Application Of Acupressure At Point P6 On Emesis Gravidarum In 1st Trimester Pregnant Women. ***Holistic Journal Of Health***, 13(3), 218–224.

[8] Masdinarsah, I. (2022). Acupressure In Reducing Emesis Gravidarum. ***Journal Of Mother And Child Care***, 7(1), 45–51. Https://Doi.Org/10.33867/Jaia.V7i1.302

[9] Rahmanindar, N., Zulfiana, E., & Harnawati, R. A. (2021). Acupressure In Reducing Pregnancy Hyperemesis Acupressure In Reducing Pregnancy Hyperemesis. ***Scientific Journal Of Midwifery***, 8(1), 1–9.

[10] Retnowati, Y. (2019). Factors Influencing The Occurrence Of Emesis Gravidarum In The First Trimester Of Pregnancy At The Pantai Amal Health Center. ***Journal Of Borneo Holistic Health***, 2(1), 40–56.

[11] Rudiyanti, N., & Rosmadewi, R. (2019). Relationship Between Age, Parity, Occupation And Stress With Emesis Gravidarum In Bandar Lampung City. ***Sai Betik Scientific Journal Of Nursing***, 15(1), 7.

[12] Rudiyanti, N., Nurchairina, & Octaviana, A. (2019). Increasing The Ability Of Health Cadres In The Application Of Acupressure To Overcome Emesis Gravidarum. Empowermwnt: ***Journal Of Community Service***, 1, 105–112. Https://Covid19.Kemkes.Go.Id/Category/Situasi- Televisi-Emerging/Info-Coronavirus/

[13] Tanjung, W. W., ; Wari, Y., & Antoni, A. (2020). Effect Of Acupressure At Pericardium Point 6 On Intensity Of Nausea Vomiting In First Trimester Pregnant Women. ***Journal Of Education And Development***, 8(4), 265–270.

[14] Widyastuti, Rumiyati, Widyastuti, (2020). Complementary Acupressure Therapy To Overcome Emesis Gravidarum In First Trimester Pregnant Women (Deny Eka Widyastuti, Eni Rumiyati, Desy Widyastutik) 96. 1ni Nyoman Yeyen Abriyani, 2marsela Renasari Presty And 3ayu Kurniati, 10(1), 96–104.

[15] Sumarni & Siti Mutoharoh (2023). Journal Of Bina Cipta Husada Vol . Xix , No . January 1, 2023 Effectiveness Of Neiguan Point Acupressure (Pc6) On Emesis Introduction Pregnancy Is An Effort To Prevent Hyperemesis Gravidarum Which Can Be Done With Acupressure Techniques (Fen. Xix(1), 11–24.