

EFFECT OF ACUPRESSURE THERAPY ON FESES CONSISTENCY IN PREGNANT WOMEN IN CONSTIPATION

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Abstract:

Constipation is a physiological discomfort for pregnant women. The incidence of constipation in pregnant women in PMB Amrina was 7 (16%) in October, and increased by 9 (24%) in November, while in PMB Kiswari there were 10 (18%) in October, and increased by 20 (40 %) in November. Constipation occurs due to decreased intestinal motility and a result of enlarged uterine pressure. Constipation can cause hemorrhoids. Constipation can be overcome by providing non-pharmacological therapy, namely acupressure therapy. The purpose of this study was to determine the effect acupressure therapy on stool consistency in pregnant women who experience constipation in the working areas of PMB Amrina and PMB Kiswari, Metro City.

The method in this study used a Quasy Experiment with a design *One Group Pretest-Posttest*. The sample in this study was taken by purposive sampling, data collection using questionnaires and check lists, and the statistical test used is the Wilcoxon test.

The results of the research that had been carried out on 30 respondents showed that the frequency distribution of the most stool consistency was in type 3, namely before acupressure therapy was given 73.3% and increased after being given acupressure therapy to type 4, namely 56.7%. The statistical test results obtained p value 0.000 which means there is an effect of acupressure therapy on the consistency of feces in pregnant women who experience constipation. Based on the research results, it is hoped that the midwives and assistant midwives at PMB Amrina and PMB Kiswari can provide acupressure therapy to pregnant women who are constipated and can socialize the benefits of acupressure therapy, and for families to provide support to mothers.

Keywords : Stool consistency, Constipation, Acupressure therapy

Abstract:

Constipation is a physiological discomfort for pregnant women. The incidence of constipation in pregnant women in Amrina PMB contained 7 (16%) in October, and increased by 9 (24%) in November, while in Kiswari PMB there were 10 (18%) in October, and increased by 20 (40 %) in November. Constipation occurs due to a decrease in intestinal motility and a result of enlarged uterine pressure. Constipation can cause hemorrhoids. Constipation can be overcome by providing non-pharmacological therapy, namely acupressure therapy. The purpose of this study was to determine the effect of acupressure therapy on stool consistency in pregnant women who experienced constipation in the work area of PMB Amrina and PMB Kiswari Metro City. The method in this study uses Quasy Experiment with the One Group Pretest-Posttest design.

The results of research conducted on 30 respondents, obtained the highest frequency distribution of stool consistency in type 3, before giving acupressure therapy there were 73.3% and increased after being given pressure therapy to type 4, which was 56.7%. Statistical test results obtained p value 0,000 which means that there is an effect of acupressure therapy on stool consistency in pregnant women who experience

constipation. Based on the results of the study, it is expected that midwives and midwife assistants at PMB Amrina and PMB Kiswari can provide acupressure therapy to pregnant women who experience constipation and can socialize the benefits of acupressure therapy, and for families to provide support to mother.

Keywords: Stool consistency, Constipation, Acupressure therapy

PRELIMINARY

During pregnancy, a woman's body will experience many physiological, psychological and hormonal changes, and of course all of them can cause all kinds of complaints and problems during pregnancy, one of which is constipation. Constipation is a condition in which the secretion from the rest of the body's nutritional metabolism in the form of feces is disturbed which causes the stool to become hard and causes difficulty during defecation (Irianti, 2014: 92) 1.

According to the World Gastroenterology Organization (WGO) some patients (52%) defined constipation as hard defecation, stool like pills or medication pills (44%), inability to defecate when desired (34%), or infrequent defecation (33%). The incidence of constipation in western countries is 2-27%. Research conducted in Israel and the UK shows that 11% and 38% of pregnant women in these countries, experience constipation during pregnancy. According to Probosuseno in 2007, from the Department of Internal Medicine, Faculty of Medicine UGM, Geriatrics Dr. Sardjito cases of constipation in Indonesia suffered by pregnant women around 4-30%, while constipation suffered by people over the elderly is around 2-25% at the age of 60 years and over. The US Census Bureau International Data base in 2003 found a number of constipation incidents in Indonesia of 3,857,327 people, and 10 data from Cipto Mangunkusumo Hospital (RSCM) from 1998 - 2005 amounted to 9% or 216 patients, while research from Minarti in Trawasan, Sumobito, The incidence of constipation experienced by pregnant women in West Sumatra Province in Padang City reaches 15-20% (Safrita, 2015) 2.

Constipation often occurs and is caused by decreased intestinal motility so that it takes a long time to absorb fluids, so the intestines can squeeze together due to pressure from the enlarged uterus (Hutahaean, 2013: 69) 3. Constipation cannot be allowed to continue continuously, because it causes hemorrhoids (Diyono, 2013: 13) 4.

Management of functional constipation, can be done with pharmacological and non-pharmacological therapy. Pharmacological therapy with laxative drugs while non-pharmacological therapy uses one of them acupressure therapy. Acupressure generally stimulates metabolism and improves nutrient distribution to cells and tissues. Mechanical massage can push digestive waste into the intestines, and massage also triggers a parasympathetic nerve response which increases digestive activity (Suarsyaf, 2015) 5.

Several studies conducted on the effect of acupressure to treat constipation have been carried out in several western countries, one of which is Korea, research on the effects of meridian acupressure to reduce and prevent constipation in the elderly. The result is that the interaction shows the availability of accelerated meridians and measurement points ($F = 98.183$, $p < 0.01$). Analysis of repeated measures of variance to compare changes in scores on the Bristol stool scale obtained the results of this study showing meridian acupressure is a useful nursing intervention for constipation in the elderly (Kim, 2014) 6. As for other studies conducted to prove the effect of meridian acupressure on constipation in inpatients, it was found that the experimental group given Acupressure ($F = 59.372$, $p = .000$) and normal stools ($F = 46.046$, $p = .000$), Acupressure meridian is an effective method of relieving constipation in hospitalized patients. A further study is needed to validate that

other patients with constipation can use the acupressure meridian as a noninvasive nursing intervention (Sokhbay, 2008) 7.

Based on the results of the pre-survey in several PMB conducted in Metro City, there was an increase in the incidence of constipation in PMB Amrina, namely from 43 pregnant women, there were 7 (16%) pregnant women who experienced constipation in October and an increase in November, namely from 37 pregnant women There were 9 (24%) pregnant women who experienced constipation, while in PMB Kiswari there were 10 (18%) pregnant women who experienced constipation in October and it increased in November, namely from 50 pregnant women, there were 20 (40 %) pregnant women who experience constipation. Based on research sources and pre-survey data, the authors are interested in conducting research on pregnant women with the title "The Effect of Acupressure Therapy on Stool Consistency in Pregnant Women with Constipation in PMB Amrina and PMB Kiswari.Metro City".

METHOD

This study used a one group pretest posttest design from a pre-experimental research design. The study population was pregnant women at PMB Amrina and PMB Kiswari in March and May 2018. Sampling used purposive sampling with a total of (30) respondents who had met the inclusion and exclusion criteria. Constipation data collection used a questionnaire and checklist (Bristol Stool Scale) before and after acupressure therapy was given. Acupressure therapy data collection used a check list. Univariate data analysis made a table of frequency distribution of stool consistency before and after treatment in the form of acupressure therapy. The bivariate data analysis used a non-parametric test, namely the Wilcoxon test to determine whether acupressure therapy had an effect on changes in the stool of pregnant women who were constipated.

RESULTS

Based on the data obtained, the data were not normally distributed, so the bivariate analysis used a non-parametric test, namely the Wilcoxon test to determine the consistency of stool before and after acupressure therapy was given.

1. Distribution frequency of stool consistency in pregnant women who experience constipation before being given acupressure

Stool Consistency	Frequency	Percentage (%)
Type 1	1	3.3%
Type 2	7	23.3%
Type 3	22	73.3%
amount	30	100%

Based on the analysis of table 3, the types of stool consistency in the respondents in this study were types 1, 2, and 3. Fecal consistency was found, namely type 3 with 22 pregnant women (73.3%), type 2 with 7 pregnant women 23.3%), and type 1 with the lowest number of 1 pregnant women (3.3%).

2. Stool Consistency Frequency Distribution in Pregnant Women Who Have Constipation after being given Acupressure

Stool Consistency	Frequency	Percentage (%)
Type 3	1	3.3%
Type 4	17	56.7%

Type 5	12	40.0%
amount	30	100%

Based on the analysis of table 3, there has been a change in the type of stool consistency among respondents who have been given the intervention in this study, namely types 3, 4, and 5. The consistency of the most common feces is type 4 with 17 pregnant women (56.7%), type 5 with the number of 12 pregnant women (40.0%), and type 3 with the lowest number of 1 pregnant women (3.3%).

3. The Effect of Acupressure Therapy on Stool Consistency in Pregnant Women Who Have Constipation.

Variable	N	<i>P Value</i>	95% CI
Before			4.16
and	30	0,000	
After			4.57

Results of the Wilcoxon Test Statistical Test on the effect of acupressure therapy on stool consistency, From the output above, it is known that the Asymp.Sig. value is 0,000, because the Asymp.Sig. $0.000 < 0.05$, then in accordance with the basis for decision making in the test *Wilcoxon Test* it can be concluded that H_a is accepted. Acceptance of H_a implies that there is a significant effect on acupressure therapy that has been given to pregnant women who experience constipation with hardened stool consistency.

DISCUSSION

1. Stool consistency frequency distribution in pregnant women who experienced constipation before being given acupressure

Based on the results of the analysis test, it was found that the consistency of feces to 30 respondents obtained a frequency distribution before being given acupressure therapy, namely in type 1 there was 3.3%, type 2 there was 23.3%, and type 3 contained 73.3%. Based on the results of research according to Catherine (2007) 8 states that the incidence of constipation 24% of pregnant women in the first trimester experience constipation, 26% experience constipation during the second trimester and 24% experience constipation during the third trimester.

The results of this study are in accordance with the theory put forward by Suarsyaf (2015) 5 which state that Acupressure therapy stimulates metabolism and improves nutrient distribution to cells and tissues. Mechanical massage can push digestive waste into the intestines, and massage also triggers a parasympathetic nerve response which increases digestive activity to be smooth.

Pregnant women often experience drastic hormonal changes, namely an increase in progesterone during pregnancy. Progesterone causes the muscles to relax to provide a place for the fetus to develop. This muscle relaxation affects the intestinal muscles so that it will reduce intestinal motility which ultimately leads to constipation (Jannah, 2012: 103) 9.

According to the researcher's analysis, as gestational age causes a decrease in intestinal motility due to an increase in progesterone in pregnancy, this can be

overcome by providing non-pharmacological treatment with acupressure therapy which can trigger a parasympathetic response that increases digestive activity to be smooth, expected to health personnel, especially midwives at PMB Amrina and PMB Kiswari can treat constipation by providing acupressure therapy as a treatment to balance the qi energy in the body.

2. Stool consistency frequency distribution in pregnant women who experience constipation after being given acupressure

Based on the results of the stool consistency value analysis test for 30 respondents, it was found that the frequency distribution after being given acupressure therapy decreased to type 3 which was 3.3%, type 4 was 56.7%, and type 5 was 40.0%. Based on the results of research according to Trotter (2012) 10 states that the incidence of constipation in pregnant women ranges from 11% to 38% due to a decrease in intestinal peristalsis due to an increase in the hormone progesterone.

These results are in accordance with the theory put forward by Dewi (2017: 7) 11 that acupressure therapy is a method of treatment or health by doing massage / pressing the fingers on the surface of the skin, where the massage / pressing will reduce tension, increase blood circulation and stimulate the body's energy strength to heal / nourish qi. According to Hutahaean (2013) 3 states that with increasing gestational age and fetal development, it causes a decrease in intestinal motility so that it takes a long time to absorb intestinal fluids due to pressure from the enlarged uterus.

Pregnant women who often experience constipation can arise in various factors caused by hormonal factors, changes in diet, fetal growth and physical activity. Position history at defecation is also a risk for constipation. During pregnancy the body retains fluids, the absorption of fluid in the intestine increases so that the contents of the intestine tend to be dry and hard which makes constipation easier. Dietary changes in pregnant women contribute to constipation because the larger the pregnancy, the more likely it is to reduce fluid intake (Varney, 2007: 539) 12.

According to the researcher's analysis, there are several factors that influence it, the occurrence of constipation including hormonal factors, changes in diet, fetal growth and physical activity. This situation is more influencing the occurrence of constipation, namely hormonal factors because the increase in progesterone causes relaxation of the muscles in the stomach against the intestinal muscles, thereby reducing intestinal motility., non-pharmacological treatment is appropriate to address this problem by providing acupressure therapy as treatment that will reduce tension, improve blood circulation and stimulate the body's energy strength to heal / nourish, expected to health personnel, especially midwives at PMB Amrina and PMB Kiswari can treat constipation by providing acupressure therapy as a treatment to balance the qi energy in the body.

3. The effect of acupressure therapy on stool consistency in pregnant women who experience constipation in pregnant women

Based on the results of the Wilcoxon Test analysis, it was found that P value = 0.000, so H_a was accepted and H_0 was rejected, which means that acupressure therapy had an effect on the consistency of feces in pregnant women who were constipated. with the frequency distribution of stool consistency that is often experienced in pregnant women is in type 3, namely before being given acupressure therapy there were 22 respondents (73.3%), and decreased after being given acupressure therapy to type 4, namely 17 respondents (56.7%). It can be concluded that

there is an effect on changes in stool consistency which is significant in pregnant women who experience constipation.

This research is in accordance with the opinion Kim (2014) 6 that stated that the experimental and control groups performed meridian acceleration which was verified by analysis that there was an interaction between the availability of meridian acceleration and the measurement point ($F = 98.183, p < 0.01$). Measurement analysis using a score on the Bristol scale shows the results of this study indicate that meridian acupressure is a useful nursing intervention for constipation in the elderly, aOther studies related to this study, namely the effect of meridian acupressure on constipation in inpatients, obtained results. with p value = .000 which is the effect of acupressure meredian on constipation, This treatment is an effective method for relieving constipation in hospitalized patients and constipation management can be provided as a non-invasive nursing intervention (Sokhbay, 2008) 7 .

This theory is in accordance with Dewi (2017: 8) 11, namely that acupressure can effectively regulate bowel movements because stimulation at these points can remove blockages in the meridian pathway which can increase the flow of Qi, blood and harmonize Yin and Yang in the body. The element involved in this case is the metal element, which is the movement of energy from the metal element to the water element which indicates that the metal is weak, so it will not form water. Treatment is carried out by strengthening metals to treat constipation by performing acupressure therapy with sedation massage techniques (Dewi, 2017: 19) 11.

According to the researcher's analysis, constipation is a condition where the secretion from the rest of the body's nutrient metabolism in the form of feces is disturbed which causes the stool to become hard which causes difficulty during defecation, non-pharmacological treatment with acupressure therapy can overcome constipation by providing massage techniques with sedation / weaken hot bowel stagnation due to decreased intestinal motility, It is hoped that midwives and assistant midwives at PMB Amrina and PMB Kiswari can provide acupressure therapy to pregnant women who are constipated and can socialize the benefits of acupressure therapy to pregnant women so that midwives can help mothers improve their health and for families can provide support to convince mothers with acupressure therapy can overcome the constipation he experiences.

CONCLUSION

1. Frequency distribution The consistency of the most stool in pregnant women who experience constipation before being given acupressure is type 3, namely 73.3%.
2. Frequency distribution Stool consistency is greatest in pregnant women who experience constipation after being given acupressure is type 4 that is 56.7%.
3. There is an effect of acupressure therapy on stool consistency in pregnant women who are constipated with p value = 0.000.

SUGGESTION

The results of this study can be a guide material and a source of information as a knowledge base for health workers and students for practical material on alternative treatment of constipation in non-pharmacological ways and for midwives and assistant midwives at PMB Amrina and PMB Kiswari can provide acupressure therapy to pregnant women who experiencing constipation and can socialize the benefits of acupressure therapy to pregnant women so that midwives can help mothers improve their health and for families can provide support to ensure that mothers with acupressure therapy can overcome their constipation.

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