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Acupressure-Moxibustion at GB-21 on Stress Levels and Blood Pressure in Primigravida Women with Gestational Age More Than 37 Weeks

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ABSTRACT

As many as 75% of third trimester primigravida pregnant women experience stress in Indonesia. Acumoxa GB-21 or a combination of acupressure and moxibustion can trigger relaxation and reduce serum corticosterone levels as well as improve psychological problems and its physiological parameters which are safe for pregnant women with gestational age >37 weeks. This study aims to determine the effect of acumoxa GB-21 therapy on stress levels and blood pressure of primigravida mothers with gestational age >37 weeks. This type of research is a quasi-experimental design pre and post-test control group with simple random sampling technique and randomization involving 32 primigravida women with gestational age >37 weeks who were divided into an intervention group (acumoxa point therapy GB21 for 10 minutes per day), and a control group (psychological education). Both groups were observed 3 times in 1 week using a Perceived Stress Scale questionnaire and an aneroid sphygmomanometer to measure blood pressure. Data analysis used independent t-test, Wilcoxon, Mann-Whitney. The stress level of the intervention group decreased by 8.44, while the control group was only 3.94, the comparison between groups ($p<0.01$). Analysis of blood pressure comparison data showed that the intervention group experienced a decrease in systolic of 6.25mmHg and diastolic of 8.13mmHg, while the control group did not experience a change so that there was a significant difference between the two groups ($p<0.01$). Acumoxa GB-21 can reduce the level of stress detected by the Perceived Stress Scale score and measured based on the value of systolic and diastolic blood pressure.

Keywords: Acupressure, Moxibustion, Stress, Blood Pressure

INTRODUCTION

Maternal stress levels during pregnancy tend to increase along with increasing gestational age so that they are more susceptible to experiencing stress during pregnancy compared to the postpartum period (1). Stress causes an increase in levels of the hormones cortisol and norepinephrine which causes negative feedback so that it triggers changes in physiological reactions in the form of an increase in heart rate > 90 bpm and an increase in systolic blood pressure reaching 120-129 mmHg while being susceptible to infection or other causes of maternal

morbidity (2–4). World Health Organization assesses that maternal psychological problems during pregnancy are 10%, and the prevalence of stress during pregnancy in developing countries reaches 15.6% (5). As many as 91.86% of the psychological problems experienced by mothers during the period of pregnancy to postpartum are caused by stress (6). The percentage of stress in third-trimester primigravida pregnant women in Indonesia is 64-75% (7,8).

Stress management is carried out in various ways, firstly through the provision of information and education which becomes standard care in the provision of maternal health services which can reduce the score of psychological problems with a significance value of 0.001 (9); Second, through a supportive group in the form of social support needed by pregnant women during the pregnancy period and proven to have effective results to reduce psychological problems (10), but other studies assessed that supportive group therapy did not have a statistically significant difference (p-value 0.25) in reducing stress even though 8 sessions have been conducted with a duration of 1.5-2 hours (11); Third, through physical exercise as recommended through a literature analysis review which assessed that physical exercise such as yoga can reduce systolic and diastolic blood pressure (12), but the results of this study are not in accordance with other studies which conclude that individuals who do not do physical exercise are less likely to do physical exercise. then doing yoga for 16 weeks experienced an increase in stress with a significance value of 0.003 while experiencing fatigue with a significance value of 0.019 (13); Fourth, Thermotherapy or heat therapy using a heating pad can statistically reduce the level of pain and psychological problems experienced by women during a cystoscopy examination with a significance value of 0.001, but clinically there is no change in physiological parameters, namely blood pressure and pulse rate with a systolic significance value of 0.103, diastolic 0.012, and pulse rate 0.82 (14).

Acupressure-moxibustion therapy is a form of a combination of Traditional Chinese Medicine (TCM) and thermotherapy that combines acupressure and moxibustion which can trigger relaxation through thermal stimulation on the external skin while simultaneously stimulating blocked meridian points (acupoints) so that they can overcome imbalances in the body (15–18). Acupressure-moxibustion therapy with acupoints is used as an anti-anxiety and anti-depressants contained in traditional Chinese theory, one of which is the GB-21 (Jian Jing) point (19). Other studies have also assessed that the GB-21 point is safe for pregnant women with gestational age more than 37 weeks (20). Stimulation of the GB-21 point has an anxiolytic effect as well as is associated with a decrease in anxiety, behavior, serum corticosterone levels, and has an antidepressant effect (19) as other studies have also stated that the GB-21 point can reduce psychological problems in pregnant women with gestational age 37 to 41 weeks (21).

The GB-21 point is considered not to have a significant difference when compared to the SP-6 point in dealing with psychological problems of primiparous mothers. These two points are considered to help the release of neurotransmitters such as serotonin so that it affects physiological and systemic changes in the form of calm and balance in the body and mind while reducing stress symptoms (21). Although there is no difference between GB-21 and SP-6, the GB-21 point is a head massage point that has been tested through gray data model analysis which has significant benefits on autonomic nervous system function while balancing sympathetic and parasympathetic nerve activity to provide a feeling of relaxation (22). When compared with other acupoints such as LI-4, LI-10, and LI-11, it was found that the GB-21 point performed for 10 minutes was superior in influencing autonomic nervous activity and significantly lowering heart rate parameters (23). The time needed to stimulate the acupoint to overcome psychological problems as well as increase blood circulation and the performance of vital signs is between 30 seconds to 5 minutes and even 20 minutes (24). Analysis of the administration of acupressure-moxibustion point GB-21 therapy on reducing stress levels in pregnant women with gestational age more than 37 weeks detected using the Perceived Stress Scale (PSS) questionnaire as well as measuring the physiological parameters of stress in the form of blood pressure using an aneroid sphygmomanometer.

METHOD

Study Design, Time, and Location

This type of research is quasi-experimental with a non-equivalent control group design or pre and post-test control group design, implemented in two working areas of the Public Health Center in Palu City, Central Sulawesi, starting from April to May 2021.

Population and Research Sample

The population in this study were all third-trimester primigravida pregnant women in the working area of Kamonji Health Center and Lere Health Center Palu City, Central Sulawesi, with a total of 104 third trimester pregnant women. The samples used in accordance with the inclusion criteria in this study include pregnant women who live in the working area of the Kamonji Health Center and Lere Health Center, Palu City, Central Sulawesi; Mothers with normal pregnancies without high risk, primigravida pregnant women with gestational age more than 37 weeks; Pregnant women who have no history of bleeding, multiple pregnancies, history of cesarean section, history of intrauterine fetal death, and complications in pregnancy; Pregnant women do not have diabetes and high blood pressure; Pregnant women do not take drugs that reduce stress or lower blood pressure. The sampling technique used is simple random sampling and use the lottery system. The total sample in this study was 32 respondents who were divided into two groups. This research was conducted during the COVID-19 pandemic, so that during the period of providing intervention and observation, it is carried out by considering, paying attention, and obeying health protocol. There are 2 groups in this study with a sample of each group as many as 16 respondents, namely the acupressure-moxibustion therapy group which was given for 10 minutes per day 3 times in 1 week, and the control group which received standard services in the form of health education.

Data Collection

Standard operating procedure sheet for acupressure-moxibustion therapy management; Questionnaire sheet and informed consent for respondent characteristics containing initials of the name, age, address, education, and occupation, as well as the signature of the agreement; The Perceived Stress Scale (PSS) questionnaire was used to measure stress levels. The PSS consists of 10 general and relatively free questions and these questions ask about the mother's feelings and thoughts during the past month. The PSS questionnaire has been validated and has a Cronbach's alpha rating of 0.702, so it is considered valid because the value indicated is greater than the minimum correlation coefficient (0.3) (7), while the reliability of the PSS-10 questionnaire instrument is declared reliable because the coefficient value is more than 0.80, namely the results Cronbach's alpha coefficient is 0.82 (25); Documentation instruments in the form of observation sheets that have been designed by the researchers who refer to the procedure for monitoring the status of stress levels based on the PSS and blood pressure questionnaires; The tool used to measure blood pressure is an aneroid sphygmomanometer that has been tested and has a calibration certification with the ANMI-S-21,135 number issued by PT Anametri Metrology Indonesia with the ISO/IEC number 17025:2017. Based on the calibration report, the correction tolerance value is not more than 2mmHg which can be seen by comparing the actual value of the standard or benchmark with the value shown on the tested aneroid sphygmomanometer so that the tolerance value obtained can be categorized as having good accuracy; and tools for moxibustion, namely matches and moxa sticks.

Data Analysis

Data were tested for normally using the Shapiro-Wilk test and was found the data on differences in stress levels were analyzed using the independent T-test, while the blood pressure data used the Wilcoxon non-parametric test to determine changes that occurred in the group as well as the Mann Whitney test to determine the differences between the two groups.

Ethical Clearance

This research has been registered with the bioethics commission of the Sultan Agung Islamic University Semarang under the number 138/IV/2021/Bioethics Commission and was declared ethically feasible to carry out.

RESULTS

Stress levels are classified based on the value of the PSS measurement score, that is, if the score shows numbers 1-13 for mild stress levels, and 14-26 for stress levels. During the pretest examination, respondents (100%) in both groups had moderate stress levels, while in the posttest, 9 respondents (56.25%) from the group given acupressure-moxibustion therapy point GB-21 experienced a change so that stress levels light. In contrast, the control group who was given only psychological health education did not have respondents who experienced a decrease in stress levels (

Table 1: Stress level frequency distribution). Changes in stress levels before and after being given acupressure-moxibustion point GB-21 therapy had a difference of 8.44 with a significance value of 0.000, while the control group who was given psychological health education

only had a difference of 3.94 with a significance value of 0.000 (

Table 2: stress level difference and

Fig **1: Changes in stress level**).

Blood pressure is a physiological parameter of stress. The group that was given acupressure-moxibustion point therapy GB-21 had an average systolic blood pressure of 121.88mmHg, then after treatment, the mean systolic blood pressure was 115.63mmHg so that a delta reduction of 6.25mmHg was obtained with a p-value of 0.008. While the control group did not experience a decrease in systolic blood pressure in terms of p-value > 0.05. There is a significant difference in the value of the difference between the groups given acupressure-moxibustion GB-21 and the control group given psychological health education, with a p-value of 0.020 (

Table 3: Systolic blood pressure difference and Fig 2: Changes in mean systolic blood pressure). In addition to systolic, diastolic blood pressure was also measured as a physiological parameter. The intervention group had a mean diastolic blood pressure of 82.50mmHg, then after the treatment, the mean diastolic blood pressure was 74.38mmHg so that a delta decrease of 8.13mmHg was obtained with a p-value decreased of 0.002, so it is stated that there is a difference in blood pressure. Significant diastolic blood pressure between pretest and posttest in the intervention group was measured using an aneroid sphygmomanometer, while the control group did not experience a decrease in diastolic blood pressure in terms of p-value 0.157 > 0.05. In addition, there is a significant difference in the value of the difference between the groups given acupressure-moxibustion GB-21 and the control group given psychological health education, with a p-value of 0.035 (

Table 4: Diastolic blood pressure difference and Fig 3**:**
Changes in mean diastolic blood pressure).

Table 1: Stress level frequency distribution

Characteristics	Pre-test				Post-test			
	Acupressure-Moxibustion GB-21		Education		Acupressure-Moxibustion GB-21		Education	
	N	%	N	%	N	%	N	%
Light stress	-	-	-	-	9	56,25%	-	-
Moderate stress	16	100%	16	100%	7	43,75%	16	100%

Table 2: stress level difference

Time	Acupressure-Moxibustion GB-21 Mean±SD	Education Mean ±SD	p-value*
Pre-test	21,56±2,366	22,56±2,128	
Post-test	13,13±1,668	18,63±2,363	
p-value*	0,000	0,000	
Δ	8,44±2,097	3,94±2,294	0,000

**Independent t-test*

Table 3: Systolic blood pressure difference

Time	Acupressure-Moxibustion GB-21 Mean±SD	Education Mean ±SD	p-value**
Pre-test	121,88±5,439	120,63±5,737	0,532
Post-test	115,63±5,123	120,63±5,737	0,019
p-value*	0,008	1,000	-
Δ	6,25±7,188	0,00±6,325	0,020

* *Wilcoxon,* ** *Mann-whitney*

Table 4: Diastolic blood pressure difference

Time	Acupressure-Moxibustion GB-21 Mean±SD	Education Mean ±SD	p-value**
Pre-test	82,50±5,774	80,00±6,325	0,254
Post-test	74,38±5,123	77,50±4,472	0,077
p-value*	0,002	0,157	-
Δ	8,13±6,551	2,50±6,831	0,035

* *Wilcoxon, ** Mann-whitney*

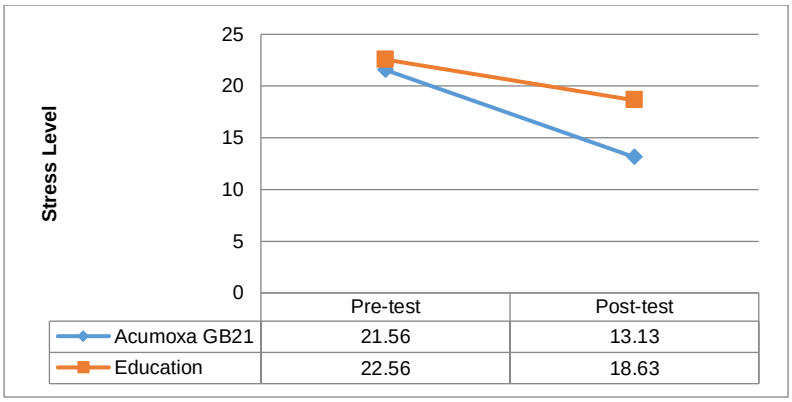

Fig 1: Changes in stress level

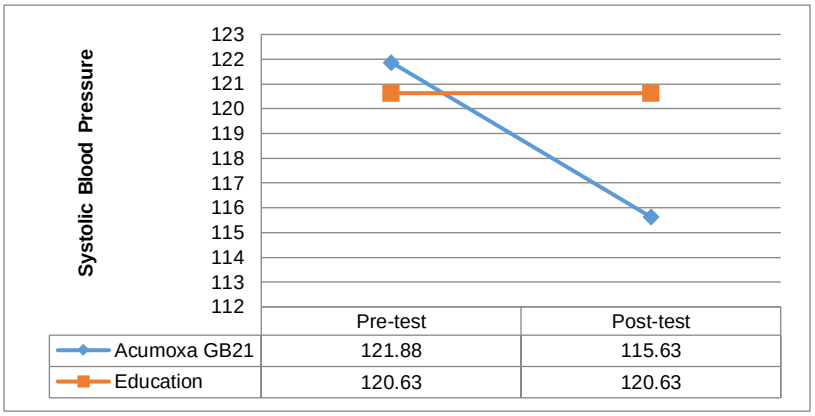

Fig 2: Changes in mean systolic blood pressure

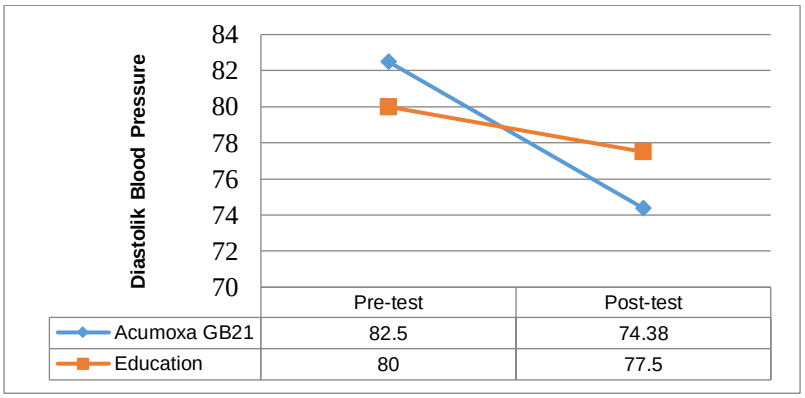

Fig 3: Changes in mean diastolic blood pressure

DISCUSSION

Stress Level

Both groups experienced a decrease in stress levels, but there was a significant difference between the mean difference between the two groups with a p-value of 0.000. When a person experiences stress, both physically and psychologically, it will stimulate the release of adrenocorticotrophin hormone (ACTH) by the pituitary which will also stimulate the adrenal glands to release stress hormones. Stress hormones circulate in the body and play a role in coping mechanisms, but if the hypothalamus receives it in a strong intensity, the secretion of corticotrophin-releasing hormone (CRF) also increases so that the stimulation obtained by the pituitary also increases. This study uses Chinese medicine therapy in the form of a combination of acupressure and moxibustion as an effort to activate coping mechanisms so that signals in the brain will inhibit the release of CRF and the stress hormone cycle so that it has an impact on hemodynamic function as well as has a blood pressure reduction response (18,26).

Moxibustion therapy has a significant effect on psychological problems with a p-value <0.01 (27). These results are supported by other studies that carried out acupressure therapy at the GB-21 point for 20 minutes so that it was known that the acupressure therapy carried out at the GB-21 point was effective in overcoming psychological problems while reducing stress symptoms experienced by pregnant women with a gestational age of 37 to 41 weeks (21). The results of other studies suggest that acupressure and moxibustion therapy can be an effective optional treatment to overcome psychological problems and minimize the occurrence of relapse (28).

The GB-21 point is considered to have anxiolytic and antidepressant effects with the mechanism of action of releasing neurotransmitters that can provide a calming effect while reducing the activity of the sympathoadrenal system which is activated when under stress conditions (21). Acupressure therapy has an analgesic effect that can significantly accelerate metabolism, relax muscle stiffness, and control physiological functions, especially heart rate and blood pressure (21,29). In addition to acupressure therapy, moxibustion therapy also has an activity that inhibits the hyperactivity of the hypothalamic-pituitary-adrenal (HPA) axis which can modulate the stress response so that there is a decrease in the concentration of CRH, ACTH, and corticosterone which can provide curative effects including controlling stress hormone secretion and improving physiological parameters (21,27).

Blood Pressure

This study also examined the blood pressure values between groups, where the study sample was pregnant women who were primigravida in the third trimester with gestational age >37 weeks and had blood pressure values <140/90mmHg or pregnant women who did not take antihypertensive drugs. The results of this study showed that the group was given acupressure-moxibustion point GB-21 therapy experienced a decrease in systolic blood pressure with a p-value of 0.008, and diastolic blood pressure had a p-value of 0.002, while the control group that was only given psychological education tended not to experience significant changes in blood pressure, namely by p-value > 0.05. In addition, there are differences in the value of the difference in decline between the two groups, namely p-value 0.020 for systolic, and p-value 0.035 for diastolic.

Previous literature reviews stated that moxibustion therapy was able to reduce systolic and diastolic blood pressure values (30), supported by clinical research that assessed that acupressure-moxibustion therapy or a combination of acupressure and moxibustion was effective for lowering blood pressure in pregnant women with gestational hypertension with a p-value of 0.027 (18). The results of other studies also stated that there was an effect of GB-21 acupressure on postpartum maternal blood pressure as seen through the difference in blood pressure between groups with a systolic difference of 5.94mmHg and a p-value of 0.011 as well as a diastolic difference of 7.19mmHg and a p-value of 0.001 (31).

Acupressure-moxibustion is combination therapy has the same mechanism as acupuncture, which is to stimulate the senses of the nervous system and autonomic nerves while at the same time inducing circulation of blood flow so that it affects the occurrence of vasodilation and a decrease in blood pressure. Acupressure therapy can stimulate the production of endorphins to minimize pain and stress, as well as moxibustion therapy which through its heat on the skin surface will cause tissue temperature to increase, causing degranulation of mast cells in helping to increase capillary hydraulic pressure and capillary permeability resulting in increased blood circulation. while being able to increase the therapeutic effect including the impact on vasodilation (18).

Stimulation given at the GB-21 point is considered to be able to release histamine which will produce a

vasodilator in blood vessels while increasing venous return so that it reduces heart work while affecting a decrease in blood pressure. Stimulation in the form of suppression or massage will affect the human body and mind as well as regulate the autonomic nervous system so that levels of stress hormones such as cortisol, adrenaline, and noradrenaline can be reduced. Intermittent therapy will increase blood circulation as well as lymphatic drainage which causes changes in heart rate and blood pressure (31).

CONCLUSION

Acupressure-moxibustion therapy at the GB-21 point given for 10 minutes with a frequency of 3 times in 1 week can reduce the stress level of primigravida pregnant women detected using the PSS score with a reduction obtained through the difference between the pretest and posttest with a value of 8.44. Acupressure-moxibustion GB-21 therapy can also reduce blood pressure obtained through the difference between pretest and posttest, which is 6.25mmHg for systolic and 8.13mmHg for diastolic. We hopes that the results of this study can be a reference for further research and it is hoped that further research will develop this research from the design and the larger number of samples. The author would like to thank Kamonji Public Health Center, Lere Public Health Center, District Health Office of Palu, Poltekkes Kemenkes Semarang and all parties contributed to this study.

REFERENCES

1. Runjati, Susanto H, Sawitri DR, Thaufik S. The effect of antenatal class plus coping skill training on the level of stress and childbirth self-efficacy. Adv Sci Lett. 2017;23(4):3329-33. doi: 10.1166/asl.2017.9125.
2. Mindasari Y, Yulifah R, W. RCA. Hubungan Stress ibu pre-operasi Seksio Sesarea terhadap Penyembuhan luka operasi Sesarea di ruang Nifas Rumah Sakit Ben Mari Malang. Nurs News (Meriden). 2017;2(2):150-62.
3. Khurade ST, Gowali S, C, Shivaprakasha KS. Stress detection indicators: a review. J Electron Commun Syst. 2019;4(1):12-7.
4. Handayani S, Stres Dengan PT. Perceived stress scale −10: Studi cross sectional Pada remaja putri Di Baturetno. J Keperawatan GSH. 2020;9(1).
5. World Health Organization. Maternal and child mental health; 2019.
6. Tang X, Lu Z, Hu D, Zhong X. Influencing factors for prenatal Stress, anxiety and depression in early pregnancy among women in Chongqing, China. J Affect Disord. 2019;253(January):292-302. doi: 10.1016/j.jad.2019.05.003, PMID 31077972.
7. Wahyuni S, Anies SA, Putra ST. Perceived stress dan sindrom depresi pada ibu primigravida. J Ilm Bidan. 2018;3(2):21-8.
8. Kasenda P, Wungouw H, Lolong J. Hubungan stres dengan kejadian insomnia pada ibu hamil di Puskesmas Bahu kota Manado. J Keperawatan UNSRAT. 2017;5:1-7.
9. Fidora I, Hapsari ED, Rahmat I. Pengaruh Pendidikan Kesehatan Individu terhadap Perubahan Maternal Depressive Symptoms pada Ibu Post partum. J Menara. Med. 2018;1(1):66-74.
10. Sari H. Penerapan terapi kelompok Suportif pada ibu hamil dengan Ansietas melalui pendekatan teori Mercer di Kelurahan Balumbang Jaya, Bogor barat. Idea Noursing J. 2013;2(2).
11. Taati F, Bahramnezhad F, Seyedfatemi N, Sharifi F, Navab E. The Effect of Participation in Support Groups on Depression, Anxiety and Stress in Family Caregivers of People with Alzheimer's: randomized clinical trail. Int J Med Res Heal Sci. 2016;5(75):256-62.
12. Murray A, Wilson K. Yoga and hypertension: a systematic review. J Yoga Phys Ther. 2018;08(2). doi: 10.4172/2157-7595.1000289.
13. Hewett ZL, Pumpa KL, Smith CA, Fahey PP, Cheema BS. Effect of a 16-week Bikram yoga program on perceived stress, self-efficacy and health-related quality of life in stressed and sedentary adults: A randomised controlled trial. J Sci Med Sport. 2018;21(4):352-7. doi: 10.1016/j.jsams.2017.08.006, PMID 28866110.
14. Kim HJ, Kim JW, Park HS, Moon DG, Lee JG, Oh MM. The use of a heating pad to reduce anxiety, pain, and distress during cystoscopy in female patients. Int Urogynecol J. 2019;30(10):1705-10. doi: 10.1007/s00192-018-3786-0, PMID 30350117.
15. Wang L, Wang L, Shi G, Zeng L, Yang Y, Zhang T, Liu H. Efficacy and safety of ginger-salt-indirect moxibustion for urge urinary incontinence after stroke: protocol for a pilot multicentre randomised controlled trial. BMJ Open. 2014;4(10):e006326. doi: 10.1136/bmjopen-2014-006326, PMID 25335962.

16. Kurniawati MD. The use of oxytocin electrostimulator corsets as A preventive measures of postpartum bleeding potential. In: 2Proceedings of the 5th International Seminar of Public Health and Education. Semarang: universitas Negeri Semarang; 2020.
17. Deng H, Shen X. The mechanism of moxibustion: ancient theory and modern research. Evid Based Complement Alternat Med. 2013;2013:379291. doi: 10.1155/2013/379291, PMID 24159344.
18. Kesumawati KAS, Mardiyono M, Latifah L. The effect of Acumoxa therapy on blood pressure in gestational hypertension. Int J Nurs Heal Serv. 2020;3(5):569-75. doi: 10.35654/ijnhs.v3i5.327.
19. Kondo T, Kawamoto M. Acupuncture and moxibustion for stress-related disorders. Biopsychosoc Med. 2014;8(1):7. doi: 10.1186/1751-0759-8-7, PMID 24456818.
20. Carr DJ. The safety of obstetric acupuncture: forbidden points revisited. Acupunct Med. 2015;33(5):413-9. doi: 10.1136/acupmed-2015-010936, PMID 26362792.
21. Moradi Z, Akbarzadeh M, Moradi P, Toosi M, Hadianfard MJ. The effect of acupressure at GB-21 and SP-6 acupoints on anxiety level and maternal-fetal attachment in primiparous women: a randomized controlled clinical trial. Nurs Midwif Stud. 2014;3(3):e19948. doi: 10.17795/nmsjournal19948, PMID 25699279.
22. Lee YT. Principle study of head meridian acupoint massage to stress release via grey data model analysis. Evid Based Complement Alternat Med. 2016;2016:4943204. doi: 10.1155/2016/4943204, PMID 26904144.
23. Matsubara T, Arai Y-CP, Shiro Y, Shimo K, Nishihara M, Sato J, et al. Comparative effects of acupressure at local and distal acupuncture points on pain conditions and autonomic function in females with chronic neck pain. Evid Based Complement Alternat Med. 2011;6.
24. Dehghanmehr S, Mansouri A, Faghihi H, Piri F. The effect of acupressure on the anxiety of patients undergoing hemodialysis -a review. J Pharm Sci Res. 2017;9(12):2580-4.
25. Niko PF. Pengaruh terapi Dzikir untuk menurunkan Kecemasan pada ibu hamil. J Islam. 2018;1:24-33.
26. Erisna M, Runjati R, Kartini A, Azam M, Mulyantoro DK. The impact of Maryam exercise towards the stress level and cortisol serum level among primiparous pregnant women. Int J Nurs Heal Serv. 2020;3(5):598-607. doi: 10.35654/ijnhs.v3i5.338.
27. Yi T, Qi L, Li J, Le JJ, Shao L, Du X, Dong JC. Moxibustion upregulates hippocampal progranulin expression. Neural Regen Res. 2016;11(4):610-6. doi: 10.4103/1673-5374.180746, PMID 27212922.
28. Suzuki S, Tobe C. Effect of acupressure, acupuncture and moxibustion in women with pregnancy-related anxiety and previous depression: A preliminary study. J Clin Med Res. 2017;9(6):525-7. doi: 10.14740/jocmr3009w, PMID 28496555.
29. Cho Y, Joo JM, Kim S, Sok S. Effects of meridian acupressure on stress, fatigue, anxiety, and self-efficacy of Shiftwork nurses in South Korea. Int J Environ Res Public Health. 2021;18(8):4199. doi: 10.3390/ijerph18084199, PMID 33921026.
30. Siddiqui MJ, Kamarudin MF, Bin A-SAKM, So'ad SZM, Jamshed SQ, Siddiqui MJ, et al. Moxibustion (Artemisia plant at acupuncture point) as alternative therapy in hypertension: A promising approach. J Pharm Bioallied Sci. 2017;9(4):279-81.
31. Sarli D, Putri AD. Acupressure point gall bladder 21 (Gb21) terhadap tekanan Darah dan jumlah Perdarahan Pada Ibu postpartum. J Ilmu Kesehat. 2020;4(2):89-94.

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