

# Usik Wiwitan Relaxation for Psychological Wellbeing among Primipara Pregnant Women in Bandung, Indonesia

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## ABSTRACT

*Introduction: Usik Wiwitan relaxation exercises in West Java is the local traditional complementary treatment. The aim of this study is to investigate the effectiveness of Usik Wiwitan relaxation application in decreasing of anxiety in primipara pregnant women.*

*Method: Pregnant women were divided into two groups: Intervention and Control randomly. The intervention group underwent the guided Usik Wiwitan relaxation for 12 weeks, while control group acted as controls. State-Trait Anxiety Inventory (STAI) was used to assess the scores associated with anxiety.*

*Results: The anxiety scores decreased after Usik Wiwitan relaxation exercises in primipara pregnant women in third trimester.*

*Conclusion: The Usik Wiwitan relaxation can decrease the anxiety of primipara pregnant women. It can be accepted that it has the potential method for the pregnant women's health programs.*

**Key words:** Pregnancy, Anxiety, Usik Wiwitan, Relaxation

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## INTRODUCTION

Relaxation techniques can overcome hypertension and improve quality of life [1]. That is to say, regular relaxation practices improve the quality of life [2], increase the immune system and reduce stress [3], decrease blood pressure, oxygen consumption and heart rate [4], decrease negative attitudes, psychological discomfort and negative perceptions [3], and reduce anxiety and pain among elderly patients [5].

Usik Wiwitan Relaxation technique is a relaxation practice that comes from local wisdom. This method was first introduced by Ms. Karlina Adikusumah. She explained that it is Sundanese cultural contemplation based on Islamic spiritual beliefs. The term Usik Wiwitan means the first movement (Usik=move, Wiwitan=beginning). She believed that all movements that happened in nature is always first never be second or third. The name "Usik Wiwitan" was given to remind the existence of God who moves anything in nature. The Usik Wiwitan relaxation is relatively easy to

do anywhere without the need for large space or special devices and includes spiritual aspects that can further enhance the elderly's belief in the Creator's compassionate nature.

Usik Wiwitan Relaxation is one of unique relaxation method of West Java, Indonesia that implements the principle of harmonizing the body's energy system through two stages; ngajurus (body work and breathwork) and tumekung (silent, meditate state). The ngajurus is done in a cross-legged sitting position by doing hand movements slowly followed by breathing. The second stage is tumekung which is lying down like meditation. Tumekung comes from the Sundanese word which means resignation, letting go, surrendering or realizing the helplessness of self. Physically, tumekung means letting the body's system work by itself without intervention and manipulation to achieve harmonization of the body's electromagnetic waves with natural rhythm.

Pregnancy is a natural and physiological process. During the process, women will get some physiological, and social changes which cause discomfort [6]. The pregnant women can apply Usik Wiwitan Relaxation technique to overcome this discomfort problem. Therefore, the purpose of this

study is to investigate the possibility of applying the practice of UWI relaxation practice to improve the psychological wellbeing of the pregnant woman in Bandung, West Java Province.

**MATERIALS AND METHOD**

This is an experimental study with one group intervention (N=20, Mean age ( $\pm$  SD)=29.238  $\pm$  4.122) and another group as control (N=20, Mean age ( $\pm$  SD)=29.3  $\pm$  4.846). They all are primipara pregnant women. All of them were experiencing the third trimester in their pregnancy. In this study it is assumed that the difference in the mean anxiety score is 5 [7].

The sampling technique used the following hypothesis testing formula for 2 population means (one-sided test) [8]. Based on the calculation of the formula, the value of the sample size is 33. Assuming 10% dropout, and the easy of dividing the groups is determined by a sample size of 40 people. Furthermore, this figure is determined as the overall sample size, so it takes 20 people for the intervention group and 20 people for the control group.

**Ethical consideration**

This study had obtained approval from National Institute of Health Research and Development (NIHRD) Indonesia Ministry of Health number L.B.02.01/5.2/KE268/2015. All respondents have been informed of their rights, research objectives, procedures, risks, benefit of participation in this research and signed the informed consent.

**Data collecting procedure**

After the subjects are collected, then based on random results it is determined that the location of the Kebon Gedang village is the place of intervention while the Cibangkong village is the place of control. Subsequently

the subjects were collected to be given an explanation of the purpose of the study and the interventions to be provided as well as requesting the subject's willingness to sign an informed consent and continued with the pregnancy examination by the midwife from local government's primary health care.

The intervention group applied Usik Wiwitan relaxation under the supervision of the facilitator. It was done 16 times with a frequency of 2 times a week. Determination of the duration of relaxation frequency is based on several previous studies of practice of Qigong, mindfulness meditation and yoga which are carried out on average for 10 weeks [9-11]. With consideration of the condition of the mother's pregnancy and the anticipation of the birth process, the intervention that was originally carried out for 10 weeks with a duration of 1 time a week was changed to 8 weeks with a duration of 2 times a week. Measurement of anxiety carried out 3 times, namely before training (baseline/pre-test), after 4 weeks (mid-test) and 8 weeks of training (post-test). All the steps of Usik Wiwitan relaxation process has been consulted and received a recommendation from an obstetrician.

In Usik Wiwitan relaxation, stage 1 is Ngajurus (breathwork and bodywork stage) and stage 2 is Tumekung (meditate stage) guided by the facilitator. It performed for 8 weeks with a frequency of 2 (two) times a week with a duration of 30 minutes each time (Table 1).

State-Trait Anxiety Inventory (STAI) [12] was used to assess the scores associated with anxiety. Based on the results of interviews with the mother's anxiety condition which includes 40 questions Rating score: 1=agree, 0=disagree, Anxiety rating score: Normal: 0-14, Light: 15-18, Medium: 19-25, Weight: 26-33, Panic/very heavy:>34.

**Table 1: The Stages of usik wiwitan relaxation treatment of two stages: First stage (Ngajurus) and second stage (Tumekung).**

First stage Ngajurus	Description of Movement	First stage Ngajurus	Description of Movement
	Sit crossed leg, relax all muscles, place both palms on your lap with the position facing up and your right palm under your left palm		Take a deep breath and exhale slowly while pushing both arms back toward the front of the chest
	Take a deep breath while raising your palms to your chest and start to straighten your back with hand movements		Stop for a moment while adjusting the breath if both arms are in front of the chest
	Stop for a moment if both palms are in front of the chest, hold your breath and exhale while reversing the position of the palm of the hand		Open the palms of both hands so that only the tips of the index fingers and thumbs touch



both palms facing each other



Take a deep breath and exhale slowly while moving your arms in opposite directions towards the left and right sides



while exhaling slowly push your arms out in front of your chest



Stop for a moment while adjusting the breath if both arms are straight on the left and right sides of the body



If both arms are straight, stop for a moment while breathing



Take a deep breath and exhale slowly while moving your arms toward your armpits



Take a deep breath and exhale slowly while pushing both arms towards the top of the head



Push both arms straight ahead in front of the chest



If both arms are straight above the head, stop for a moment while breathing



Lower your arms to your lap while regulating your breath and relaxing all the muscles of the body

Note: do all movements slowly and do not need to use force, do 3x. Just live and feel every movement



Second stage: Tumekung

After completing all the stages of the ngajurus, then do the tumekung by lying still for 10 minutes

**RESULTS**

There was a statistically significant differences between before and after treatment (4 and 8 weeks) in intervention group (F=33.585, p=0.00) in repeated measures test, but not in control group (F=3.065,

p=0.096) (Table 2). The difference between intervention and control groups was statistically significant (F=10.659, p=0.00) there is a significant decrease in anxiety scores and no difference in control group.

**Table 2: The anxiety scores in control and intervention groups before and after Usik Wiwitan Relaxation treatment.**

	Before treatment	After treatment (4th weeks)	After treatment (8th weeks)	F	p
Control (N=20)	17.941 ± 1.7	17.951 ± 2.282	18.95 ± 1.849	3.065	NS
Intervention (N=21)	18.762 ± 1.729	17.524 ± 1.167	15.667 ± 1.167	33.585	0

**DISCUSSION**

The Usik Wiwitan relaxation application, a local traditional alternative and complementary treatment. In a recent previous study [13], this treatment decreased the systolic and diastolic blood pressures and increased quality of life scores in elderly people with hypertension. In the present study, the anxiety scores decreased after Usik Wiwitan treatment in pregnant women. It can be stated that the results of the present study are consistent

with their results. They concluded that Usik Wiwitan technique is a simple method for the elderly people and easy to do as well as entertaining and vastly improve the quality of life.

The most complementary medicine applications result in the decrease of psychological stress through decreasing sympathetic activity and increasing parasympathetic activity in the body. For example, it has been reported that wet cupping therapy restored sympatho-vagal

imbalances and decreased psychological stress by decreasing sympathetic activity and increasing parasympathetic activity [14]. In some recent studies, it was reported that foot reflexotherapy [15], footbath therapy [16], and wet cupping therapy increases [17] beta and gamma activities of the brain EEG in young healthy humans. Also, some different complementary approaches were reported to be very useful to decrease pain in some other pain syndromes, for example, foot bathing therapy for surgical pain in women with caesarean section [18], moving dry cupping for upper shoulder and neck pain [19], wet cupping for shoulder pain and neck pain [20] and foot reflexotherapy for acute low back pain [21].

The results of the present study show Uvik Wiwitan technique results in an important bodily and psychological relaxation through decreasing the sympathetic activity and increasing parasympathetic activity. The practice of UWI art relaxation can decrease the anxiety level in pregnant women and increase quality of pregnancy.

### CONCLUSION

The Usik Wiwitan relaxation can decrease the anxiety of primipara pregnant women. Further research by recording ECG and EEG and by assessing the levels of plasma stress hormones needs to be done to prove the effectiveness of the Usik Wiwitan exercises on larger populations.

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### REFERENCES

- Gureje O, Kola L, Afolabi E, et al. Functional disability among elderly Nigerians: Results from the Ibadan survey of ageing. *J Am Geriatr Soc* 2010; 54:1784-1789.
- Sulistiyarini I. Terapi relaksasi untuk menurunkan tekanan darah dan meningkatkan kualitas hidup penderita hipertensi. *J Psikol* 2013; 40:28-38.
- Reig-Ferrer A, Ferrer-Cascales R, Santos-Ruiz A, et al. A relaxation technique enhances psychological well-being and immune parameters in elderly people from a nursing home: A randomized controlled study. *BMC Complement Altern Med* 2014; 14.
- Dusek JA, Benson H. Mind-body medicine: A model of the comparative clinical impact of the acute stress and relaxation responses. *Minn Med* 2009; 92:47-50.
- Rejeh N, Heravi-Karimooi M, Vaismoradi M, et al. Effect of systematic relaxation techniques on anxiety and pain in older patients undergoing abdominal surgery. *Int J Nurs Pract* 2013; 19:462-470.
- Musfirowati F, Fahrudin A, Nursanti I. The effectiveness of yogic breathing to comfort level of first trimester pregnant mothers at community health center of Kragilan district working area, Serang, Banten, Indonesia. *Int J Res Med Sci* 2018; 6:51-56.
- Muzik M, Hamilton SE, Lisa Rosenblum K, et al. Mindfulness yoga during pregnancy for psychiatrically at-risk women: Preliminary results from a pilot feasibility study. *Complement Ther Clin Pract* 2012; 18:235-240.
- Lwanga SK, Lemeshow S. Sample size determination in health studies: A practical manual. Geneva: World Health Organization (WHO) 1991.
- Tsang HW, Mok CK, Au Yeung YT, et al. The effect of qigong on general and psychosocial health of elderly with chronic physical illnesses: a randomized clinical trial. *Int J Geriatr Psychiatry* 2003; 18:441-449.
- Haak T, Scott B. The effect of qigong on fibromyalgia (FMS): A controlled randomized study. *Disabil Rehabil* 2008; 30:625-633.
- Lee MS, Lee MS, Choi ES, et al. Effects of qigong on blood pressure, blood pressure determinants and ventilatory function in middle-aged patients with essential hypertension. *Am J Chin Med* 2003; 31:489-497.
- Gunning MD, Denison FC, Stockley CJ, et al. Assessing maternal anxiety in pregnancy with the state-trait anxiety inventory (STAI): issues of validity, location and participation. *J Reprod Infant Psychol* 2010; 28:266-273.
- Hartiningsih SS, Utomo B, Damayanti R, et al. Effectiveness and practicality of Usik Wiwitan relaxation to improve quality of life in elderly with hypertension in West Java. *J Res Med Dent Sci* 2020; 8:10-16.
- Arslan M, Yeşilçam N, Aydın D, et al. Wet cupping therapy restores sympathovagal imbalances in cardiac rhythm. *J Altern Complement Med* 2014; 20:318-321.
- Unal C, Welcome MO, Salako M, et al. The effect of foot reflexotherapy on the dynamics of cortical oscillatory waves in healthy humans: An EEG study. *Complement Ther Med* 2018; 38:42-47.
- Olanipekun A, Alhassan AK, Musa FH, et al. The effect of foot bath therapy on the dynamics of cortical oscillatory waves in healthy humans: An EEG study. *J Res Med Dent Sci* 2019; 7:57-61.
- Abdullahi F, Unal C, Welcome MO, et al. Beta and gamma eeg oscillatory waves of the frontal cortex increase after wet cupping therapy in healthy humans, *J Res Med Dent Sci* 2019; 7:123-130.
- Cal E, Cakiroglu B, Kurt AN, et al. The potential beneficial effects of hand and foot bathing on vital signs in women with caesarean section. *Clin Invest Med* 2016; 39:86-88.
- Arslan M, Yaman G, Ilhan E, et al. Moving dry cupping therapy reduces upper shoulder and neck pain in office workers. *Clin Invest Med* 2015; 38:217-220.
- Arslan M, Gokgoz N, Dane S. The effect of traditional wet cupping on shoulder pain and neck pain: A pilot

study. *Complement Therapies Clin Practice* 2016; 23:30-33.

21. Dane S. The effect of foot reflexotherapy on acute low back pain: A pilot study. *J Res Med Dent Sci* 2019; 7:13-16.