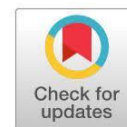


The effectiveness of belly and ujjay breathing techniques on declining levels of anxiety in the third trimester of pregnant women in Klinik Pratama Asih Waluyo Jati Banguntapan Bantul Yogyakarta



Ratih Kumorojati¹, Dian Puspitasari², Corry Octiva Sari³

¹Department of Midwifery, Universitas Jenderal Achmad Yani Yogyakarta, Yogyakarta, Indonesia, ratihkumorojati@gmail.com

²Departement of Midwifery, Universitas Jenderal Achmad Yani Yogyakarta, Yogyakarta, Indonesia, dian.ayaniyka@gmail.com

³Departement of Midwifery, Universitas Jenderal Achmad Yani Yogyakarta, Yogyakarta, Indonesia, corryocvita@gmail.com

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ABSTRACT

Pregnancy and childbirth in women are normal and natural cycles, but these cycles are still a burden for a woman. Women who are pregnant and want to give birth normally need not only physical readiness, but also mental readiness. This study aims to obtain information about the effectiveness of belly and ujjay breathing techniques in reducing anxiety levels in third trimester pregnant women at Asih Waluyo Jati Clinic. This study was a quasi-experimental one group pretest-posttest without control design. The population of third trimester pregnant women in Klinik Pratama Asih Waluyo Jati with a sample of 16 third trimester pregnant women. Data was collected by uses the Zung Self-Rating Anxiety Scale (ZSAS) anxiety questionnaire. All respondents were between 20 - 35 years old. The majority of respondents have junior high school education as much as 62.5% and do not work as much as 56.3%. Data analysis used T-test with the result $p = 0.004$. In conclusion, belly and ujjay breathing techniques can reduce anxiety in third trimester pregnant women.

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Corresponding Author:

Ratih Kumorojati
Universitas Jenderal Achmad Yani Yogyakarta
Jl. Ringroad Barat, Gamping Kidul, Ambarketawang, Kec. Gamping, Kabupaten Sleman, Daerah Istimewa Yogyakarta 55294
E-mail: ratihkumorojati@gmail.com

Pregnancy and childbirth in a woman is a normal and natural cycle, but the cycle remains a burden for a woman. Mothers who are experiencing pregnancy and want to give birth normally, are required not only to be physically ready, but also to be mentally ready¹. Pregnant women must maintain the condition of the womb, provide intensive care for the fetus and pay attention to medical conditions themselves and the fetus. Various kinds of problems experienced by pregnant women can be a stressor during pregnancy. If someone feels able to cope with stressors, then he will avoid stress. Conversely, if someone feels unable to cope with stressors, then he will tend to be in a state of stress². Disorders that are often experienced by pregnant women are emotional disorders in the form of anxiety³.



Anxiety is an unclear feeling of worry associated with feelings of uncertainty and helplessness, and this emotional state has no specific objects⁴. Several studies have proven that women who experience abnormal labor can even complicate maternal and fetal death. This condition can cause further anxiety and tension so as to form a feedback cycle that can increase overall emotional intensity. High stress and disturbing moods during pregnancy can result in babies with LBW (low birth weight), preterm birth, spontaneous chromosomal abortion, low APGAR score, neuro endocrine dysregulation⁵. While the impact on the mother can occur hyperemesis gravidarum, preeclampsia and eclampsia⁶.

According to Sindhu that by mastering emotions and thoughts as well as mastering breathing techniques, through gentle and regular breathing the mind will become calmer and the body becomes more relaxed⁷. The breathing technique (pranayama) in yoga is a breathing exercise using breathing techniques using diaphragm muscles, breathing slowly and deeply, so that the chest can fully expand and allow the abdomen to lift slowly⁸.

Diaphragmatic breathing is the easiest relaxation technique to do slowly, consciously and deeply. Diaphragmatic breathing techniques include belly and ujjay breathing. In its simplest form, diaphragmatic breathing is slow, conscious and deep breathing. This is a sign of a deep sigh. The frequency of normal breathing is 14-16x / minute, as long as strenuous exercise increases to around 60x/minute, with diaphragmatic breathing can reduce the frequency of breathing to 3-6x/minute⁹.

Based on the description above, researchers are intrigued to conduct research on the effectiveness of breathing techniques belly and ujjay on declining levels of anxiety in the third trimester of pregnant women in Klinik Pratama Asih Waluyo Jati Banguntapan Bantul Yogyakarta.

METHOD

This research is a quasi-experimental study with two groups of pre-test and post-test with control with a cohort time study approach. In this study only used one group, namely a case group without control. Case group is third trimester pregnant women who were given belly and ujjay breathing techniques. In the case group, pre-post test were performed and then the anxiety level was faced in facing labor.

This research was conducted at Klinik Pratama Asih Waluyo Jati Banguntapan Bantul conducted in April - September 2019. The variables studied in this study were anxiety and breathing techniques. The instruments used in this study were questionnaires and checklist. Analysis used T-Test.

RESULTS

Table 1
Frequency Distribution of Third Trimester Pregnant Women Characteristics Based on Age, Education and Employment at Klinik Pratama Asih Waluyo Jati Banguntapan Bantul Yogyakarta

Characteristics of Respondents	F	%
Age		
20-35 years old	16	100
Total	16	100
Education		
Intermediate	10	62.5
High	6	37.5
Total	16	100
Profession		

Work	7	43.8
Does not work	9	56.2
Total	16	100

Based on table 1 it can be seen that the respondents who participated in belly and ujjay breathing, all respondents aged 20 - 35 years. The majority of respondents with secondary education level are 10 people or 62.5%. Based on work, 9 people or 56.3% did not work.

Table 2
Anxiety of Third Trimester Pregnant Women Before and After Relaxation of Belly and Ujjay Breathing Techniques at Klinik Pratama Asih Waluyo Jati Banguntapan Bantul Yogyakarta

	The mean	St dev	Min	Max
Before relaxation	30.06	8.72	12	46
After Relaxation	25.94	8.27	14	46

Based on table 2 it can be seen that the initial anxiety before before belly relaxation and ujjay breathing in the mean 30.06 with St dev 8.72 while anxiety after the mean relaxation 25.94 with St dev 8.27.

Table 3
The Effectiveness of Relaxation Belly and Ujjay Breathing Techniques on the anxiety of Third Trimester Pregnant Women at Klinik Paratama Asih Waluyo Jati Banguntapan Bantul Yogyakarta

	Pre test mean	Post test mean	The mean difference	P value
Relaxation	30.06	25.94	4.12	0.004

Based on table 3 the results of the T-Test Paired test in the relaxation group obtained p-value = 0.004 with a mean difference of 4.12, which means there is relaxation of breath in an effective way to reduce anxiety in third trimester pregnant women.

DISCUSSION

Characteristics of Respondents

In this study the results of the age of respondents who experienced anxiety ranged from 20 years to 35 years. According to Badudu, women aged 20-35 years are physically ready to become pregnant because their reproductive organs are fully formed, compared to women whose age is partially classified as having a high risk of congenital abnormalities and complications in childbirth so that the level of anxiety is more severe (panic)¹⁰. In studies with first-time pregnant women (primigravida) to allow anxiety to occur, this is in accordance with Kurniawati, 2014 which states that anxiety for women who are pregnant for the first time is higher than women who are already pregnant for the second time. Besides the emergence of anxiety in primigravida is influenced by physical changes in the abdomen that gets bigger and the body gets fatter that occurs during pregnancy¹¹. These physical changes cause psychological and emotional conditions to become unstable so that it fosters worries.

In this study the dominant level of secondary education is 10 people and experiencing anxiety. Mothers have not made any efforts to seek health services to reduce anxiety and complaints during pregnancy. The low level of maternal education makes it easy for mothers to experience stress and anxiety, this is due to the lack of information and knowledge to mothers about their health and pregnancy¹².

On univariate results, more respondents were not working as many as 9 people. According to Wanda there is a relationship between traumatic experiences and anxiety of

pregnant women¹³. This is different from Kusumawati's opinion in Hasim which states that mothers who have a job are more likely to get information and experience about pregnancy from others because mothers who have work more often meet other people, besides that mothers who have jobs will get influence in determining stressor so that the mother can change her perspective and better control her anxiety¹⁴.

Anxiety Before Relaxation of Belly and Ujjay Breathing Techniques

Based on table 2, the results of univariate analysis showed that pregnant women before relocation had anxiety with a mean of 30.36 with St dev 8.72. In this study, the anxiety felt by three trimester pregnant women including the pain of childbirth because they had never given birth before, excess maternal weight and about fears the baby will suffer physical disabilities after birth.

In the study after the relaxation of anxiety three third trimester pregnant women mean 25.94 with St dev 8.27 which means there is a decrease in anxiety in third trimester pregnant women after deep breathing relaxation. Because one of the efforts to reduce or eliminate anxiety include the Deep Breath Relaxation Technique. When a pregnant woman relaxes her breath in impulses from the baroreceptors reach the heart center which will stimulate parasympathetic nerve activity so that the breath will be more relieved, calmer, regular heartbeat, the muscles of the body relax so that anxiety and stress are reduced¹⁵.

This is supported by Smeltzer's opinion which states that relaxation is an effective method for reducing muscle tension, saturation and anxiety¹⁶. Anxiety in pregnant women can also be influenced by several factors including husband support, maternal age, level of education and economy¹².

This study is in line with the research of Laili Fauziah and Wartini Endang who examined the Effect of Deep Breath Relaxation Techniques on Anxiety in the Face of Labor in Pregnant Women. The results obtained p value of 0.003 which means that there is an effect of giving Deep Relaxation Technique to the level of anxiety in the face of childbirth in pregnant women, of 16 respondents more than half of respondents (56.2%) experienced severe anxiety and after breathing relaxation in 43 , 8% experienced mild anxiety¹⁷.

Effectiveness of Belly and Ujjay Breathing Techniques on Anxiety of Third Trimester Pregnant Women

In the bivariate test results using the Paired T-Test in the relaxation group the results obtained p-value = 0.004 with a mean difference of 4.12, which means that breathing relaxation is effective in the anxiety of third trimester pregnant women.

During relaxation, deep breathing will stimulate parasympathetic nerve activity and inhibit the sympathetic center (cardio accelerator), thereby causing systemic vasodilation, decreased heart rate, and heart contraction. The parasympathetic nervous system that travels to the SA node through the vagus nerve releases the neurotransmitter acetylcholine which inhibits the speed of depolarization of the SA node, resulting in a decrease in heart rate. As a result of a decrease in heart rate, contraction of heart muscle fibers and blood volume makes blood pressure low and anxiety automatically, stress low¹⁸.

This is in accordance with the opinion of Setyoadi and Kushariyadi who stated that deep breathing relaxation is beneficial to reduce stress and anxiety¹⁹. According to Laili and Wartini that regularity in breathing causes mental and body attitudes to relax, so that it can help reduce anxiety in pregnant women. Deep breathing relaxation techniques can improve alveoli ventilation, maintain gas exchange, prevent lung atelektasi, increase cough efficiency, reduce stress both physical and emotional stress. Based on this, it can

be stated that the Deep Breath Relaxation technique is effectively used to reduce anxiety including anxiety in pregnant women¹⁷.

This study is in line with research conducted by Kurniyati who examines the effects of deep breathing relaxation in decreasing the pregnancy women anxiety of primigravida third trimester in facing the childbirth work process area in the center of the jungle of the old gutters in the Lebong Rejang Bengkulu Rejang. The results of data analysis using Shapiro Wilk with a value of $p < 0.05$ there is the influence of deep breathing relaxation techniques performed in third trimester primigravida pregnant women in the face of childbirth¹¹.

CONCLUSION

In a study of the effectiveness of Belly and Ujjay Breathing Techniques on reducing anxiety levels in third trimester pregnant women at Klinik Pratama Asih Waluyo Jati Banguntapan Bantul Yogyakarta it can be concluded that the anxiety of third trimester pregnant women before breathing relaxation in the mean 30.06 and anxiety after breathing relaxation in the mean 25.94 and a mean difference of 4.12. Then, relaxation of the breath in an effective way to reduce anxiety in third trimester pregnant women with a P-value of 0.004.

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Some suggestions that the author can give to several parties related to the results of research and discussion that has been done is that clinic can teach belly and ujjay breathing techniques to pregnant women who do ANC or USG to reduce anxiety of pregnant women.

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