



## The Difference Of Comfort And Anxiety Level In Third Trimester Pregnant Women With One Student One Client (OSOC) And Conventional Pregnancy Care

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### Abstrak

*Kecemasan pada wanita hamil saat menghadapi persalinan berbeda. Bidan harus mampu meningkatkan kenyamanan untuk mengurangi kecemasan. Salah satu caranya adalah dengan bantuan OSOC, ini adalah bantuan selama kehamilan, persalinan, postpartum, bayi baru lahir hingga keluarga berencana untuk meningkatkan kesehatan ibu dan bayi. Tujuan dari penelitian ini adalah untuk mengetahui perbedaan kenyamanan dan kecemasan ibu hamil trimester ketiga yang diberi bantuan OSOC dan perawatan kehamilan konvensional di Puskesmas Kabupaten Kendal. Penelitian ini adalah penelitian eksperimental semu dengan desain kelompok kontrol tidak setara. Sampel dalam penelitian ini adalah 124 wanita hamil trimester ketiga di Puskesmas Kabupaten Kendal. Subjek penelitian dibagi menjadi kelompok intervensi dan kontrol. Pada kelompok intervensi, wanita hamil diberi intervensi dengan bantuan OSOC, dan kelompok kontrol diberi perawatan kehamilan konvensional. Penelitian ini dilaksanakan pada bulan Juli-September 2018. Desain analisis menggunakan Chi Square. Hasil penelitian menunjukkan bahwa ada perbedaan yang signifikan ( $p < 0,05$ ), dan pengaruh bantuan OSOC pada wanita hamil yang menghibur adalah 2,357, dan ada perbedaan yang signifikan antara kecemasan pada wanita hamil trimester ketiga dengan bantuan OSOC dan perawatan kehamilan konvensional, dan pengaruh bantuan OSOC pada kecemasan wanita hamil adalah 7.703. Kesimpulan dari penelitian ini adalah bahwa ada perbedaan yang signifikan antara kenyamanan dan kecemasan ibu hamil trimester ketiga dengan bantuan OSOC dan perawatan kehamilan konvensional.*

**Kata kunci** : Kecemasan, Kehamilan Trimester Ketiga, OSOC.

### Abstract

*Anxiety in pregnant women when facing labor is different. Midwives have to be able to increase the comfort to reduce anxiety. One of the ways is with OSOC assistance, this is an assistance during pregnancy, childbirth, postpartum, newborns until family planning in order to increase maternal and infant health. The aims of this study are to determine the differences in comfort and anxiety of third trimester pregnant women who were given OSOC assistance and conventional pregnancy care at Kendal District Health Center. This research is a quasi experimental study with non equivalent control group design. Samples in this study were 124 third trimester pregnant women at Kendal District Health Center. The research subjects were divided into intervention and control groups. In the intervention group, pregnant women were given intervention by OSOC assistance, and the control groups were given conventional pregnancy care. This research was held on July-September 2018. The analysis design used Chi Square. The results showed that there were significant differences ( $p < 0.05$ ), and the influence of OSOC assistance on comforting pregnant women was 2.357, and there were significant*

*differences between anxiety in the third trimester pregnant women with OSOC assistance and conventional pregnancy care, and the influence of OSOC assistance on anxiety pregnant women was 7,703. The conclusion of this study is that there are significant differences between the comfort and anxiety of the third trimester pregnant women with OSOC assistance and conventional pregnancy care.*

**Keywords :** Anxiety, Third Trimester Pregnancy, OSOC.

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## INTRODUCTION

Pregnancy is a time when the conception begins until the birth of the fetus. The duration of normal pregnancy is 280 days (40 weeks or 9 months 7 days) which is calculated from the first day of the last period (1). Pregnancy, childbirth, and being a mother are precious events and experiences in women's lives. However, these events can also create stress, so the response can be various, such as happiness or the otherwise, called anxiety (2). Anxiety is a concern that is not clearly defined and can spread, which is related to uncertainty feel (3). Responses that arise due to anxiety include feelings of worry, anxiety, insecurity, and sometimes accompanied by physical complaints (3).

Some developing countries in the world are at high risk of occurrence psychological disorders in pregnant women = 15.6% and postpartum mothers = 19.8%. As many as 81% of women in the United Kingdom have experienced psychological disorders in pregnancy. Whereas in France as much as 7.9% Primigravida mothers experienced anxiety during pregnancy, 11.8% experienced depression during pregnancy, and 13.2% experience anxiety and depression (5). In Indonesia in 2008 there were 373,000,000 of pregnant women, and there were 107,000,000 people experiencing anxiety when deal with childbirth (28.7%) (6)

There are several factors that can affect anxiety during pregnancy, including: factors of knowledge, psychology, economics, experience, and support (2). When the mother being pregnant, there are some physiological changes, and it can

also experience discomfort in pregnancy such as fatigue, vaginal discharge, cramping, frequent urination, and emesis gravidarum (1). Some women are not able to accept changes that occur in their body during pregnancy, although often these physical changes are considered normal by other women. Comfort is a state of fulfilling basic human needs that are individual and holistic. With fulfillment of comfort can cause a sense of well-being in the individual (7). According to preliminary observations made by researchers at Kendal District Health Center there are 7 women experienced discomfort and 8 woman experienced anxiety.

Midwives as providers of pregnancy care, have a strategic position to play a role in efforts to accelerate the reduction of MMR and IMR, so that midwives not only provide adequate care according to standards, but also must be qualified based on the philosophy of midwifery care that have emphasizes care for women (women centered care). One effort that midwives can use to improve midwives qualifications is to apply the Continuity of Care (CoC) model. This effort can involve various sectors to carry out assistance for pregnant women as a promotive and preventive effort that starts from the moment when mother stated pregnant until the postpartum period ends through counseling, information and education (KIE) and the ability to identify risks to pregnant women (8).

Most risk can be avoided if maternal health problems are intervened from the start. One of the efforts to optimize the detection of high-risk maternal neonatal, pregnant women until childbirth requires ongoing assistance. Therefore,

it is necessary to conduct a series of efforts, one of which is to involve educational institutions by integrating education programs, in addition to community empowerment efforts that have been implemented but have not been synergized with education (8). The contribution of midwifery education in this step is to bring the learning experience closer to the situation that approaches the source of the problem by proactively visiting clients in the community.

Central Java Province gives more attention to reduce MMR and IMR. One of them is by launching the OSOC (One Student One Client) program, a method conducted by midwife students to record and assist pregnant women during pregnancy, childbirth, postpartum, newborn babies until family planning so that maternal and infant will be healthy. With this method, students ensure that clients have standardized services. That service starts from holistic care and promotes an ongoing partnership with clients in the building of understanding, support and trust.

Based on the description, the researchers are interested in further researching of the comfort and anxiety in the third trimester pregnant women with the OSOC method to determine the differences in comfort and anxiety levels of the third trimester pregnant women who are given OSOC assistance and conventional pregnancy care at Kendal District Health Center.

## MATERIALS AND METHODS

This research is a quasi experimental. The subject of this study is all third trimester pregnant women who are perform examination for pregnancy at Kendal District Health Center who gives statement that they agree to participate in the study by signing the approval sheet after explanation (PSP). The population is 124 people, with the inclusion criteria, which is all third trimester pregnant women, perform examination for pregnancy at the Kendal District Health Center, the mother is willing to be a respondent as evidenced by the signatures of consent. The sampling technique used is total sampling. In this study the number of samples used was 124 with a level of error is 10%.

The instrument use to measure the OSOC assistance variable is a checklist. Whereas to

assess the comfort and anxiety using a questionnaire. Bivariate analysis and the influence of the effect were done with Chi-Square. This research strives to uphold the scientific and ethical attitudes in research. Researchers try to minimize possible losses and maximize the research. The study is conducted at the Kendal District Health Center in July-September 2018.

## RESULTS AND DISCUSSION

Research on the assistance of pregnant women with OSOC toward the anxiety and comfort of pregnant women in the third trimester held on July to September 2018 located at the Kendal District Health Center, Central Java Province, which has fulfilled the inclusion and exclusion criteria. This study is conducted on 124 pregnant women, divided into two groups, that is 62 third trimester pregnant women in the group that given intervention of OSOC assistance and 62 pregnant women with conventional pregnancy care.

The results of research describing the characteristics of third trimester pregnant women based on age, income, and education of third trimester pregnant women with OSOC assistance and conventional pregnancy care are shown in the following table:

**Table 1**  
**Subject characteristics in both study groups**

No	characteristics	Groups		P Value
		Intervention (n=62)	Control (n=62)	
1	<b>Age (Year)</b>			0.618*
	<20 year	8 ( 6.5%)	11 (8.9%)	
	20- 35 year	54 ( 43.5%)	51 (41.1%)	
2	<b>Income</b>			0.239*
	< Rp 1.774.867.00	40 ( 46.0%)	47 (54.0%)	
	= Rp 1.774.867.00	22 ( 59.5%)	15 (40.5%)	
3	<b>Education</b>			0.718*
	primary	29 ( 52.7%)	26 (47.3%)	
	Junior high	33 (47.8%)	36 (52.2%)	

Ex: \* Chi Quadrate Test

Based on table 1, the results show that the analysis of different characteristics of age, income, and education in the two study groups did not show any significant differences ( $p > 0.05$ ), so that the data was suitable for comparison.

Characteristics of research subjects used in this study include maternal age, income, and education.

In table 1 the characteristics of research subject are presented. Overall the characteristics of each group, that is the intervention group and the control group. All the characteristics studied were not significantly different, so the two research groups were considered homogeneous, which in turn is feasible to compare.

Based on the mother's age of 105 respondents aged 20-35 years, 54 of them are pregnant women in the intervention group and 51 of them were pregnant women in the control group. This means that more than half of the respondents from each group are aged 20-35 years. This shows the real form of the Indonesian population pyramid, where most of the population is young, with a high birthrate.

There were 19 respondents with <20 years of age, consisting of 8 people in the intervention group and 11 of them were pregnant women in the control group, and there were no respondents aged > 35 years.

Age is the one indicator of someone thinking ability, organic, psychological and intellectual functions that can be vary in the period of human life cycle. In the context of health behavior, age synergizes with the ability of individuals to manage themselves in their environment, which involves many variety of understanding, example, and assessment. With the more age of someone, it is expected that an assessment of something will be more mature. Psychological someone is also influenced by age, the more age, the better level of emotional maturity and ability to deal with various problems. The ideal age to having pregnancy and childbirth is at the age of reproduction, which is about age 20-35 years. A woman less than 20 years old may be sexually mature, but emotionally and socially are not mature enough. Based on income characteristics, from 37 respondents, 22 of them were pregnant women in the intervention group and 15 pregnant women in the control group who had income > regional minimum wage. 40 pregnant women were in the intervention group and 47 in the control group who had < regional minimum wage.

Economic status indicators can be seen from the income of husband and wife. Income is closely related to economic factors that have an important role in influencing a person's health, selection of places and types of health services. If economy

is good, then access to health services will be easier (9).

Based on Table 1, the results showed that out of 55 people with primary education, divided into 29 people in the intervention group, and 26 people in the control group, as well as respondents with junior high, divided into 33 people in the intervention group, and 36 people in the control group. And there are no respondents who have a higher education level.

With increasing the level of education of Indonesian women, their knowledge will be increase too. Someone who has desire to learn and know the benefits of education will immediately have self-motivation to improve education. Education for everyone has various meanings. Education is very useful for someone to thinking, acting and making decisions.

A person who highly educated will respond more rationally and behave better than those who are less educated or uneducated. A person with a good level of education will find it easier to identify internal and external stressors. The level of education also influences awareness and understanding of a stimulus. A person's level of education will greatly influences a person in responding to something that comes from internal or external. This is in accordance with the opinion which states that the level of education in determining whether or not a person absorbs or receives and uses his knowledge.

The results of research describing the comfort and anxiety of pregnancy in the third trimester are displayed on the following table:

**Table 2**  
**Comparison of comfort and anxiety in the two study groups**

No	Characteristics	groups		Total	OR (CI 95%)	P Value
		Intervention (n=62)	Control (n=62)			
1	Comfortable	35 (61.4%)	22 (38.6%)	57 (100%)	2.357 (1.144-4.856)	0.031*
	Uncomfortable	27 (40.3%)	40 (59.7%)	67 (100%)		
2	Anxiety				7.703 (2.707-21.914)	0.000*
	Mild Anxiety	57 (60.6%)	37 (39.4%)	94 (100%)		
	Severe Anxiety	5 (16.7%)	25 (83.3%)	30 (100%)		

Ex: \* Chi Quadrate Test

Based on Table 2, the results of statistical tests found that the comfort of the two study groups showed a significant difference ( $p < 0.05$ ), and the quantity of influence in assistance of pregnant women with OSOC on comfort was

2.357, meaning that third trimester pregnant women accompanied by OSOC had the possibility 2,357 times to feel comfortable compared to unaccompanied third trimester pregnant women.

Based on table 2 obtained the results of statistical tests that anxiety in both study groups showed a significant difference ( $p < 0.05$ ), and the quantity of the influence in assistance pregnant women with OSOC on anxiety was 7.703, meaning that trimester 3 pregnant women who were assist by OSOC had the possibility of 7.703 times to not feel anxiety compared to unassisted third trimester pregnant women.

The presence of assistance during pregnancy and childbirth, can improve the comfort of pregnant women, so that the mother will feel more relaxed and calm in undergoing the process of pregnancy (10).

Psychological conditions of pregnant women need to be considered, because during pregnancy, the mother's psychological condition greatly affects the health of the mother and fetus. One effort that can be done to support the psychological condition of pregnant women is by providing assistance to pregnant women. Comfort is defined as a condition in which basic and individual human needs are fulfilled, with the fulfillment of comfort can cause a sense of well-being in the individual (10).

Comfort is a person's comprehensive assessment of his environment. Humans assess environmental conditions based on stimuli that enter into him through the five senses, then flowed by nerves and digested by the brain and then assessed. In this case the involved are not only biological physical problems, but alsopsychic.

Achieving patient comfort is related to improving the patient's condition both physically and mentally. Convenience results from several interventions including the presence of assistance during pregnancy (7). This is in accordance with table 2 which shows that there are differences in the comfort of third trimester pregnant women between the presence of assistance with the OSOC and the conventional pregnancy care, which is the absence of assistance.

The presence of OSOC assistance has a significant role in the comfort of pregnant women ( $p < 0.05$ ), which is 2,357 times, which means that

pregnant women accompanied by OSOC during the third trimester feel 2,357 times more comfortable compared to unaccompanied third trimester pregnant women.

Pregnant women, who feel high comfort, have more hope. Increased comfort correlates with increased expectations and vice versa, in other words, shows that there is mutual between comfort and hope. Comfort can grow a hope and a hope can also be fostered by comfort. The concept of comfort in pregnancy means that comfort can provide strength and hope for pregnant women. Creating a condition to support physical and psychological comfort (7).

Assistance by closest people can provide physical and psychological encouragement for pregnant women, so that mothers feel more comfortable and feel safe. Based on research, assistance by husbands in the third trimester in resolve wife's anxiety shows that assistance for prospective mothers, feeling calm and having a strong mentality to deal with childbirth and influence the perception of the wife (11). Assistance by midwives also has greatly affects the mentality of the mother. The existence of appropriate information, will affect the mother's perception of her pregnancy (11). Midwives must be able to play the best role in providing services to pregnant women. Anxiety facing childbirth is a natural thing but if the anxiety is excessive, it will have an adverse impact on the health of the mother and fetus, so that as a midwife must be able to deal with it and be able to provide motivation and solutions to reduce maternal anxiety (12).

Anxiety in third trimester pregnant women is an unpleasant emotional state, which is characterized by fear and tense physical symptoms, experienced by pregnant women during the 28th to 40th week (1).

Anxiety in pregnant women is one of the risk factors for maternal mental health problems, such as increasing the likelihood of postpartum depression. Furthermore, longitudinal studies have shown that babies born from pregnant women with high anxiety will be at greater risk of experiencing behavioral problems in the neonatal and toddler period. Likewise with specific anxiety such as fear of giving birth to a disabled child. It is very clear that increased anxiety can lead to

unfavorable results, triggered by overstimulation of the hypothalamus-pituitary-adrenal (HPA), with increased secretion of gluco-corticoids such as cortisol. In fact, there are studies that link the increased risk of preterm birth to an increase in anxiety scores between the second and third trimesters (13).

The decrease in anxiety results from several interventions including the presence of assistance during pregnancy (7). This is in accordance with table 2 which shows that there are differences in the third trimester maternal pregnancy between the presence of assistance with the OSOC and the conventional pregnancy care one, which is the absence of assistance. The presence of OSOC assistance has a significant role on the anxiety of pregnant women ( $p < 0.05$ ), which is equal to 7.703, meaning that the third trimester pregnant women who are assisted by OSOC have the 7.703 times possibility to not feel anxiety compared with unaccompanied third trimester pregnant women.

## CONCLUSION AND RECOMMENDATION

Based on the results of the study, it can be concluded that there is a significant difference between the comfort of the third trimester pregnant women with OSOC assistance and conventional pregnancy care and there is a significant difference between anxiety in the third trimester pregnant women with OSOC assistance and conventional pregnancy care proved by  $p < 0.05$  with a level of error 10%.

Researchers also gave specific conclusions of how big is the influence of OSOC assistance for the comfort and anxiety of third trimester pregnant women, that is third trimester pregnant women who were assist by OSOC had the possibility of 2,357 times to feel comfortable compared to unassisted third trimester pregnant women and third trimester pregnant women who were assist by OSOC had the possibility of 7.703 times to not feel anxiety compared to unassisted third trimester pregnant women.

Based on the conclusions, there are several suggestions that the researchers propose, that are in the form of theoretical advice and practical advice. The suggestion of the theory made is that the level of comfort and anxiety of each person is

different and is influenced by many factors, such as: ethnicity, culture, place of residence, and so on. So it is expected for the next researcher to be able to examine these factors. As well as practical advice, mentoring the third trimester pregnant women can be used as an alternative to support the physical and psychological conditions of third trimester pregnant women, because it has been proven to increase comfort and reduce anxiety.

## REFERENCES

1. Tyastuti S, Wahyuningsih HP. Asuhan kebidanan kehamilan. Jakarta: Pusdik SDM Kesehatan; 2011. 1-32 p.
2. Wulandari PY. Efektivitas Senam Hamil sebagai Pelayanan Prenatal dalam. 2006;8(2).
3. Rohmi Handayani, Dyah Fajar sari, Dwi Retno Trisna Asih DNR. Pengaruh terapi Murotal Al-Quran untuk penurunan nyeri persalinan dan kecemasan pad ibu bersalin kala I fase aktif. J Ilm Kebidanan [Internet]. 2014;5(2):1–15. Available from: <http://download.portalgaruda.org/article.php?article=297669&val=6633&title=>
4. WHO. Interventions for Common Perinatal Mental Disorder In Women In Low- and Middle-Income Countries: A Systematic Review and Metaanalysis. 2008.
5. Gladys Ibanez, Bernard JY, Rondet C, Peyre H, Forhan A, Kaminski M, et al. Effects of Antenatal Maternal Depression and Anxiety on Children's Early Cognitive Development: A Prospective Cohort Study. PLoS One. 2015;10(8).
6. Depkes. Audit Maternal Perinatal. 2008.
7. Seyedfatemi N, Rafii F, Rezaei M. Comfort and Hope in the Preanesthesia Stage in Patients Undergoing Surgery. 2014;29(3):213–20.
8. Qureshi RI. Continuous support for women during childbirth. Int J Evid Based Healthc. 2012;10(3):227–8.
9. Srivastava A, Avan BI, Rajbangshi P, Bhattacharyya S. Determinants of women's satisfaction with maternal health care: A review of literature from developing countries. BMC Pregnancy Childbirth. 2015;15(1):1–12.
10. Songporn Chuntharapat. The Effects of Using a Yoga Program during Pregnancy on

Maternal Comfort, Labor Pain, and Birth Outcomes. Prince of Songkla University 2007; 2007.

11. Senarath U, Fernando DN, Rodrigo I. Factors determining client satisfaction with hospital-based perinatal care in Sri Lanka. *Trop Med Int Heal*. 2006;11(9):1442–51.
12. Kheirkhah M, Setayesh Vali Pour N, Neisani L, Haghani H. Comparing the Effects of Aromatherapy With Rose Oils and Warm Foot Bath on Anxiety in the First Stage of Labor in Nulliparous Women. *Iran Red Crescent Med J* [Internet]. 2014;16(9). Available from: [http:// www. ircmj.com/ ?page=article&article\\_id=14455](http://www.ircmj.com/?page=article&article_id=14455)
13. Buckley SJ. *Hormonal Physiology of Childbearing/ : Evidence and Implications for Women , Babies , and Maternity Care*. 2015;(January).