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ORIGINAL RESEARCH

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HYPNOANXIETY AS AN ALTERNATIVE THERAPY TO REDUCE ANXIETY IN PRIMIGRAVIDA MOTHERS

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ABSTRACT

Background: Anxiety among primigravida mothers should be handled to avoid the risks during pregnancy. Hypnotherapy is considered to be a solution; however, there are limited studies to determine its effect on anxiety, especially in primipara mothers.

Objective: To examine the effect of hypnoanxiety on the level of anxiety in primigravida.

Methods: This was a Randomized Controlled Trials (RCTs) with pretest-posttest design, conducted between September – October 2016 in the working area of the Health Center of Bergas Semarang, Indonesia. There were 40 respondents recruited using simple random sampling, which divided into intervention and control group. Hypnoanxiety was performed 8 times for 4 weeks. The Zung Self-Rating Anxiety Scale (ZSAS) was used to measure anxiety in pregnant women. Data were analyzed using Mann Whitney test and Kruskal Wallis test.

Results: Findings showed that after four weeks intervention, there was a decrease of the level of anxiety in the intervention group, consisted of 25% of moderate anxiety, 40% of mild anxiety, and 35 % of respondents with no anxiety. The p-value was 0.05, which indicated that there was mean difference of anxiety level between intervention and control group.

Conclusions: There was a significant effect of hypnoanxiety on the level of anxiety in pregnant women. It is suggested that hypnoanxiety could be one of the alternative therapies to reduce the anxiety among pregnant women. This could be considered to be included in the standard of midwifery care in Indonesia.

Keywords: pregnancy, anxiety, hypnoanxiety

INTRODUCTION

Maternal Mortality Rate (MMR) in Central Java province in 2012 was 116.34/ 100,000 live births, and increased to be 118.62/100,000 in 2013.¹ While MMR in Semarang in 2013 amounted to 120.22/100,000 live births, and gently increased to 144.31/100,000 live births in 2014,¹ which was considered high and has not reached the Minimum Service Standards (SPM) in Semarang, 107/100,000 live births.¹

Based on the audit of maternal and perinatal in Semarang, the causes of maternal mortality are very diverse, ranging from bleeding (42%), eclampsia (13%), complications of abortion (11%), infection (10%) and prolonged labor (9%) that still require hard work from all components for reducing maternal mortality rate.¹

Anxiety in pregnant women generally revolves around the fear of bleeding, scared of baby disability, fear of complications of pregnancy, fear of pain during childbirth, and fear when stitched, complications during birth that can lead to death, and the concern of being unable to care and raise the children in the future.² Unwittingly, fear of childbirth will be embedded in the subconscious mind and finally embedded as negative program. The study said that pregnant women who have normal delivery were 47.7% of severe anxiety, 16.9% of moderate anxiety, and 35.4% of low anxiety.³

In addition, thoughts of fear of childbirth will always be followed by pain, lead to an increase of the sympathetic nervous system works. Excessive anxiety and stress during pregnancy are as dangerous as pregnant women smokers. As a result, the children are at risk, which may be born with low birth weight (LBW), the size of the head small (microsomia), the development of nerve unbalanced, premature birth, low immune system, and high emotional distress after birth compared with women undergoing pregnancy with happy heart and mind.⁴⁻⁷ Thus, alternative therapies are needed to overcome the anxiety in the third trimester of pregnant women.

Hypnoanxiety therapy is addressed as one of the solutions to deal with anxiety. It is given to patients in combination with the

practice of self-hypnosis to address specific disorders of anxiety guided by a hypnotherapist to achieve deep relaxation.⁸ Hypnoanxiety inhibits the transmission of anxiety impulses in the central nervous system, so that anxiety can be reduced. Hypnoanxiety is also working on the limbic system that will be delivered to the nervous system which activates the parasympathetic nerves work which serves to reduce body muscle tension.⁹ This is consistent with results of previous study found there is an influence of hypnotherapy on decrease of anxiety in pregnant mothers.¹⁰

Preliminary descriptive quantitative study had been conducted in pregnant women in the setting of this study, the Health Center (Puskesmas) Bergas, found that 15 respondents had low anxiety, 12 respondents experienced medium anxiety, and 1 respondent had severe anxiety. The respondents also said that they had been given a counseling, but it was not enough to reduce maternal anxiety, however until now there is no other treatment applied by this health center to overcome anxiety. Thus, this study aims to see the effect of hypnoanxiety on the decrease of anxiety in pregnant mothers during the third semester of pregnancy.

METHODS

Design

This was a Randomized Controlled Trials (RCTs) with pretest-posttest design.

Setting

The study was conducted for four weeks between September – October 2016 in the working area of the Health Center of Bergas Semarang, Indonesia. Intervention was given at home of each respondent.

Sample

Forty respondents were recruited using simple random sampling, which divided into intervention group (20 respondents) and control group (20 respondents). The inclusion criteria for the sample were pregnant women aged 20-35, gestational age 30-36 weeks, no severe depression, no consuming anxiety medication, had history of antenatal care at least 4 times of visits, willing to be

respondent, and based in the working area of the Health Center of Bergas Semarang. Randomization was performed using computerization.

Instruments

The Zung Self-Rating Anxiety Scale (ZSAS) was used to measure anxiety in pregnant women.¹¹ Instrument reliability was 0.87. Anxiety was measured before, two weeks (posttest 1) and four weeks (posttest 2) after intervention.

Intervention

Hypnoanxiety was performed 8 times for 4 weeks or twice a week. It was conducted in each respondent's house, ranged from 30-45 minutes by certified researchers. In this study, the intervention group had been given antenatal care and hypnoanxiety, while the control group was given antenatal care only.

Ethical consideration

Ethical clearance was obtained from the Research Ethics Committee of the Health Ministry Polytechnic Semarang No. 109/KEPK/polytechnic-SMG/ec/2016. This study permission was also obtained from Political Office of Head of Regency (Kesbangpol) Semarang, Department of

Health of Semarang, and the Health Center (Puskesmas) Bergas. Each participant signed an informed consent prior to collecting data. The procedure was explained, particularly about the flow of research and asked the willingness of respondents for 4 weeks without any intervention force to be given to their respective homes.

Data Analysis

To determine the effect on anxiety hypnoanxiety, data were analyzed using Mann Whitney test and Kruskal Wallis test.

RESULTS

Characteristics of the respondents

Table 1 shows that the characteristics of the respondents in the control and intervention groups were mostly 25-26 years old, having 32 weeks of gestational age, working, senior high school background, and the same level of knowledge. Levene's test showed that all of variables between the control and intervention group were homogenous with p-value > 0.05, which indicated that there was no difference in characteristics of the respondents between both groups.

Table 1 Characteristics of the Respondents Based on Age, Gestational Age, Education, Working Status, and Knowledge

Variable	Group	Mean	SD	Median	P-value
Age (year)	Control	25.30	2.13	25	0.150*
	Intervention	26.20	2.60	25	
Gestational Age (Week)	Control	31.30	2.13	31	0.661*
	Intervention	31.95	2.06	32	
Knowledge	Control	13.70	2.79	15	0.221*
	Intervention	13.00	3.22	13	
Education		Basic (%)	Senior High (%)	University (%)	
Control		15	70	15	0.830*
Intervention		25	65	10	
Working Status		Working (%)	Not Working (%)		
Control		65	35		0.555*
Intervention		70	30		

*Levene's test

Table 2 Difference of Anxiety Level in Pregnant Women

Time of measurement	Intervention						Control						P-value
	Moderate		Mild		No Anxiety		Moderate		Mild		No Anxiety		
	N	%	N	%	N	%	N	%	N	%	N	%	
Pretest	16	80	4	20	0	0	15	75	5	25	0	0	0.708
After two weeks	10	50	10	50	0	0	14	70	6	30	0	0	0.202
After four weeks	5	25	8	40	7	35	12	60	8	40	0	0	0.004*

Mann Whitney test *p-value <0.05

Table 3 Effect of Hypnoanxiety on The Level of Anxiety Before and After Intervention

Category	Mean	P-value	
Control Group			
Anxiety level Posttest 1	3.85	0.000*	
Anxiety Level Posttest 2	3.58		
Intervention group			
Anxiety level Posttest 1	3.38		
Anxiety Level Posttest 2	2.00		

Friedman test *) p-value <0.05

Table 2 shows that there was no difference in the level of anxiety between intervention and control group in pretest and posttest after two weeks with p-value > 0.05. However, after four weeks, there was a decrease of the level of anxiety in the intervention group, which only 25% of respondents had moderate anxiety, 40% of mild anxiety, and 35 % of respondents had no anxiety. While in the control group, 60% of respondents had moderate anxiety, 40% of mild anxiety, and 0% had no anxiety, with p-value 0.005, which indicated that there was mean difference of anxiety level between intervention and control group.

While Friedman test in the table 3 shows that there was a significant effect of Hypnoanxiety in the level of anxiety in the intervention group with p-value 0.000. It could be seen the significant difference between the anxiety level in the posttest 1 and posttest 2. However, there was also a decrease of the level of anxiety in the control group, but it was just slightly different.

DISCUSSION

In this study, the characteristics of the respondents were also examined based on the age, gestational age, level of education, working status, and knowledge whether their characteristics had an effect on the anxiety

level in pregnant women. Table 1 shows that only the knowledge had a significant influence on the level of anxiety in pregnant women.¹² This is in line with the theory indicated that knowledge can improve the control of emotions, increase the independence, self-esteem, and endurance, and can assist clients in adapting to the disease which will ultimately improve the quality of life.¹² However, there were no significant effects of the other characteristics (age, gestational age, level of education, working status) on the level of anxiety in pregnant women in this study.

Finding in this study revealed that there was a significant effect of hypnoanxiety on the level of anxiety in pregnant women. This proves that relaxation during hypnoanxiety could decrease anxiety, which is line with the previous study indicated that there was a significant difference in the anxiety level after given hypotherapy.^{10,13}

During hypnoanxiety, the respondents were demanded naturally to increase self-calmness and create goodwill or positive suggestions during pregnancy to childbirth. Implanted positive suggestions will be channeled to the brainstem to the thalamus sensor, and that stimulation is formatted in thalamus according to the language of the brain. Stimulation is then transmitted to the

amygdala, hippocampus and cerebral cortex. While in the cerebral cortex, sensory association process occurs in which stimuli is analyzed and compiled into something tangible so that the brain recognizes the objects. The hippocampus plays a role as a determinant or appraiser.¹⁴ Things that we like are considered as an important signal by the hippocampus that is processed into memory. When there is a stimulus, those memories will be stored again. Therefore, it could be said that that pregnant women who follow the techniques of hypnoanxiety always got positive suggestions that entered the mind. Mind and human behavior are dominated by the subconscious mind while the conscious mind in human self-control only amounted to 12%, therefore it is important to instill positive things in the mind.¹⁵ However, it could be emphasized that respondents who get hypnoanxiety will have a state of body becomes very relaxed, quiet, or like a state of sleep but never lost consciousness completely. Hypnoanxiety in this regard also increase the ability of the body to produce “anesthesia” in every part of the body to deal with sleep problems, increase coping, control pain and other symptoms.¹⁶

On the other hand, in hypnotherapy there is a stimulus against the activation system of the brain reticular, which make parasympathetic nervous system lower the pulse, respiration, and blood pressure; control the feelings, emotions and stress. Relaxation in hypnotherapy also inhibits the increase in the sympathetic nerve.¹⁷ Thus, the whole body begins to function at a level more healthy with more energy for healing (healing), reinforcement (restoration), and renewal (rejuvenation).¹⁷

CONCLUSION

Based on the findings of this study, it could be concluded that there was a significant effect of hypnoanxiety on the level of anxiety in pregnant women. It is suggested that hypnoanxiety could be one of the alternative therapies to reduce the anxiety among pregnant women. This could be considered to be included in the standard of midwifery care. Further study is needed to include primipara

and multipara mothers to strength the generality.

Declaration of Conflict of Interest

None declared.

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Authorship Contribution

The authors contributed equally in this study.

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