



The Effect of Positive Affirmation Through the 'Arunika' Card on the Anxiety level of First Stage of Labor

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Abstract. This study aims to analyze the effect of giving Positive affirmations through 'Arunika' card to anxiety level of women in the first stage of labor. Methods: This type of research is Pre-Experimental Design (Nondesign) using a one group pretest-posttest design. The population was 34 mothers giving birth and a sample of 31 mothers was obtained. The independent variable is positive affirmations and the dependent variable is the level of anxiety. Anxiety level measurement using the Zung Self-Rating Anxiety Scale questionnaire. Data analysis used the Wilcoxon signed ranked test. Results: Before being given treatment, almost half (36%) of the respondents experienced mild anxiety, most respondents (61%) experienced moderate anxiety, and a small proportion of respondents (3%) experienced severe anxiety. After being given treatment, it was found that almost all respondents (87%) experienced mild anxiety, and a small number of respondents (13%) experienced moderate anxiety. Results of data analysis obtained through the Wilcoxon Signed Rank Test with a p-value of $0.000 < \alpha (0.05)$. Conclusion: There was an effect of giving positive affirmations through the 'Arunika' card on the anxiety level of mothers in the first stage of labour. The results showed that giving positive affirmations through the 'Arunika' cards had an effect on the anxiety level of mothers in the first stage of labour.

Keywords: Childbirth, Anxiety, Positive Affirmations.

1 Introduction

Childbirth is a physiological event. However, there are still changes both physically and psychologically in the process. In facing childbirth, mothers often experience anxiety, especially in primiparous mothers[1]. The World Health Organization (WHO) states that anxiety in childbirth normally occurs in 12% of women worldwide. Further research was carried out and data was obtained that the incidence of anxiety during childbirth was 8% in Europe, 24% in Australia, 25% in Asia, and 26.9% in America[2]

The Ministry of Health of the Republic of Indonesia stated that out of 373,000 pregnant women, at the time of delivery 28.7% (107,000) experienced anxiety[13].

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T. Triwiyanto et al. (eds.), *Proceedings of the 6th International Conference of Health Polytechnic Surabaya (ICoHPS 2023)*, Advances in Health Sciences Research 72,

https://doi.org/10.2991/978-94-6463-324-5_37

Facts found in the field, 80% of mothers in labor experience anxiety in the first stage. Based on a preliminary study conducted in January 2023 at PMB Lulu Surabaya, out of 5 mothers giving birth, 3 of them (60%) experienced anxiety during the delivery process.

Anxiety experienced by mothers in labor is influenced by internal and external factors. Internal factors include anxiety about pain, physical condition of the mother, and age of the mother. External factors include a history of prenatal care, lack of knowledge about childbirth, mother's occupation, and support from the surrounding environment[3]

Feelings of fear and anxiety are the main factors that cause labor pain and have an impact on the condition of the uterus and cervical dilatation which results in prolonged labour. The fear and anxiety experienced by the mother will cause prolonged labour, inadequate delivery and poor opening [4, 6]. Maternity anxiety that occurs in the long term causes reduced uteroplacental blood flow and oxygenation to the uterus. Then, it can cause fetal hypoxia and increase the fetal heart rate until it reaches an abnormal frequency[5, 7]

There are many ways to reduce anxiety in childbirth, such as doing prenatal yoga, relaxing breathing techniques and positive affirmations[10]. The government has a program called 'Asuhan Sayang Ibu'. The Ministry of Health stated that maternal care is care that respects culture, beliefs and the mother's desire to receive safe care during the birth process. Positioning the mother and family as decision makers, unemotional and supportive. Maternal care refers to the competence of midwives in Indonesia, namely midwives must be able to provide care during labor and birth [8, 9]

Positive affirmations are a collection of positive sentences that are commonly used for self-hypnosis. Positive affirmations, containing sentences of hope that can calm the mother's mind. Positive affirmations are one method that can be used to reduce anxiety[10]. Anxiety in the first stage is the anxiety experienced by mothers who are in labor because they are worried about the condition of the baby when it comes out, labor pain and a pelvis that is too small so that a vacuum extraction procedure is needed[11].

Positive affirmations can be done alone (self-affirmation) or with the help of others. With positive sentences received, it will indirectly indoctrinate the brain and change the perspective or perspective of the mother about the events that are being experienced. This research was conducted to determine the effect of giving positive affirmations through the "arunika" card on the anxiety level of mothers in the first stage of labour

2 Methods

The type of research used was the Pre-Experimental Design (Nondesign) with a one group pretest-posttest design. The population was 34 mothers giving birth in the first stage at PMB Lulu Surabaya from February to April 2023 with a sample of 31 mothers giving birth. The sample was determined using a purposive sampling technique. This study used the Zung Self-Rating Anxiety Scale (ZSAS) questionnaire compiled

by William W. K. Zung, which is a method for assessing a person's level of anxiety. It consists of twenty statements, with the following assessment criteria: never at all worth 1, sometimes experienced a value of 2, often experienced a value of 3, always experienced a value of 4. Data was processed using the PSPP version 1.2.0-g0fb4db Wilcoxon Signed Rank Test with a significance value $\alpha=0,05$.

3 Results

Respondents in this study were mothers giving birth at TPMB Lulu in February-April 2023 with a sample of 31 mothers who experienced anxiety. Characteristics of the majority of mothers (68%) aged 20 to 35 years and most of the mothers (71%) were multigravida mothers.

Table 1. Anxiety level of First Stage of Labor at TPMB Lulu Before Being Given Positive Affirmation

Category	N	%
Mild anxiety	11	36
Moderate anxiety	19	61
Severe anxiety	1	3
Panic	0	0
Total	31	100

Based on Table 1, before being given positive affirmation through the 'arunika' card, the majority (61%) of birth mothers had moderate levels of anxiety.

Table 2. Anxiety level of First Stage of Labor at TPMB Lulu After Being Given Positive Affirmation

Category	N	%
Mild anxiety	27	87
Moderate anxiety	4	13
Severe anxiety	0	0
Panic	0	0
Total	31	100

Based on Table 2, after being given positive affirmation via the 'arunika' card, almost all (87%) of mothers in labor had a mild level of anxiety. Based on Table 3, it can be seen that before being given treatment, almost half (36%) of the respondents experienced mild anxiety, most respondents (61%) experienced moderate anxiety, and a small proportion of respondents (3%) experienced severe anxiety. After being given treatment, it was found that almost all respondents (87%) experienced mild anxiety, and a small number of respondents (13%) experienced moderate anxiety. Results of data analysis obtained through the Wilcoxon Signed Rank Test with a p-value of $0.000 < \alpha (0.05)$.

Table 3. Cross Table of Results of Analysis of the Effect of Giving Positive Affirmation Through the 'Arunika' Card on the Level of Anxiety in Mothers in Birth at TPMB Lulu

Category	Pretest		Posttest		<i>p-values</i>
	n	%	n	%	
Mild anxiety	11	36	27	87	0.000
Moderate anxiety	19	61	4	13	
Severe anxiety	1	3	0	0	
Panic	0	0	0	0	
Total	31	100	31	100	

4 Discussion

4.1 Anxiety Level of First Stage of Labor Before Being Given Positive Affirmation Through the 'Arunika' Card

Anxiety or often called anxiety is a feeling of worry, fear whose cause is uncertain. Anxiety is a reaction to things that are considered threatening, and is something that often occurs with developments, changes, new or unprecedented events, as well as in finding identity and meaning in life[12]. Feelings of fear and anxiety in facing labor are elements that can cause psychological and physical tension, including manifestations of muscle work. In this situation, the hypothalamus will stimulate an increase in stress hormones (adrenaline and non-adrenaline). Increases in adrenaline and non-adrenaline hormones cause dysregulation of the body's bio-chemistry, resulting in physical tension in pregnant women such as increased heart rate, respiratory rhythm, blood pressure, muscle tension (lower back pain), metabolic rate, and stress hormone production. often heard, including fatigue, digestive problems, constipation and swelling[13].

The hypothalamus has a function as a regulator of emotions and fear. If there is an unpleasant event, the hypothalamus will record and store it in the memory system. So, when something similar is about to happen, the hypothalamus releases stress hormones which cause a person to become afraid, anxious, and restless[14]. Research [15] states that age and parity affect the anxiety level of mothers in childbirth. Pregnancy at the age of <20 years is less stable in terms of emotional and not optimal in terms of biology. The mother's mentality is also immature, so it's easy to experience anxiety. Primigravidas have a moderate level of anxiety higher than multigravidas.

This research is also in line with [16] which states that age has a considerable influence on the level of anxiety in mothers. Age 25-30 years is a fairly mature age both physically and psychologically to face childbirth so that the level of anxiety experienced tends to be lighter compared to those aged under 25 years or over 35 years. Based on the results of this study, anxiety is influenced by age and parity of the mother. Because respondents in the age category under 20 years, almost all of them have moderate to severe levels of anxiety. Mothers who are pregnant before the age of 20 are very vulnerable to anxiety due to their unstable physical and mental condition. All primipara respondents had a moderate level of anxiety. This is because primiparous

mothers do not have an idea or experience about childbirth. Thus, there is a lot of fear and the perception that childbirth is a process full of risks. In addition, the influence of the environment and support from the family also affect the level of anxiety in primiparous mothers.

Research [17] states that the higher the parity, the anxiety experienced will decrease. This is not in line with this research because based on the results in the field, the anxiety experienced by mothers is not affected by parity. Mothers with multiparity also have the same risk of experiencing anxiety, especially for mothers who had unpleasant experiences in previous deliveries. If the previous delivery was performed or there were complications, the mother will tend to feel anxious in facing labor. Anxiety can occur due to environmental factors and experiences. The existence of stories and discussions from the environment regarding the frightening and painful birth process makes mothers feel anxious and increases anxiety

4.2 Anxiety Level of First Stage of Labor After Being Given Positive Affirmation Through the 'Arunika' Card

One of the causes of decreased production of endorphins in the body is anxiety. Some studies reveal that endorphins are 200 times stronger than morphine. Calm body conditions can increase the production of endorphins. Relaxation exercises will reverse the effect of stress on the parasympathetic of the central nervous system. Relaxation will inhibit the increase in sympathetic nerves, so that the body's dysregulation hormones are reduced. The parasympathetic nervous system and the sympathetic nervous system, which have opposite functions, cause the work of the internal organs in the body to slow down, then the heart rate will decrease, accompanied by a decrease in breathing rhythm, blood pressure, metabolic rate, muscle tension and inhibited release of stress hormones. Reducing stress hormones makes the body healthier and will experience a process of healing, strengthening and rejuvenation[19, 20]. Research [18] states that anxiety can be reduced when mothers find effective coping and that can be obtained from positive affirmation therapy which makes mothers think positively about their pregnancy. Therefore, coping resources play an important role in solving any anxiety problems that occur.

The decreased level of anxiety is caused by positive signals sent to the hypothalamus. The hypothalamus stimulates the release of more serotonin. The existence of good coping indirectly instills positive value principles in the brain so that the mother feels motivated, brings a sense of comfort, and has a good perception of childbirth. Feelings of calm in the labor process prevent labor jams because feelings of calm make the contractions that occur good and regular. Positive thoughts can get the blood flowing and reduce the anxiety you get from past birth experiences or negative stories and statements from other people. In line with research [21] which states that positive affirmations can improve the work of the parasympathetic nerves, provide a calming effect, stimulate the release of the hormone oxytocin by reducing levels of the hormone cortisol. This intervention improves the condition of the mother and fetus so that they are better prepared both physically and mentally, reduce insomnia, reduce stress, depression and anxiety.

4.3 The Effect of Giving Positive Affirmation Through the 'Arunika' Card on the Anxiety Level of Mothers in the First Stage of Labor

Positive affirmations are a collection of positive sentences that are commonly used for self-hypnosis. Positive affirmations, containing sentences of hope that can calm the mother's mind. There are many ways you can do it, namely saying sentences out loud, writing positive sentences in a journal or diary, or even in the form of cards that you can carry anywhere and can be read whenever you need them[22].

The practice of one-time positive affirmations can facilitate cycles of adaptive potential, in which gains in adaptive functioning reflect multiple positive feedback processes both within the individual and between individuals and social environments. These processes include recursion, where the resolution of the problem further asserts itself which, in turn, promotes the next goal i.e. attainment; interaction, in which the other person's positive response to a self-asserted identity serves to further strengthen that identity; and subjective constructs, when future less pleasant experiences are interpreted in a more friendly way given one's reinforced self-identity. For example, students who use positive affirmations to improve their academic performance experience a boost in the perceived adequacy that is carried forward to future performance; being responded to by others in a way that reinforces their image as an individual capable person; and enter into threatening situations in the future with a reinforced view of their capabilities[23].

Positive affirmations may have a very strong effect on the appreciation system and have something to do with future orientation. The results of this study are in line with previous research showing that increased activity in the ventromedial prefrontal cortex (VMPFC), which plays a role in emotion regulation, control of risk anticipation and fear, is associated with imagining positive rather than negative future events and increases when imagining future rewards. The VMPFC also works with the role of the brain's appreciation system in guiding reinforcement learning and decision-making of future behavior. Past research has shown that the value of transcending the self and having a sense of purpose has great power. For example, affirmation of self-transcending values is more powerful at reducing behavior associated with ego depletion than affirmation of self-improvement values. Results from neuroscientific research suggest a possible link between behavior and research examining appreciative neural activity in response to prosocial (eudaimonic) vs egotistical (hedonic) decisions, which found that ventral striatum (VS) activity differently predicts the likelihood of mental health problems later in life[25].

The positive affirmation intervention has a blend of technical elements including the Neuro Linguistic Program (NLP), Psychoanalysis, and Hypnosis techniques which are carried out during the therapy process. This therapy can solve a person's problems based on the main root of the problem through the Set Up process that will be carried out and can influence the human subconscious by self-suggestion. This technique also applies the principle approach of therapeutic communication techniques that exist in nursing, at the preparatory stage by fostering a relationship of mutual trust and mutual respect, so that the problems and sources of the patient's problems can be identified[26].

This is in line with research[24], which states that positive affirmations have an effect on reducing maternal anxiety. This is because if the mother has positive thoughts it will improve blood flow and can reduce the anxiety that comes from experiences, birth trauma, and negative talk about the birth process. This is also in line with research [15] which states that positive affirmations indirectly provide doctrine to the brain so that one's perspective can change. For mothers in labor, positive affirmations can change perspectives regarding childbirth, and have benefits such as growing self-confidence, preventing depression, increasing comfort, and bringing feelings of happiness.

Research [9] states that giving affirmation therapy can reduce anxiety levels and help mothers to have good self-acceptance and bring a sense of calm in facing labor. This happens because giving affirmative relaxation therapy can change negative perceptions or views into positive ones. However, this research is not in line with research[25]. The study states that giving positive affirmations has no significant effect on reducing anxiety in pre-surgery patients. This happened because when the intervention was given, the patient did not say the sentence repeatedly and continuously.

The principle of giving positive affirmations is to say it repeatedly and interpret each sentence. The more you pronounce and repeat sentences, the easier it will be absorbed by the brain and the positive feeling doctrine will stick more. Positive affirmations also cannot be given at any time. The patient must be completely relaxed. Usually, positive affirmations are given when the patient is going to sleep at night or when he wakes up in the morning. In this study, explanations and 'arunika' cards were given when the mother was not having contractions so that the mother was in a calm condition. When the mother is having contractions, the family also provides support by reading the positive sentences contained in the 'arunika' card to the respondent

5 Conclusion

The anxiety level of mothers in labor before being given positive affirmation through the 'arunika' card was in the moderate to severe category. Almost all of the anxiety levels of mothers in labor decreased after being given positive affirmations through the 'arunika' card. Giving positive affirmations through the 'arunika' card has an effect on the anxiety level of mothers in the first stage of labour. For future researchers, it is hoped that this research can become a reference for learning and can be developed by linking other factors such as the last education and occupation of the respondent and conducting trials on cards first.

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