

The Effectiveness of Hypnotherapy to Reduce Anxiety in Pre-Caesarean Section Women

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ABSTRACT

Background: Anxiety felt by women before delivery with cesarean section can cause psychological problem, increase pain in surgery, increase analgesic needs, and prolong hospital treatment. Hypnotherapy has minimal side effects and is easy to do in reducing anxiety. The purpose of this study was to analyze the effect of hypnotherapy in reducing anxiety in women with pre-cesarean section.

Subjects and Method: This was a randomized controlled trial study conducted at in Karanganyar Hospital, and PKU Muhammadiyah Hospital, Karanganyar, Central Java, from July to August 2019. A sample of 60 women was selected for this study by purposive sampling. 30 subjects of the treatment group received hypnotherapy intervention and 30 subjects of the control group received standard care. The dependent variable was anxiety. The independent variable was hypnotherapy. Anxiety was tested by the Hamilton Rating Scale for Anxiety questionnaire. Hypno-

therapy was done using hypnosis recording/ audio. The data were analyzed by independent t test.

Results: Mean of anxiety after hypnotherapy (mean = 14.17; SD = 4.36) was lower than control group (mean = 19.93; SD = 6.02), effect size = -1.09, and is statistically significant ($p < 0.001$).

Conclusion: Hypnotherapy is effective in reducing anxiety in women before cesarean section.

Keywords: anxiety, hypnotherapy, cesarean section

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BACKGROUND

Nearly one in three women get a cesarean section in developed countries, therefore this operation is the most common type of surgery performed (Hepp et al., 2018).

Although some cases of cesarean section are planned, most patients are afraid to face this procedure which is very significantly related to the level of stress or anxiety for patients (Hepp et al., 2018; Xu et

al., 2017; Schantz et al., 2016).

Caesarean section is associated with adverse psychological consequences for the mother, including postpartum depression (Xu et al., 2017). The psychological response that often occurs in patients undergoing surgery is anxiety. In addition to patients who think about conditions in themselves, they also think about conditions in their babies (Sriningsih and Afriani, 2014).

Feelings of anxiety and fear in the face of childbirth are factors that can cause physical and physical tension that will be manifested in the muscles associated with labor (Imannura et al., 2016). Anxiety is a mental disorder that most often occurs. The prevalence of anxiety disorders was reported at 31%. Unfortunately, this anxiety disorder is very underdiagnosed and poorly treated (Katzman et al., 2014). Anxiety is also associated with increased plasma catecholamine levels and electrolyte imbalance (Sahin et al., 2016).

Childbirth, caesarean birth, and anesthesia can produce anxiety in women. Maternal anxiety has a positive relationship with a higher risk in newborns such as premature birth and low birth weight (Ding et al., 2014). One of the anxiety effects is the lack of exclusive breastfeeding (Field, 2017). There is a positive direct relationship between anxiety and labor pain (Nisa et al., 2018).

Alladin (2016) states that any comprehensive therapy must include both conscious and unconscious therapies such as behavioral therapy, cognitive therapy, psychodynamic psychotherapy, therapy mindfulness and others in the treatment of anxiety disorders.

The key to overcoming anxiety, depression or stress is to adapt to want to change the situation that is being experienced if the coping mechanism is successful then the person will easily adapt to the situation that is felt (Setyadi et al., 2016).

Hypnosis/hypnotherapy receives less empirical attention, but the evidence suggests that it is a very effective treatment method for anxiety and disorders related to anxiety (Daitch, 2018). Hypnotherapy is scientific knowledge and has also been recognized by WHO as a safe way of therapy (Prasetya et al., 2018).

Based on the description above that pre-delivery mother with cesarean section

experience anxiety and given the limited pharmacological intervention options for pre-delivery mothers, the need for low-risk alternatives is needed to approach positively to influence anxiety and stress that arise. In this case, the positive effect of hypnotherapy on anxiety is one of the treatment approaches chosen by authors.

SUBJECTS AND METHOD

1. Study Design

This study is an experimental study using a Randomized Controlled Trial (RCT). It was conducted at Karanganyar General Hospital and the PKU Muhammadiyah Karanganyar Hospital, Karanganyar, Central Java, from July to August 2019.

2. Population and Sample

The population in this study consisted of all women giving birth at the Karanganyar Hospital and Muhammadiyah Karanganyar Hospital, Karanganyar, Central Java, from July to August 2019. A sample of 60 women with pre-cesarean was selected by purposive sampling, divided into two groups.

Inclusion criteria in this study were recorded as a maternity patient with pre-operative cesarean section, can communicate in Indonesian, have the ability to hear within normal limits, have the ability to attend hypnotherapy sessions, are willing to take part in experiments that will be given, and can read and write. Exclusion criteria in this study were preoperative maternity patients but with the emergence or complications of other diseases that require immediate cesarean section (CITO), have obstacles in communication, have psychiatric disorders that interfere with the process of hypnotherapy.

3. Study Variables

The dependent variable in this study is hypnotherapy. The independent variable is women's anxiety ahead of cesarean section.

4. Operational Definition of Variables
Anxiety was defined as a mental state of a

pregnant women whose concerns to their pregnancy. The measurement scale was continuous. Hypnotherapy intervention was defined as the provision of suggestions to mothers in trance/hypnosis conditions, the suggestions given contain advice, invitations, the order is intended to reduce the level of anxiety in maternal preoperative cesarean section. Suggestions are given by authors using suggestion recordings on MP3s or cellular phones that have been prepared. Coding in this study is "Yes" for the treatment group and "No" for the control group, so the scale of the data in this group is the nominal dichotomy included in the categorical data.

5. Study Instruments

Anxiety pre-cesarean patients used HRS-A (Hamilton Rating Scale for Anxiety) which consists of 14 groups of symptoms. Each symptom group was given a rating of 0-4. Measurement of maternal anxiety was done twice on each respondent that was done before and after hypnotherapy in the action group and the control group. Categorizing the data was done based on the pure value of calculating the total score obtained. This study employed a study instrument in the form of

an anxiety questionnaire using Hamilton Rating Scale for Anxiety (HRS-A) to measure anxiety in pre-cesarean patients. Hypnotherapy was conducted by played hypnotherapy audio suggestion/ recording using a headset from a cellular device or MP3.

6. Data Analysis

Mean difference of anxiety in pregnant women before and after the intervention were tested by independent t test run on SPSS 25 program.

7. Research Ethic

This study used an informed consent sheet from the subjects, which is anonymous, and confidential. It has also obtained ethical clearance research from Research Ethics Committee in Dr. Moewardi Hospital, Surakarta, Central Java, with number: 846/ VII/ HREC-/2019.

RESULTS

1. Univariate analysis

The univariate analysis description explained the general characteristics of the sample data of each variable including data on age, parity, education, and occupation. Univariate analysis can be seen in Table 1 and 2

Table 1. The characteristics of continuous data samples

| Group | n | Mean | SD | Min | Max |
|-------------|----|-------|-------|-----|-----|
| Age (years) | 60 | 30.13 | 6.046 | 19 | 45 |
| Parity | 60 | 2.17 | 1.224 | 1 | 5 |

2. The result of bivariate analysis

The bivariate analysis in this study used the independent t test to test the mean difference between the independent and dependent

variables. Test results about the different anxiety levels in the hypnotherapy intervention group and the standard care group are presented in Table 2.

Table 2. The characteristics of categorical data samples

| Variables | n | % |
|------------------|----|------|
| Education | | |
| ES | 14 | 23.3 |
| JHS | 4 | 6.7 |
| SHS | 31 | 51.7 |
| College | 11 | 18.3 |

Employment

| | | |
|---------------|----|------|
| House Wife | 27 | 45 |
| Laborer | 15 | 25 |
| Entrepreneur | 13 | 21.7 |
| Civil Servant | 5 | 8.3 |

Table 3 showed that there was no difference in mean anxiety between the hypnotherapy group and non-hypnotherapy before the intervention, and it was statistically non-significant ($p= 0.892$). These results indicated

that the randomization carried out in allocating into the hypnotherapy group and not hypnotherapy succeeded in making the two groups comparable in the initial anxiety level before the intervention.

Table 3. The results of the t-test mean differences in anxiety in the hypnotherapy group and non-hypnotherapy before the intervention

| Group | n | Mean | SD | p |
|------------------|----|-------|------|-------|
| Hypnotherapy | 30 | 16.77 | 5.64 | 0.892 |
| Non Hypnotherapy | 30 | 16.97 | 5.75 | |

Table 4 showed the mean anxiety in the hypnotherapy group (Mean= 14.17; SD= 4.36) lower than the non-hypnotherapy group (Mean= 19.93; SD= 6.02) and the difference was statistically significant ($p <0.001$).

These findings indicated that hypnotherapy was effective for reducing anxiety in patients with pre-cesarean section. These results came from the Randomized Controlled Trial (RCT).

Table 4. Mean differences of anxiety in the hypnotherapy and non-hypnotherapy groups after the intervention

| Group | n | Mean | SD | p |
|------------------|----|-------|------|--------|
| Hypnotherapy | 30 | 14.17 | 4.36 | <0.001 |
| Non Hypnotherapy | 30 | 19.93 | 6.02 | |

3. Size Effect

The effect of the use of hypnotherapy on anxiety reduction in pre cesarean patients known based on the calculation was equal to -1.09. Based on Cohen's standard effect size value 0.8-2.0 has a high effect. Thus, the use of hypnotherapy has a high influence in reducing anxiety in patients with pre-cesarean section.

levels compared to the control group or the group that only got standard care.

This study can further strengthen the opinion that a program in the mind that has been instilled through affirmation or suggestion in a hypnotic state, can be a trigger for a change that was permanent (Beneditis, 2015). The hypnotic state began by focusing someone's attention, creating a relaxation response through induction and deepening techniques (Daitch, 2018).

The addition of hypnosis substantially increased the therapeutic outcome positively. The average patient who received cognitive behavior oriented hypnosis showed a greater improvement than at least 70% of patients who received non-hipnotic treatment

DISCUSSION

The results of the study used an independent t test to determine the effect of hypnotherapy in the control group and the treatment group. Data Table 2.2 showed that patients who received intervention or patients who received hypnotherapy had lower average anxiety

(Alladin, 2016), Someone who was in a state of hypnosis can significantly improve brain function because that person can access the subconscious mind. So using hypnotherapy the behavior changes can be desired through the subconscious mind (Prasetya et al., 2018).

Kluft (2018) stated that there was a very unique therapeutic relationship in someone who was in a deep phase of hypnosis, they can change and move forward towards new insights incorporated in hypnotic suggestions that were considered by psychoanalytic insights. In the process of induction in someone who has been hypnotized, this pre induction can strengthen beliefs and expectations about what might happen when thinking, feeling, and doing something, thus increasing motivation to respond by involving his imagination in the suggestion given (Lynn et al., 2017).

In the influence of hypnosis, there was a strong inhibition in the cerebral cortex so that the power of analysis, identification and decision making on new stimulation was decreased, past experience cannot be utilized, so words that were suggestive would become a dominant force that would not be able to ignore. This explanation mean that in hypnosis conditions through suggestions that were actively given conditions and behavior in patients both psychic or physiological can be controlled, so that hypnotherapy was able to influence individual perceptions of anxiety so that hypnotherapy can reduce anxiety levels in patients with pre-cesarean section (Prasetya et al., 2018; Iserson, 2014).

Giving suggestions to someone created a sense of comfort, all the anxiety felt as if it turned into happiness in welcoming the baby. As a result, someone who was hypnotized felt comfortable and the level of anxiety in the patient can decrease just before the cesarean section.

Someone who felt comfortable because

of hypnotherapy intervention would have better readiness in doing labor with cesarean section surgery, while in mothers who did not feel comfortable when getting standard care tend to experience feelings of anxiety in approaching Caesarean section. This was because they were more able to think positively by considering and overcoming problems that were felt optimally and following the positive suggestions that have been given.

AUTHOR CONTRIBUTION

Rizka Innayatun Mubarokah as the main author conducted the study intervention, wrote the manuscript, and examined the data. Hanung Prasetya created the hypnotherapy audio instruments. Supriyadi Hari Respati formulating study methods and suggested the materials for discussion.

CONFLICT OF INTEREST

There was no conflict of interest.

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