ABSTRAK HYPNOBIRTHING TERHADAP TINGKAT KECEMASAN DAN LAMA PERSALINAN KALA I


Tujuan: Mengetahui pengaruh hypnobirthing terhadap lama persalinan kala I secara langsung maupun tidak langsung dengan melalui tingkat kecemasan.


Hasil: hypnobirthing berpengaruh signifikan terhadap tingkat kecemasan ibu bersalin, dengan t-hitung sebesar -2,934 dan p sebesar 0,005 (p<0,05). Hypnobirthing berpengaruh signifikan terhadap lama persalinan kala I, dengan t-hitung sebesar -2,016 dan p sebesar 0,048 (p<0,05). Tingkat kecemasan ibu bersalin berpengaruh signifikan terhadap lama persalinan kala I, dengan t-hitung sebesar 2,832 dan p sebesar 0,006 (p<0,05). Hypnobirthing berpengaruh secara tidak langsung terhadap lama persalinan kala I dengan dimeriasi oleh tingkat kecemasan ibu bersalin, dengan Sobel’s Z sebesar -2,0360 dan p sebesar 0,0417(p<0,05).

Kesimpulan: hypnobirthing berpengaruh signifikan terhadap lama persalinan kala I secara langsung maupun tidak langsung dengan melalui tingkat kecemasan.

Saran bidan hendaknya dapat membuat suatu SOP persalinan dengan memasukkan hypnobirthing dalam prosedur penatalaksanaan persalinan.

Kata kunci: Hypnobirthing, Lama Persalinan Kala I, Tingkat Kecemasan Ibu Bersalin.

ABSTRACT

Background: About 10-14% of women are afraid of giving birth. The level of anxiety of pregnant women and mothers giving birth has increased with the Covid-19 pandemic. The level of maternal anxiety has an impact on the length of first stage labor duration. One of the efforts made to reduce maternal anxiety levels and shorten first stage labor duration is through the application of the hypnobirthing program.

The Purpose: To know the effect of hypnobirthing on first stage labor duration, directly or indirectly through the level of anxiety.

Methods: This research is a causal research. The population in this study were mothers giving birth at BPM Midwife Dina Garut. A sample of 60 maternity mothers was taken using purposive sampling. Data was collected by observing for hypnobirthing and first stage labor duration, and the Anxiety Assessment Scale for Pregnant Women in Labor (AASPWL) for the level of anxiety. The analysis technique used is regression and path analysis with Sobel test.

Result: hypnobirthing has a significant effect on maternal anxiety level, with t-count of -2,934 and p of 0,005 (p<0,05). Hypnobirthing has a significant effect on first stage labor duration, with t-count of -2,016 and p of 0,048 (p<0,05). The level of maternal anxiety has a significant effect on first stage labor duration, with t-count of 2,832 and p of 0,006 (p<0,05). Hypnobirthing indirectly affects first stage labor duration by being mediated by the level of maternal anxiety, with Sobel’s Z of -2,0360 and p of 0,0417 (p<0,05).

Conclusion: hypnobirthing has a significant effect on the duration of the first stage of labor, directly or indirectly through the level of anxiety.
INTRODUCTION
Pregnancy and childbirth are significant and positive life experiences for most women. However, about 10-14% of women are afraid of giving birth. Some of these women actively avoid pregnancy, seek termination of pregnancy or try to cause miscarriage (Amidu et al., 2018). Anxiety and depression during pregnancy are experienced by 20%-40% of pregnant women (Araji et al., 2020). Specific and high anxiety during pregnancy is associated with prolonged labor, preterm delivery, low birth weight and unplanned caesarean section (Madhavanprabhakaran et al., 2013). The level of anxiety of pregnant women and mothers giving birth has increased with the Covid-19 pandemic.

Research in China shows that the Covid-19 pandemic poses a major challenge to mental health services for pregnant women (Zeng et al., 2020). Obstetricians in Wuhan and Chongqing China reported a dramatic reduction in attendance and prenatal care births, as well as an increase in caesarean section rates (Liu et al., 2020). A study in Italy revealed that 80% of women fear and anxiety when thinking about childbirth during the Covid-19 pandemic (Ravaldi et al., 2020).

Anxiety and fear can have an impact on the onset of severe pain and also result in decreased uterine contractions, so that labor takes longer (Setiani et al., 2020). The results also show that anxiety has a significant effect on pain levels (Florios & Irion, 2015). Anxiety can also have an impact on increasing adrenaline secretion. The increase in adrenaline has an impact on the contraction of blood vessels so that there is a decrease in the supply of oxygen to the fetus, so that uterine contractions weaken and result in the length of the labor process (Safitri et al., 2019). Several studies have shown that the level of maternal anxiety affects the length of the first stage of labor (Setiani et al., 2020); (Safitri et al., 2019); (Difarissa et al., 2016); (Masruroh, 2015).

One of the efforts to reduce anxiety levels and accelerate the first stage of labor is through hypnobirthing. Hypnobirthing is a program that pays attention to the psychological, physical, well-being of mothers, fathers, newborns, self-empowerment, tranquility at home, tranquility in the hospital, or in the delivery room. Hypnobirthing is about the educational process of childbirth which includes breathing, relaxation, visualizing meditation exercises, paying attention to nutrition and positive body toning (Imannura et al., 2016).

Hypnobirthing aims to reduce or eliminate feelings of fear, panic, tension and other pressures that are a source of maternal anxiety during childbirth (Dona et al., 2016). The hypnobirthing technique helps relax the muscles so that the level of anxiety decreases, and helps the mother feel calmer during the labor process (Sariati et al., 2016). Previous research has shown that hypnobirthing has an effect on reducing maternal anxiety levels (Imannura et al., 2016); (Sariati et al., 2016); (Rahmawati, 2018).

The application of hypnobirthing will also shorten the first stage of labor. The effect of hypnosis to reduce pain is hypothesized to be due to activation of the anterior cingulate cortex, which is associated with decreased perception of pain and discomfort (Downe et al., 2015). Over the years, several studies have also demonstrated the beneficial effects of giving pregnant women self-hypnosis while preparing for labor. The results suggest that hypnosis may have a positive impact on labor pain (Werner et al., 2013). Pain can affect fatigue, fear and stress, and have an impact on weakening uterine contractions so that labor takes longer (Syahda & Ramaida, 2017). Previous research has shown that the application of hypnobirthing has an effect on shortening the length of the first stage (Widiawati, 2019); (Karuniawati & Fauziandari, 2017); (Nuryanti et al., 2017).

The importance of hypnobirthing has caused several health services to hold training for pregnant women who have their pregnancy checked, one of which is the BPM Midwife Dina Garut. Hypnobirthing training is carried out outside of check-up hours, and pregnant women must pay for the training fee. This causes not all pregnant women can do the hypnobirthing training that is held.

This study aims to determine: 1) the effect of hypnobirthing on maternal anxiety levels; 2) the effect of hypnobirthing on the duration of the first stage of labor; 3) the effect of maternal anxiety level on the duration of the first stage of labor; and 4) the indirect effect of hypnobirthing on the duration of the first stage of labor, mediated by the level of maternal anxiety.

RESEARCH METHODOLOGY
Research is causal research. The population in this study were mothers who gave birth at BPM
Midwife Dina Garut. The sample in this study was set at 60 research respondents. The sampling technique used in this study is *purposive sampling*, namely the sample is selected based on certain desired characteristics (Beins & McCarthy, 2012). The sample in the study was determined by the inclusion criteria of primigravida mothers who gave birth at BPM Midwife Dina Garut at the time of the study, gestational age 37-40 weeks, interpretation of fetal weight 2500-4000 grams, head presentation, no KPD occurred, and willing to be research respondents.

Data was collected using observation and questionnaires. Observation was used to collect data on hypnobirthing and the duration of the first stage of labor, with the instrument in the form of an observation sheet. The questionnaire method was used to collect data on maternal anxiety. The questionnaire used was the *Anxiety Assessment Scale for Pregnant Women in Labor* (AASPWL) compiled by Durat et al (2018). The AASPWL instrument is measured by 9 items on a scale of 1 – 5.

The data analysis technique used to test the hypothesis in this study was regression and path analysis using the Sobel Test. Prior to data analysis, the analysis requirements were tested which included normality test, linearity test, and collinearity test.

**RESEARCH RESULT**

**Description of Hypnobirthing Data**

Hypnobirthing data in this study can be described in the table below, namely 37 respondents (61.7 %).

**Table 1**

<table>
<thead>
<tr>
<th>Hypnobirthing</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypnobirthing</td>
<td>37</td>
<td>61.7</td>
</tr>
<tr>
<td>No Hypnobirthing</td>
<td>23</td>
<td>38.3</td>
</tr>
</tbody>
</table>

**Description of Maternal Anxiety Data**

Maternal anxiety data in this study can be described in the following table:

**Table 2**

<table>
<thead>
<tr>
<th>Anxiety</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Moderate</td>
<td>49</td>
<td>81.7</td>
</tr>
<tr>
<td>Severe</td>
<td>11</td>
<td>18.3</td>
</tr>
</tbody>
</table>

**Frequency**

Table 2 shows that most of the respondents experienced mild anxiety, namely 49 respondents (81.7 %).

**Description of the First Stage of Labor Time**

Based on the results of the study, the duration of the first stage of labor can be described in the following table:

**Table 3**

<table>
<thead>
<tr>
<th>Statistics</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>3,5</td>
</tr>
<tr>
<td>Maximum</td>
<td>23</td>
</tr>
<tr>
<td>Mean</td>
<td>10,45</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>4,22</td>
</tr>
</tbody>
</table>

Table 3 shows that the minimum duration of the first stage of labor is 3.5 hours and a maximum of 23 hours with an average of 10.45+4.22 hours. If you look at the research data, all respondents are still in the normal first stage of labor.

**Test Requirements Analysis**

Analysis requirements test is carried out so that the results of data analysis have met the analysis requirements. Test requirements analysis includes data normality test, linearity, and collinearity.

Normality test was performed using the Kolmogorov-Smirnov test. The test was carried out on the variable level of maternal anxiety and the duration of the first stage of labor. The hypnobirthing variable was not tested for normality of distribution because it is a dummy variable. The results of the data normality test are described in the following table:
Variables | KS-Z | p | Mark
--- | --- | --- | ---
Anxiety Level | 0.104 | 0.164 | Normal
Phase I Labor Duration | 0.106 | 0.093 | Normal

Table 4 shows that all research variables have a normal distribution, indicated by the p value > 0.05.

**Linearity Test**

In this study, linearity testing was only carried out on the anxiety level regression model on the duration of the first stage of labor. This is because the hypnobirthing variable is a dummy variable so that it cannot be tested for linearity. Testing is done by using a regression technique. The results of the linearity test are seen in the deviation from linearity line. The results can be summarized in the following table:

<table>
<thead>
<tr>
<th>Regression Model</th>
<th>F</th>
<th>p</th>
<th>Mark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety level towards duration of Phase I Labor</td>
<td>2.528</td>
<td>0.100</td>
<td></td>
</tr>
<tr>
<td>Liniery</td>
<td>15.158</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>Deviation from Liniery</td>
<td>1.476</td>
<td>0.168</td>
<td>Liner</td>
</tr>
</tbody>
</table>

Table 5 shows that the p value for F deviation from linearity is 0.168 (p > 0.05), so it can be concluded that the influence of anxiety levels on the length of the first stage of labor is a linear effect.

**Collinearity Test**

The collinearity test was carried out only on the second regression model, namely the effect of hypnobirthing and anxiety levels on the length of the first stage. The collinearity test for model I was not carried out because it was a simple regression consisting of only one independent variable. Collinearity testing is done by looking at the value of the variance inflation factor (VIF). The results of the collinearity test can be summarized in the table below.

The table below shows that the VIF value is 1.148 (<10), so that in the regression model II there is no collinearity.

<table>
<thead>
<tr>
<th>Variables</th>
<th>VIF</th>
<th>Mark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypnobirthing</td>
<td>1.148</td>
<td>There is no</td>
</tr>
<tr>
<td>Anxiety Level</td>
<td>1.148</td>
<td>co-linearity</td>
</tr>
</tbody>
</table>

**Data Analysis and Hypothesis Testing**

Testing is done using regression and path analysis, and there are 2 regression models. The first model is the effect of hypnobirthing on maternal anxiety, and the second model is the effect of hypnobirthing and maternal anxiety on the duration of the first stage of labor. The results of regression testing in model I can be described in the following table:

<table>
<thead>
<tr>
<th>Model</th>
<th>Coef. Reg.</th>
<th>SE</th>
<th>β</th>
<th>T</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>31.391</td>
<td>0.676</td>
<td>-0.360</td>
<td>46.429</td>
<td>0.000</td>
</tr>
<tr>
<td>Hypnobirthing</td>
<td>-2.526</td>
<td>0.861</td>
<td>-0.360</td>
<td>-2.934</td>
<td>0.005</td>
</tr>
</tbody>
</table>

Dependent variable = Anxiety of labor women

The results of the regression model II can be described in the table as follows:
Table 8
Model II Regression Test Results

<table>
<thead>
<tr>
<th>Model</th>
<th>Coef. Reg.</th>
<th>SE</th>
<th>β</th>
<th>T</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-0.984</td>
<td>4.802</td>
<td></td>
<td>-0.205</td>
<td>0.838</td>
</tr>
<tr>
<td>Hypnobirthing</td>
<td>-2.139</td>
<td>1.061</td>
<td>-0.249</td>
<td>-2.016</td>
<td>0.048</td>
</tr>
<tr>
<td>Anxiety</td>
<td>0.427</td>
<td>0.151</td>
<td>0.349</td>
<td>2.832</td>
<td>0.006</td>
</tr>
</tbody>
</table>

Dependent variable = Phase I Labor

Based on tables 7 and 8, the following hypothesis was tested:

1. The Influence of Hypnobirthing on Maternal Anxiety Levels

Based on the results of the regression model I, the t-count value for the hypnobirthing variable was -2.934 with a p of 0.005. Based on the p value < 0.05, it is concluded that hypnobirthing has a significant effect on maternal anxiety levels. A negative t-count indicates that respondents who do hypnobirthing have lower anxiety than those who do not do hypnobirthing.

2. The Influence of Maternal Anxiety Levels on the First Stage of Labor Duration

Based on the results of the regression model II, the t-count value for the maternal anxiety variable was 2.832 with a p of 0.006. Based on the p value < 0.05, it was concluded that the level of maternal anxiety had a significant effect on the duration of the first stage of labor. A positive t-count value indicates that the heavier the level of maternal anxiety, the longer the first stage of labor.

Table 9
The results of the Sobel Test The Effect of Hypnobirthing on the First Stage of Labor Time Through Maternal Anxiety Levels

<table>
<thead>
<tr>
<th>Unstandardized coefficient of IV -&gt; Mediator (a)</th>
<th>-2.526</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stand error of IV -. Mediator (se a)</td>
<td>0.861</td>
</tr>
<tr>
<td>Unstandardized coefficient of M -&gt; DV with IV in eqn (b)</td>
<td>0.427</td>
</tr>
<tr>
<td>Stand error of M -. DV with IV in eqn (b)</td>
<td>0.151</td>
</tr>
</tbody>
</table>

Two-tailed p value

<table>
<thead>
<tr>
<th>Sobel’s z</th>
<th>-2.0360</th>
<th>0.0417</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aroian’s z</td>
<td>-1.9773</td>
<td>0.0480</td>
</tr>
<tr>
<td>Goodman’s z</td>
<td>-2.1002</td>
<td>0.0357</td>
</tr>
</tbody>
</table>

3. The Effect of Hypnobirthing on the First Stage of Labor Indirectly Through the Anxiety Levels of Maternity Mothers

Based on the results of the regression testing of model I and model II, Sobel test calculations can be carried out, and the results can be described in the table as follows:

Sobel test results obtained Sobel's Z value of -2.0360 with a p of 0.0417. Based on the p value < 0.05, it was concluded that hypnobirthing had a significant indirect effect on the duration of the first stage of labor through maternal anxiety levels. Giving Hypnobirthing will reduce maternal anxiety levels and further reduce the length of the first stage of labor.

DISCUSSION
The Influence of Hypnobirthing on Maternal Anxiety Levels
The results showed that hypnobirthing had a significant effect on maternal anxiety levels. Maternal mothers who did hypnobirthing had lower anxiety than those who did not do hypnobirthing. The application of hypnobirthing during pregnancy based on research results is also able to reduce the anxiety level of pregnant women (Nainggolan et al., 2021); (Maulida & Wahyuni, 2020); (Marliana et al., 2016); (Martalisa & Budisetyani, 2013); (Haniyah, 2013).

Hypnobirthing is basically an autohypnosis technique (self hypnosis), which is an effort that naturally instills positive suggestions into the soul or subconscious mind in undergoing pregnancy and preparing for childbirth (Kuswandhi, 2014). Fear of pain during labor and the occurrence of complications during labor are factors that cause anxiety. This is also influenced by the parity of pregnant women. The research subjects are primiparas, so they have not had the experience of giving birth, so it has the potential to cause severe anxiety.
In conditions of high anxiety, a relaxation technique is needed that will help mothers give birth to reduce anxiety levels. Mothers giving birth need to instill positive suggestions that will help mothers give birth to relax and prepare themselves better in facing childbirth, so that their anxiety decreases. This is in accordance with the opinion which states that hypnobirthing aims to reduce or eliminate feelings of fear, panic, tension and other pressures that are a source of maternal anxiety during childbirth (Donas et al., 2016).

**The Effect of Hypnobirthing on the First Stage of Labor**

The results showed that hypnobirthing had a significant effect on the length of the first stage of labor. Mothers who gave hypnobirthing had a lower duration of labor in the first stage than those who did not.

Labor pain is one of the factors associated with a long first stage of labor. Pain can affect fatigue, fear and stress, and have an impact on weakening uterine contractions so that labor takes longer (Syahda & Ramaida, 2017). Previous research has shown that the application of hypnobirthing has an effect on shortening the length of the first stage (Widiawati, 2019); (Karuniawati & Fauziandari, 2017); (Nuryanti et al., 2017).

Based on this, reducing pain and mentally preparing the mother for childbirth is an effective effort to reduce the length of the first stage of labor. Through hypnobirthing, labor pain can be reduced, so that it will have an impact on reducing the length of the first stage of labor.

Hypnobirthing is a deep relaxation technique, which is done through slow and deep breathing patterns. Through this relaxation process, endorphins, which are like morphine naturally, will be released automatically by the body, so that it will reduce and even eliminate pain during the labor process. Through this, mothers giving birth can be safer and more comfortable, so they can enjoy the birth process more (Karuniawati & Fauziandari, 2017).

**The Effect of Maternal Anxiety Levels on the First Stage of Childbirth**

The results showed that the level of maternal anxiety had a significant effect on the duration of the first stage of labor. The heavier the level of maternal anxiety, the longer the first stage of labor.

Anxiety and fear are experienced by many mothers giving birth. The anxiety factor is caused by labor pain, fear of possible complications that may lead to death, distrust of health workers, and much more. During a pandemic, maternal anxiety becomes even higher. This is because the fear of being exposed to Covid-19 has the potential to have an impact on the condition of her pregnancy. The fear of being exposed to Covid-19 is also due to the perception in the community that hospitals are the most dangerous places to transmit Covid-19.

Anxiety and fear can have an impact on the onset of severe pain and also result in decreased uterine contractions, so that labor takes longer (Setian et al., 2020). Anxiety can also have an impact on increasing adrenaline secretion. The increase in adrenaline has an impact on the contraction of blood vessels so that there is a decrease in oxygen supply to the fetus, so that uterine contractions weaken and result in the length of the labor process (Safitri et al., 2019). Several studies have shown that the level of maternal anxiety affects the length of the first stage of labor (Setian et al., 2020); (Safitri et al., 2019); (Widiawati, 2019); (Difarissa et al., 2016); (Masruroh, 2015); (Muhidayati et al., 2018).

**The Effect of Hypnobirthing on the First Stage of Labor Indirectly Through the Anxiety Levels of Maternity Mothers**

The results showed that hypnobirthing had a significant indirect effect on the length of the first stage of labor through maternal anxiety levels. Giving hypnobirthing will reduce maternal anxiety level and further reduce the length of the first stage of labor.

Hypnobirthing in labor helps mothers in labor relax to feel comfortable and safe, so they can face and undergo childbirth safely. Through hypnobirthing, maternal anxiety can be reduced. The decreased level of anxiety causes the labor process to run well, so that the first stage of labor becomes faster.

If you look at the results of the study, it is found that hypnobirthing directly also has a significant effect on the duration of the first stage of labor. This means that the level of anxiety in childbirth can directly or indirectly affect the length of the first stage of labor through the level of anxiety.

**CONCLUSION**

The results showed that hypnobirthing had a significant effect on maternal anxiety levels. Maternal mothers who did hypnobirthing had lower anxiety than those who did not do hypnobirthing.
Hypnobirthing has a significant effect on the length of the first stage of labor. Mothers who do hypnobirthing have a lower duration of labor in the first stage than those who do not. The level of maternal anxiety has a significant effect on the length of the first stage of labor. The heavier the level of maternal anxiety, the longer the first stage of labor. Hypnobirthing has a significant indirect effect on the length of the first stage of labor through the level of maternal anxiety.

SUGGESTION
Based on the results of the research above, hypnobirthing should be given during pregnancy and applied at the time of delivery under the guidance of a midwife, especially for primiparous mothers who are more at risk of experiencing severe anxiety. Midwives should also be able to provide an overview of the healthy delivery process to primigravida mothers during ANC, so that mothers have good mental readiness so that they are not expected to experience severe anxiety during the delivery process. Through this, it is hoped that the first stage of labor can be lived in a shorter time.

REFERENCES


