



Hypnoprenatal reduces anxiety and stress in high-risk pregnancy in North Tapanuli District

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ABSTRAK

Latar Belakang : Kehamilan berisiko tinggi dapat menyebabkan komplikasi pada ibu dan janin selama masa kehamilan, persalinan dan nifas dibandingkan dengan kehamilan normal. Faktor risiko tinggi pada ibu hamil dapat meningkatkan ansietas dan stress pada masa kehamilan yang berpengaruh pada proses persalinan dan prediktor depresi pasca persalinan. Pada saat kehamilan, stres dapat meningkatkan risiko memiliki bayi prematur, bayi dengan berat lahir rendah. Hypnoprenatal merupakan suatu metode komunikasi efektif untuk memasukkan sugesti positif ke dalam pikiran bawah sadar ibu hamil untuk mengurangi ansietas dan stress pada kehamilan.

Tujuan: untuk mengetahui pengaruh intervensi hypnoprenatal terhadap ansietas dan stress pada ibu hamil berisiko tinggi di Kabupaten Tapanuli Utara.

Metode : penelitian ini menggunakan pre-eksperimen dengan desain one group pre-test post-test Sampel diambil dengan metode purposive sampling, berdasarkan kriteria inklusi diperoleh sebanyak 36 orang ibu hamil berisiko tinggi yang mengalami kecemasan dan stress. Intervensi hypnoprenatal dilakukan selama 3 hari, sebanyak dua kali sehari kemudian dilakukan observasi dan wawancara menggunakan kuesioner DAS 42. Analisis data menggunakan uji paired t-test.

Hasil : penelitian diketahui karakteristik responden berdasarkan umur mayoritas adalah >35 tahun (44,7%), pendidikan menengah (33,3%), pekerjaan petani (52,8%), primigravida (17%), kehamilan berisiko tinggi (72,7%) dan risiko rendah (27,8%). hasil uji statistik terdapat perbedaan dan penurunan tingkat ansietas dan stress pada ibu hamil berisiko sebelum dan sesudah intervensi hypnoprenatal p-value 0,000 ($p < 0,05$).

Kesimpulan : hypnoprenatal berpengaruh signifikan terhadap tingkat ansietas dan stress ibu hamil berisiko. Disarankan bagi ibu hamil agar dapat menerapkan hypnoprenatal untuk membantu mengurangi ansietas dan stress selama kehamilan yang berpengaruh pada kondisi psikologis ibu.

KATA KUNCI: hypnoprenatal; kehamilan risiko tinggi; ansietas; stress

ABSTRACT

Background: High-risk pregnancies can cause more complications for the mother and fetus during pregnancy, childbirth, and the puerperium compared to normal pregnancies. High-risk factors during pregnancy can increase worry and stress, which can influence labor and delivery and are risk factors for postpartum depression. During pregnancy, stress can increase the risk of having a premature, low-birth-weight baby. Hypnoprenatal is an effective communication method to incorporate positive suggestions into the subconscious mind of pregnant women to reduce anxiety and stress during pregnancy.

Objectives: to determine the effect of hypnoprenatal intervention on anxiety and stress in high-risk pregnant women in the North Tapanuli District.

Methods: This research method used a pre-experimental method with a one group pre-test post-test design. Samples were taken by the purposive sampling method, which, based on the inclusion criteria, obtained as many as 36 high-risk pregnant women who experience anxiety and stress. Hypnoprenatal intervention was carried out for 3 days, twice a day, and then observations and interviews were carried out using the DAS 42 questionnaire. Data analysis used a paired t-test. The results showed that the characteristics of the respondents based on the age of the majority were >35 years (44.7%), secondary education (33.3%), farmer's work (52.8%), primigravidas (17%), high-risk pregnancies (72.7%), and low risk (27.8%).

Results : The results of the statistical tests showed differences and decreased levels of anxiety and stress in pregnant women at risk before and after the hypnoprenatal intervention, with a p-value of 0.000 ($p < 0.05$).

Conclusions: hypnoprenatal has a significant effect on the level of anxiety and stress among pregnant women at risk. It is recommended that pregnant women use hypnoprenatal techniques to help reduce anxiety and stress during pregnancy, which affects the mother's psychological condition.

KEYWORD : hypnoprenatal; high risk pregnancies; anxiety; stress

Article Info :

Article submitted on April 25, 2023

Article revised on May 28, 2023

Article received on June 24, 2023

INTRODUCTION

A high-risk pregnancy increases the risk of prenatal illness or infant death for both the mother and the unborn child (1). Factors that cause pregnancy risk that is not treated immediately in the mother can threaten safety, and even the worst thing can happen, namely the death of the mother and baby –(2). Pregnancy is a period of growth and development of the intrauterine fetus, which starts at conception and lasts until labor starts. During pregnancy, many physiological changes occur in the body of pregnant women as a form of maternal adaptation, namely physical changes, organ function, changes in the hormonal system, metabolism, and psychological conditions such as anxiety, fear, stress, and depression –(3).

Research shows that about 7% of pregnant women experience depression during pregnancy. This incidence increases in

low- and middle-income countries (4). Prenatal stress can be caused by physical stress or psychosocial stress. This stress can be caused by external factors (external stressors) or from within (internal stressors) of pregnant women. Excessive anxiety can escalate into depression, which can make pregnant women do things that endanger their pregnancy. One of the things that cause stress in pregnant women is the many changes that are felt during pregnancy. These changes can occur in terms of physical, mental, emotional, and social conditions and relationships. Some of these changes may be well received, but several others can potentially cause stress and worry for pregnant women.

Anxiety or depressive disorders, as well as general stress, can occur during pregnancy. However, anxiety that occurs continuously can make you uncomfortable,

causing difficulty sleeping, headaches, a loss of appetite, or excessive eating behavior. Related to the condition of pregnancy, anxiety in pregnant women can increase stress, which affects the growth and development of the fetus in the womb. High levels of stress can stay for a long time and lead to various health problems, such as high blood pressure and heart disease. When you are pregnant, stress can increase your risk of having a premature or low-birth-weight baby. Babies born too soon or too small have a higher risk of health problems than babies born normally. The effect of stress on pregnant women does not only occur in the fetus but can continue and hurt children from infancy to school age. An epidemiological study shows that the stress of pregnancy can increase the rate of spontaneous abortion, fetal malformations, and preterm birth. Toddlers born to mothers with stressful conditions have worse intellectual and language abilities(5)(6).

Psychosocial research on stress during pregnancy conducted on Asian, African, and white races stated that 6% of pregnant women experienced mild stress, 78% experienced severe stress, and 16% experienced no stress at all. Stress during pregnancy is significantly caused by factors such as economic difficulties, household problems, physical violence, medical problems, busy activities, work, and history of complicated pregnancies (7). The level of stress and anxiety increases in at-risk pregnancies, where at-risk pregnancies are pregnancies that can cause harm or complications to the mother and fetus during pregnancy, childbirth, and the puerperium when compared to normal pregnancies. The prevalence of COVID-19 and the nature of the epidemic also increase

worry and anxiety in pregnant women, making them vulnerable to mental and psychological disorders (8). Research by Khoury et al. said that 57% ($t = 17.21$, $p < 0.001$) of pregnant women experienced an increase in clinical depression, 30% ($t = 17.21$, $p < 0.001$) experienced an increase in anxiety, and 19% experienced insomnia, which was higher than that of non-pregnant women(9).

During pregnancy, mothers must also manage their emotional levels effectively, one of which is by using prenatal hypnosis techniques, also known as hypnoprenatal. Hypnosis can be defined as "an animated, altered, and integrated focused state" of consciousness, i.e., controlled imagination" and as "a state of attentive and receptive concentration". which can be activated easily and measurably". It illustrates how, on a subconscious level, thoughts can influence and change the way a person feels about their own body. Hypnosis helps women in the bonding process, as it increases their body awareness and helps them connect with their babies. Hypnoprenatal techniques can even prevent and relieve symptoms of mental disorders, such as depression and anxiety disorders. Hypnoprenatal techniques are even good for dealing with anxiety and stress in pregnant women(10).

According to the results of a location assessment conducted with local midwives, there were approximately 268 at-risk pregnant women in the North Tapanuli Regency area in January-June 2021, and information was obtained that the majority of pregnant women at-risk experienced anxiety in carrying out their pregnancies, where pregnant women felt afraid and worried because the condition of the pregnancy is risky, afraid that the baby will

be unhealthy, and afraid to face childbirth. In addition, during the COVID-19 pandemic, routine pregnancy checks according to a predetermined schedule could not be carried out as usual. So that it cannot be denied that pregnancy and preparation for childbirth during the COVID-19 pandemic, adds anxiety to pregnant women. For this reason, it is very important to make efforts to treat the psychological problems of pregnancy, namely anxiety, with hypnoprenatal technical interventions so that mothers can go through their pregnancy and childbirth comfortably and safely. Based on the background above, the authors are interested in knowing how the influence of hypnoprenatal technique interventions reduces the anxiety level of at-risk pregnant women in the North Tapanuli Regency area.

MATERIALS AND METHODS

In the field, a pre-experimental design with a one-group pretest-posttest design was used. The design of this study aims to determine how much influence hypnoprenatal therapy has on the level of anxiety and stress in high-risk pregnant women. This research was conducted in the area of North Tapanuli Regency. This research was carried out from August to October 2021. The population in this study was all high-risk pregnant women who were examined and documented in the working area of the Situmeang Habinsaran and Sitada-tada Health Centers, North Tapanuli Regency. The sample for this study was high-risk pregnant women who were in the working area of the Situmeang Habinsaran and Sitada-tada Public Health Centers, North Tapanuli Regency. Samples were taken by purposive sampling that met the inclusion

criteria, namely, as many as 36 high-risk pregnant women based on KSPR calculations with anxiety and stress problems. The type of data used is primary data obtained directly from the respondents. Data collection was carried out in three ways: distributing questionnaires before the prenatal hypnosis technique was carried out, including the identity of the respondent and the history of the mother's illness, past pregnancy, and childbirth; performing simple physical and lab examinations to screen for risk factors for pregnancy; and giving the respondent hypnosis techniques consisting of relaxation, deepening, positive affirmations, and termination.

The tools used in this study included informed consent, an anxiety level questionnaire using the Depression Anxiety Stress Scale 42 (DASS 42) method, which had its validity and reliability measured and consisted of 42 statements measuring three scales, namely depression, anxiety, and stress, each of which has 14 statement items. Data were processed and analyzed using the IBM SPSS for Windows version program. 24.0. The paired t-test can determine if the data is normally distributed after tabulating and analyzing it with the paired t-test.

RESULTS AND DISCUSSION

RESULTS

Based on tracing data on pregnant women at the Situmeang and Sitada-tada Health Centers, it was found that 68 third-trimester pregnant women were at high risk. Based on the inclusion criteria, some did not meet the sample criteria, so the total sample of at-risk pregnant women who met the sample criteria and became respondents in this study was 36

high-risk pregnant women who were then observed and assessed for anxiety and stress levels before and after hypnoprenatal. The research data are presented in the table as follows:

Characteristics of Respondents

The characteristics of the respondents studied were age, education, occupation, parity, and risk assessment of pregnancy.

Table 1. Subject characteristics of research (n=36)

Characteristics	Frequency	(%)
Age (Years)		
< 20	9	25.0
20-35	11	33.3
>35	16	44.7
Education		
Elementary School	12	30.6
Senior High School	20	33.3
High School	4	11.1
Profession		
Housewife	3	8.3
Farmer's job	19	52.8
Private	9	25.0
Civil servant	5	13.9
Parity		
Primigravida	17	47.2
Multigravida	8	22.3
Grandemultigravida	11	30.5

Source: Primary data

Based on the univariate analysis of **Table 1** above, it can be seen that the distribution of respondents' characteristics based on age shows that the majority is older than 35 years (44.7%) and minorities are younger than 20 years (25%). Based on education, the majority of respondents had senior high education (33.3%), and a minority had a higher education (11.1%). Based on

their profession, the majority of respondents have a farmer's job (52.8%). Based on the parity of the majority of respondents in the primigravida category (17%).

Anxiety Level of At-Risk Pregnant Women Given Hypnoprenatal

To measure the level of anxiety, the DASS questionnaire is used, and the level of anxiety is known as follows:

Table 2. Anxiety level categories before and after hypnoprenatal intervention

Anxiety Level	Before		After	
	Frequency	(%)	Frequency	(%)
Severe anxiety	2	5.6	0	0
Worried heavy	12	33.4	1	2.7
Moderate anxiety	17	47.2	2	5.6
Worried mild	5	13.8	20	55.5
Not Worried	0	0	13	36.11
Total	36	100	36	100

Source: Primary data

Based on **Table 2**, shows that before doing hypnoprenatal, the majority of respondents (47.2%) were in the moderate anxiety category. After being given hypnoprenatal intervention, the majority of respondents (55.5%) experienced a decrease in the level of anxiety in the mild category in at-risk pregnant women in North Tapanuli

Regency.

Stress Levels in At-Risk Pregnant Women Who Received Hypnoprenatal Care

To measure the stress level, the DASS questionnaire is used, and it is known that the stress level of pregnant women at risk is as follows:

Table 3. Distribution of stress levels in pregnant women at risk before and after hypnoprenatal intervention

Stress Levels	Before		After	
	Frequency	(%)	Frequency	(%)
Severe stress	0	0	0	0
Stress heavy	1	2.7	0	0
Moderate stress	18	50.0	6	16,6
Stress mild	12	33.4	21	58.4
Not stress	5	13.8	9	25.0
Total	36	100	36	100

Source: Primary data

According to **Table 3**, the majority of respondents (50.0%) were in the moderate stress category before doing hypnoprenatal. After being given hypnoprenatal intervention, the majority of respondents (58.4%) experienced a decrease in stress levels in the mild category in at-risk pregnant women in North Tapanuli Regency.

Anxiety and Stress Levels in High-Risk Pregnant Women Before and After Hypnoprenatal Intervention

The following table shows the differences in the outcomes of hypnoprenatal intervention before and after in pregnant women at risk for anxiety and stress:

Table 4. Anxiety and stress levels in high-risk pregnant women before and after hypnoprenatal intervention

Variable		Mean	Standart deviasi	Range	t	sig
Anxiety	Levels	1.444	.773	1.183-1.706	11.218	0.000*
before_after						
Stress	Levels	1.028	.696	0.792-1.263	8.856	0.000*
before_after						

*) Paired t test

Based on the results of the paired t-test on the level of anxiety and stress levels before and after hypnoprenatal, it produced a t-count value of 11.218 and 8.856, which is greater than the t-table value of 1.689, indicating that

there is a significant difference in the average level of anxiety and stress levels of high-risk pregnant women before and after hypnoprenatal implementation. The results of the study show that the standard deviation

value is smaller than the average value, which means that the distribution of the data is even. The difference in these results was indicated by a decrease in anxiety and stress levels after hypnoprenatal implementation in high-risk pregnant women at Sitada-tada Health Center and Situmeang Habinsaran Health Center, North Tapanuli Regency.

DISCUSSION

Characteristics Of High-Risk Pregnant Women With Anxiety And Stress

Based on the results of this study, the majority of pregnant women were at risk in the age group over 35 years (44.7%). Pregnant women who are over 35 years old are among the risk factors that cause anxiety. Women aged 20–35 are physically ready to get pregnant because their reproductive organs are fully formed. Pregnant women who are old enough are also mentally prepared to take care of their pregnancy carefully (11). Pregnant women who are less than 20 years old have feelings of anxiety and fear because their physical condition is not ready, while pregnant women who are more than 35 years old are at higher risk of experiencing obstetric complications and perinatal morbidity and mortality (1). Severe anxiety experienced by young pregnant women (20 years old) can affect perceptions so that a person tends to focus on something specific and cannot think about anything else. Meanwhile, pregnant women who are old enough experience mild anxiety related to tension in everyday life, which causes an increase in perceptual fields.

Based on education, the majority of respondents had secondary education (33.3%) and a minority had higher education (11.1%). Pregnant women with low education feel more anxious than pregnant women with

higher education. Psychological factors were found to be higher in pregnant women with less than high school education (12). The level of education is related to the reception of information. The educational level of pregnant women greatly influences the level of maternal anxiety. Education can help pregnant women and their families control sources of anxiety, especially during first pregnancies. Education can also influence pregnant women's perceptions and ways of thinking when managing information and making decisions. Anxiety in pregnant women is influenced by the knowledge of pregnant women about their pregnancy. The higher the education of pregnant women, the higher the level of knowledge. Highly educated pregnant women have more knowledge about pregnancy, enabling them to anticipate and deal with anxiety. Meanwhile, low education causes anxiety due to a lack of information. A mother can find out all the health information about herself and the baby in her womb so that she can have a safe and enjoyable pregnancy and prevent anxiety.

The results of this study indicate that based on occupation, the majority of pregnant women work as farmers (52.8%). Work can divert feelings of anxiety experienced by pregnant women because of time-consuming activities so that pregnant women can focus on their work. Pregnant women who have jobs can interact with the community so that they can increase their knowledge about their pregnancy and increase family income to meet their needs during and after childbirth. Occupation can describe a person's economic status, which then can lead to a lack of knowledge in preparing for childbirth. Work can also describe the mother's interaction with

other people so that it influences perceptions, and understanding of preparation for childbirth.

Based on the parity of the majority of respondents in the primigravida category (17%). In the third trimester of primigravida pregnant women, the anxiety experienced is related to childbirth and self- and family readiness. Primigravida is the first pregnancy, so they have no experience with pregnancy and childbirth. This can cause mothers to feel anxious, afraid, and stressed when dealing with pregnancy and childbirth. In addition, anxiety arises because of the fear of losing the baby being born, such as the fear that the baby will die or be born with a disability. Anxiety can also arise due to feelings of inability to meet the needs of the baby to be born, as well as the suspicion that giving birth will hamper daily activities.

The results of the study in **Table 2** show that 19 respondents (52.8%) are in the multigravida category with anxiety. Parity respondents in the multipara category were worried, this was because the mother had experienced childbirth before and had complications in the previous process. So that this experience makes the pregnant woman feel anxious. The same thing was discovered in the findings of a study conducted by Alibasjah et al., which were not much different, namely that in the younger age group, more primigravida third-trimester pregnant women had moderate levels of anxiety, namely as many as 10 respondents (17.2%), and in the third-trimester primigravid group, at a moderate age, more primigravida pregnant women experienced moderate anxiety, namely 17 people (29.3%). Apart from primiparas, there are also respondents with

multigravida and grand multigravida parity (13). This is by Heriani's research, which indicates that the pregnancy experienced by primigravida mothers is their first experience, so the third trimester is felt to be even more anxious because it is getting closer to the delivery process (11). Mothers will tend to feel anxious about their pregnancy and afraid of facing childbirth, considering that ignorance is a contributing factor to anxiety (14). Among mothers who have been pregnant before (multigravida), maybe their anxiety is related to past experiences they have had (4). In general, the anxiety that occurs in women who are about to give birth is caused by the fact that pregnant women have to adjust to physical and psychological changes.

The Anxiety Level of High-Risk Pregnant Women

Based on **Table 2**, it can be seen that after being given hypnopenatal intervention, the majority of respondents (55.5%) experienced a decrease in the level of anxiety in the mild category in at-risk pregnant women in North Tapanuli Regency. Anxiety is a feeling (mood) characterized by physical symptoms such as physical tension and worries about the future. Anxiety can be a feeling of restlessness and cause many visible behaviors, including worry, and restlessness. When pregnant women enter their third trimester, the anxiety they experience is related to childbirth and their own and their families readiness. In addition, anxiety arises because of the fear of losing the baby being born, such as the fear that the baby will die or be born with a disability. Anxiety can also arise due to feelings of inability to meet the needs of the baby to be born, as well as the suspicion that giving birth will hamper daily

activities. During pregnancy, the mother's body goes through many changes. Changes that occur physically and psychologically. Physical changes in pregnant women, often make mothers feel uncomfortable. Hormonal changes in pregnant women affect the mother's psychology. The inability of pregnant women to deal with discomfort due to physiological changes can also make the mother psychologically disturbed. Anxiety is characterized by a sense of unease and apprehension for reasons unknown. According to ADAA (Anxiety and Depression Association of America) data, 52% of pregnant women report increased anxiety or depression during pregnancy. (15)

Anxiety in pregnant women will affect the incidence of disease and complications of pregnancy and childbirth, both for the mother and the baby. Symptoms of anxiety and depression in pregnancy affect 10 to 25% of pregnant women, and if not treated properly, symptoms of depression and anxiety are associated with an increased risk of preterm birth (5). Psychological factors influence the occurrence of disturbances in the delivery process. About 65% of prolonged labor events are caused by inefficient uterine contractions, and inadequate uterine contractions in response to anxiety, thereby inhibiting uterine activity. Because this response is part of the psychological component, it can be stated that psychological factors influence the mother's safety during delivery.

Stress Levels in At-Risk Pregnant Women

In **Table 3**, it is shown that before the intervention was given to risky pregnant women, their stress levels were higher (50.0%). Psychological disorders can be in the

form of anxiety, worry during pregnancy, or facing childbirth, which in turn can cause stress. Anxiety can trigger the body's response both physically and psychologically during pregnancy. The physical response to anxiety causes an increase in the sympathetic nervous system, which secretes the adrenal, thyroid, and pituitary glands into the bloodstream. As a result, the autonomic nervous system activates the adrenal glands, which function to provide energy to the mother and prepare her physically and psychologically. The presence of adrenaline and non-adrenaline hormones causes dysregulation of the body's biochemistry, resulting in physical tension in pregnant women. The impact of this process will result in psychological changes in pregnant women, namely becoming anxious, irritable, unable to concentrate, indecisive, and even wanting to escape from the realities of life (6).

Stress in pregnant women will have an impact on the fetus they contain and also on pregnant women. Stress causes an increase in pressure on arterial blood flow. This causes an increase in the pressure of blood flow to the fetus so that the welfare of the fetus decreases. In stressful situations, there is a release of stress hormones, which can cause premature birth. High levels of stress can stay for a long time and lead to various health problems, such as high blood pressure and heart disease. Prenatal stress can indirectly affect infant development and health by increasing the occurrence of adverse pregnancy outcomes which are themselves predictive of substantial and ongoing challenges for affected preterm labour, preterm delivery, preeclampsia, gestational diabetes. Severe stress appears to have its

greatest impact on birth outcome when it occurs early in pregnancy(16).

Stress can increase risk of having a premature or low-birth-weight baby. Babies born too soon or too small have a higher risk of health problems than babies born normally. The effect of stress on pregnant women does not only occur in the fetus but can continue and hurt children from infancy to school age. An epidemiological study shows that the stress of pregnancy can increase the rate of spontaneous abortion, fetal malformations, and preterm birth. Toddlers born to mothers with stressful conditions have worse intellectual and language abilities (5,6).

Differences in Stress and Anxiety Levels of Pregnant Women at Risk Before and After Hypnoprenatal Intervention

Based on the results of data analysis using the paired t-test, it was found that the p-value was 0.000; <0.05, meaning that there were differences in the levels of stress and anxiety of pregnant women at risk before and after doing hypnoprenatal. Based on the results of research on maternal anxiety before and after participating in hypnoprenatal, it has decreased. This is inline with the research results of Sedighe Vahdat et al., who discovered that hypnosis significantly reduced stress in pregnant women at risk of preeclampsia ($p = 0.005$).(17)

Third-trimester pregnant women experience anxiety due to physical and psychological changes. Anxiety is a mood disorder characterized by deep and ongoing feelings of fear or worry. Maternal psychosocial stress during pregnancy is associated with risks to maternal health, birth outcomes, as well as adverse health and

behavioral outcomes in offspring. Maternal immune dysregulation, particularly disruption of inflammatory processes, is also implicated in adverse perinatal health outcomes, with the greatest evidence in relation to preterm birth. (18)

Hypnoprenatal therapy improves the mood during pregnancy so that the mother is more relaxed, and comfortable in her pregnancy, and prepares for labor. Anxiety and stress issues are common in pregnant women, especially if they have risk factors; therefore, these anxiety issues must be addressed. One way that can be done is with hypnoprenatal. Hypnoprenatal is an activity that can help a person relax and calm, and the effects of this condition will affect the mother and her environment. Hypnoprenatal techniques are external actions that can influence an individual's internal response. The hypnoprenatal technique is a relaxation technique that originates from oneself in the form of words, short sentences, or thoughts that can make the mind peaceful. Hypnoprenatal is done by imagining yourself in a state of peace and calm and focusing on regulating your breath and heartbeat.

Hypnoprenatal therapy for pregnant women aims to be a diversion, reduce anxiety and pressure, calm the mind, improve sleep quality, help reduce constipation, and make the mother more relaxed. Hypnoprenatal helps mothers relax due to the formation of endorphins, which have a calming effect. Hypnoprenatal affects reducing the level of anxiety in at-risk pregnant women because when doing hypnoprenatal there is an increase in concentration, which makes it easier to regulate breathing, increases oxygen in the blood, decreases the hormone

adrenaline, stimulates endorphins and enkephalins to provide a sense of calm, reduces heart rate, and lowers blood pressure, thereby lowering levels of anxiety. pregnant women's anxiety.

CONCLUSION AND RECOMMENDATION

There were significant differences in the anxiety and stress levels of high-risk pregnant women before and after being given hypnoprenatal ($p < 0,05$) so it can be concluded that hypnoprenatal can reduce anxiety and stress levels in high-risk pregnant women in North Tapanuli Regency. It is hoped that pregnant women can use prenatal hypnosis as an alternative therapy to deal with stress and anxiety during pregnancy.

REFERENCES

1. Saifudin AB. Buku Acuan Nasional Pelayanan Kesehatan Maternal dan Neonatal. Jakarta: Yayasan Pustaka; 2019.
2. Widarta GD, Cahya Laksana MA, Sulistyono A, Purnomo W. Deteksi Dini Risiko Ibu Hamil dengan Kartu Skor Poedji Rochjati dan Pencegahan Faktor Empat Terlambat. *Majalah Obstetri Ginekology*. 2015;23(1):28.
3. Manuaba, IBG. Penyakit Kandungan dan KB Untuk Pendidikan Bidan. Ilmu Kebidanan. 2014;
4. Biaggi A, Conroy S, Pawlby S, Pariante CM. Identifying the women at risk of antenatal anxiety and depression: A systematic review. *Journal Affect Disord* [Internet]. 2016;191:62–77. Available from: <http://dx.doi.org/10.1016/j.jad.2015.11.014>
5. Dunkel Schetter C, Tanner L. Anxiety, depression and stress in pregnancy: Implications for mothers, children, research, and practice. *Current Opinion in Psychiatry*. 2012;25(2):141–8.
6. Buffa G, Dahan S, Sinclair I, St-Pierre M, Roofigari N, Mutran D, et al. Prenatal stress and child development: A scoping review of research in low- and middle-income countries. *PLoS One*. 2018;13(12):1–24.
7. Woods SM, Melville JL, Guo Y, Fan MY, Gavin A. Psychosocial stress during pregnancy. *American Journal Obstetri Gynecology* [Internet]. 2010;202(1):61.e1-61.e7. Available from: <http://dx.doi.org/10.1016/j.ajog.2009.07.041>.
8. Naghizadeh S, Mirghafourvand M. Relationship of fear of COVID-19 and pregnancy-related quality of life during the COVID-19 pandemic. *Archives of Psychiatric Nursing* [Internet]. 2021;35(4):364–8. Available from: <https://doi.org/10.1016/j.apnu.2021.05.006>.
9. Khoury JE, Atkinson L, Bennett T, Jack SM, Gonzalez A. COVID-19 and mental health during pregnancy: The importance of cognitive appraisal and social support. *Journal Affect Disord* [Internet]. 2021;282(August 2020):1161–9. Available from: <https://doi.org/10.1016/j.jad.2021.01.027>
10. Sado M, Ota E, Stickley A, Mori R. Hypnosis during pregnancy, childbirth, and the postnatal period for preventing postnatal depression. *Cochrane Database Syst Rev*. 2012;(6).
11. Heriani. Kecemasan Dalam Menjelang Persalinan. *Jurnal Aisyah: Jurnal Ilmu Kesehatan (JIKA)*. 2016;1(2):01–7.
12. Kahyaoglu Sut H, Kucukkaya B. Anxiety,

- depression, and related factors in pregnant women during the COVID-19 pandemic in Turkey: A web-based cross-sectional study. *Perspectives in Psychiatric Care*. 2021;57(2):860–8.
13. Alibasjah et al. Hubungan Usia Ibu Hamil Trimester 3 Dengan Kecemasan Menghadapi Persalinan Pada Primigravida Di Wilayah Kerja Puskesmas Palimanan Cirebon. *Fakultas Kedokteran Diponegoro*. 2018;19–26.
 14. Rinata E, Andayani GA. Karakteristik Ibu (Usia, Paritas, Pendidikan) Dan Dukungan Keluarga Dengan Kecemasan Ibu Hamil Trimester III Evi Rinata 1 , Gita Ayu Andayani. *Jurnal Ilmiah Ilmu Ilmu Kesehatan*. 2018;16(1):14–20.
 15. Rohan HH SH. *Buku Ajar Kesehatan Reproduksi*. 1st ed. Yogyakarta: Nuha Medika; 2013. 1–367 p.
 16. Coussons-Read ME. Effects of prenatal stress on pregnancy and human development: Mechanisms and pathways. *Obstetric Medicine*. 2013;6(2):52–7.
 17. Sedighe Vahdat et al. The effect of hypnosis on perceived stress in women with preeclampsia. *Journal of Education Health Promotion [Internet]*. 2022;12(February):1–7. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9093662/pdf/JEHP-11-111.pdf>.
 18. Lisa M. Christian. Stress and Immune Function during Pregnancy: An Emerging Focus in Mind-Body Medicine. *Physiology Behavior [Internet]*. 2015;24(1):3–9. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4346221/pdf/nihms622677.pdf>