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Telehealth Relaxation, Is It Really Can Decrease The Level Of Anxiety For Pregnant Women During The Pandemic COVID-19

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ABSTRACT

Coronavirus Disease 19 (COVID-19) pandemic has had a significant impact on human survival. As an effort to prevent the spread of COVID-19, WHO recommends temporarily stopping activities that have the potential to cause crowds. Although pregnancy is generally believed to be an exciting time for most women, some women experience various negative emotions during pregnancy that cause anxiety and depression. Increased symptoms of depression and anxiety can harm pregnant women and developing fetuses. The current COVID-19 pandemic is a stressor with potentially far-reaching consequences for pregnancy and its later phases. This study aims to determine the effect of relaxation through telehealth on the anxiety of pregnant women during the COVID-19 pandemic. The sampling technique used a purposive sampling of 20 pregnant women as the subject. The instruments used in this study were a zoom application for the implementation of telehealth relaxation and an anxiety questionnaire from the Hamilton Anxiety Rating Scale (HARS). The analysis used the Wilcoxon test. The bivariate analysis of the pre-test and post-test values showed p-value = 0.000 (p < 0.05). There is a significant effect of telehealth relaxation on the anxiety of pregnant women.

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INTRODUCTION

Maternal Mortality Rate (MMR) is one of the targets in the third Sustainable Development Goals (SDGs), which is to reduce maternal mortality to less than 70 per 100,000 live births by 2030. The World Health Organization (WHO) states that approximately 295,000 women died during and after pregnancy and childbirth in 2017. Most of these deaths (94%) occur in resource-limited countries, and most are preventable.[1]

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Based on Indonesia Health Profile data in 2018 and 2019, the number of women of childbearing age (WUS) aged 15-49 years has increased from 70,715,592 people in 2018 to 71,149,767 people in 2019. Then the number of pregnant women in the DI Yogyakarta region was 59,540 people with the highest number of pregnant women in the Bantul Regency area of 15,508 people and the lowest being in Yogyakarta City of 3,855 people. The Maternal Mortality Rate (MMR) is likely to have increased because between December 2019-early 2020 there was a Coronavirus Disease 2019 (COVID-19) epidemic that first appeared in Wuhan City, China and spread throughout the country. On February 11, 2020, WHO announced that Coronavirus Disease (COVID-19) was caused by the Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV-2) virus. The virus can be transmitted from person to person and has spread widely in China and more than 190 other countries and territories. On March 12, 2020, WHO declared COVID-19 a pandemic. The first case of COVID-19 was reported in Indonesia on March 2, 2020 as two cases and until March 31, 2020 the cases reached 1,528 cases with 136 deaths. This mortality rate is the highest in Southeast Asia with a percentage of 8.9%. With the declaration of COVID-19 as a pandemic, the Indonesian government has made management efforts by maintaining a safe distance to isolation at home or working from home.[1]

Prenatal stress and anxiety are common conditions experienced by pregnant women during pregnancy who are at risk for premature delivery, fetal growth restriction, and low birth weight (LBW). Anxiety is an emotional state characterized by feelings of fear, tension, increased autonomic nervous activity, and an unclear fear accompanied by feelings of uncertainty, helplessness, isolation, and insecurity. Some health problems caused by maternal stress such as preeclampsia or hypertension due to pregnancy are associated with increased hormone levels.[2] In fact, one of the factors contributing to the Maternal Mortality Rate (MMR) and Infant Mortality Rate (IMR) is the psychological condition of the mother during pregnancy until birth. Pregnant women who are prone to anxiety are high-risk pregnant women. The anxiety of high-risk pregnant women will increase if they are required to undergo treatment related to their pregnancy either in the hospital or at home. If a person feels able to cope with stressors, they will avoid stress. Stress conditions that take place continuously can be manifested into physical and psychological disorders. The psychological disorders that are often experienced by pregnant women are emotional disorders in the form of anxiety. Pregnant women who experience anxiety feel tension and motor hyperactivity such as shaking, nervousness, restlessness, fatigue.[3] The literature review by Isnaini, *et al*. stated that the impact of anxiety during pregnancy that cannot be overcome can affect the psychological condition of mothers who are prone to depression and anxiety symptoms after giving birth. Mothers with severe anxiety tend to give birth to premature babies, with low birth weights, increased risk of asthma, impaired growth and development processes, risk of adverse behavior, and neurodevelopmental disorders.[4]

Relaxation therapy has become the standard intervention for individuals with anxiety disorders, especially pregnant women. Efforts to improve psychological well-being are still rarely carried out. Relaxation is a relaxing and recreational activity characterized by the emergence of a feeling of peace, and freedom from tension, anxiety, and fear. Breathing relaxation plays a role in overcoming anxiety by harmonizing the nervous system.[2,3] Some various ways or methods can be done for relaxation in pregnant women, such as yoga, muscle relaxation, and deep breathing.[5] Research conducted in Tehran City states that the progressive Muscle Relaxation technique in pregnant women is very effective in reducing anxiety levels due to COVID-19.[6] Deep breathing relaxation is a technique to relax muscle tension, this will make pregnant women feel calm and can reduce or eliminate the psychological impact of stress on pregnant women. The results are believed to be by research by Sudaryani, which showed that after the deep breathing relaxation technique the mother would feel comfortable and relaxed.[7] Besides that, the other relaxation

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techniques are progressive muscle relaxation, emotional freedom relaxation, suggestion exercises, music relaxation, and facial relaxation. Various ways to reduce anxiety have proven to be effective, but with the COVID-19 pandemic, there have been many changes in access to health care. The existence of social distancing, isolation, and quarantine causes anxiety and fear to get health services at the hospital, especially for pregnant women even though pregnancy requires ongoing care and counseling from health workers. Online health applications or telemedicine or telehealth are important tools to be able to provide counseling or treatment without the need to meet face-to-face.[8] The study stated that during this pandemic, half of the total respondents chose not to leave the house, and more than half did not visit the doctor because they were worried about their baby's condition and were afraid of being infected with COVID-19. In addition, the majority of respondents amounting to 77.9% of pregnant women are greatly helped when using mobile applications related to pregnancy. 82.8% of respondents were able to learn about normal changes during pregnancy while 29.5% of respondents sought information about pregnancy and childbirth as well as COVID-19.[9] Another study conducted in the western part of Indonesia on parents with children with Autism Spectrum Disorder stated that parents' anxiety levels decreased after an online counseling program was conducted during the COVID-19 pandemic. A total of 15 respondents (32.6%) felt little or no anxiety after online counseling. During online counseling, respondents can share experiences, discuss the anxiety they experience, and can find out how to overcome the anxiety they experience. Mothers also experience more anxiety than fathers.[10] Other studies also state that mothers with ASD children experience severe anxiety.[11] The use of telehealth especially during the COVID-19 pandemic is very useful. In addition to reducing the risk of COVID-19 transmission between patients and health workers, the use of telehealth can also increase work efficiency.[12] Telehealth can minimize in-person visits and face-to-face contact.[13] Therefore, the use of telemedicine or telehealth during the COVID-19 pandemic is highly recommended because of the many benefits that can be obtained, especially for patients who are self-isolating and can reduce morbidity and mortality during the COVID-19 pandemic.[14]

Telehealth quickly became integrated into almost every aspect of obstetrics and gynecology. In most states, doctors, nurses, and other health care providers must be licensed in the country where the patient is located and also need to be trusted in the facility where the patient is located. The provision of health care with telehealth technology to improve the standard of care, not replace the standard of care.[15] The communication facilities used are various, such as telephones, video calls, internet sites, or other sophisticated tools. The main advantage of telemedical services is the use of technology to eliminate distance and geographical restrictions and associated costs, especially for medical services in remote areas where there is a shortage of medical personnel.[16] Evidence shows that telehealth provides comparable outcomes without compromising the patient-physician relationship, increasing patient satisfaction, and increasing patient engagement.[15] Women's views on the use of telehealth applications vary, many women view these applications as a positive experience, but there are also concerns about the use of technology, data reliability, and the ability to inform clinical decision making.[17] The benefits of telehealth programs are reducing the risk of exposure of patients with Covid-19, reducing the amount of PPE (Personal Protecting Equipment) that must be used, as well as the additional social and economic benefits of prenatal care because working from home has increased responsibility in child care. Telehealth is very useful for reducing exposure in patients who are in areas with a high prevalence of the virus. Severe respiratory infections are common in pregnant women with Covid-19.[18] Telemedicine or telehealth is considered to be the right step in efforts to deal with the problems of depression and anxiety of pregnant women due to the COVID-19 pandemic. Given that there are social restrictions, isolation, and quarantine, telemedicine or telehealth can be an option because expert midwives can

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still provide counseling on various existing relaxations clearly even without meeting face to face. In this Covid-19 pandemic, the use of telehealth can improve epidemiological research, disease control, and clinical case management.[19] Several studies state that the use of telehealth during this pandemic has received a positive response and a good level of satisfaction from both health care providers and patients.[20] So this study aims to determine the effect of relaxation through telehealth on the anxiety of pregnant women during the COVID-19 pandemic.

METHOD

This is a quasi experimental study with one group pretest and posttest design. The study was run in 2021. The study was taken place in Yogyakarta City. Telehealth was done using the virtual method by zoom meeting. Every single zoom was conducted for an hour with a pretest before hand and a posttest at the end. A midwife expert took their hand as a trainer. This study will look for the effect of the independent variable and the dependent variable, where relaxation measurements will be carried out on the respondents and investigate the relationship of the variables to the mother's level of anxiety.[21] The sample consisted of second-trimester pregnant women aged between 20-35 years, with a minimum education level of elementary school, having mild, moderate, severe, or panic anxiety, and living in the Special Region of Yogyakarta. The sampling technique used is purposive sampling. The research sample was determined using the sample size formula for a single proportion. Respondents involved in this study were 20 pregnant women. The variables studied consisted of the independent variable, namely relaxation through telehealth, and the dependent variable, namely the anxiety of pregnant women. The instruments used in this study were a zoom application for the implementation of telehealth relaxation and an anxiety questionnaire from the Hamilton Anxiety Rating Scale (HARS). Hamilton's Anxiety Rating Scale (HARS) consists of questions to assess 14 symptoms, namely feelings of anxiety, tension, fear, sleep disturbances, intelligence disorders, feelings of depression, muscle symptoms, sensory symptoms, cardiovascular symptoms, respiratory symptoms, gastrointestinal symptoms, urogenital symptoms, symptoms autonomy, behavior.[22] The bivariate analysis used the Wilcoxon test. This research was carried out after obtaining approval from the Yogyakarta Ministry of Health Poltekkes by obtaining a research ethics letter from the Research Ethics Committee of the Yogyakarta Ministry of Health Poltekkes with the number e-KEPK/POLKESYO/0352/III/2021 dated March 29, 2021.

RESULTS

Characteristics of Respondents

The characteristics of the respondents studied in this study including the last education, area of residence, and parity are presented in Table 1. Based on Table 1, it was found that as many as 6 pregnant women (30%) of the respondents lived in the Yogyakarta City area. Based on education level, most of the respondents, namely 213 pregnant women (55%) took their last education at university. Based on parity data, 11 pregnant women (55%) were primigravida, which means that the mother has no experience or imagination about what will happen in pregnancy and after pregnancy. Univariate analysis was used to compare the research subjects by calculating the frequency and percentage of anxiety levels of pregnant women before and after the intervention. The proportion of anxiety levels of pregnant women aged 20-35 years during the COVID-19 pandemic before being given intervention is shown in Table 2 and after being given intervention is shown in Table 3.

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Table 1 *Frequency Distribution of Respondents based on Characteristics of Pregnant Women aged 20-35 Years*

Respondent Characteristics	Frequency (f)	Percentage (%)
District of residence		
Bantul Regency	5	25
Gunungkidul Regency	2	10
Sleman Regency	5	25
Kulonprogo Regency	2	10
Yogyakarta City	6	30
Total	20	100
Level of education		
Junior High School	2	10
Senior High School	7	35
University	11	55
Total	20	100
Parity		
Primigravida	11	55
Multigravida	9	45
Total	20	100

Table 2 The proportion of Anxiety Levels of Pregnant Women 20-35 years old during the COVID-19 pandemic before and after the intervention was given.

	Pretest		Posttest	
Level of Anxiety	Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)
1st Meeting				
No Anxiety	9	45.0	17	85.0
Mild Anxiety	5	25.0	2	10.0
Moderate Anxiety	4	20.0	0	0
Severe Anxiety	2	10.0	1	5.0
Severe Anxiety	0	0	0	0
Total	20	100	20	100
2nd Meeting				
No Anxiety	11	55.0	19	95.0
Mild Anxiety	4	20.0	0	0
Moderate Anxiety	3	15.0	0	0
Severe Anxiety	2	10.0	1	5.0
Severe Anxiety	0	0	0	0
Total	20	100	20	100
3rd Meeting				
No Anxiety	17	85.0	19	95.0
Mild Anxiety	0	0	0	0
Moderate Anxiety	1	5.0	0	0
Severe Anxiety	2	10.0	1	5.0
Severe Anxiety	0	0	0	0
Total	20	100	20	100
4th Meeting				
No Anxiety	19	95.0	19	95.0
Mild Anxiety	0	0	0	0
Moderate Anxiety	0	0	0	0
Severe Anxiety	1	5.0	1	5.0
Severe Anxiety	0	0	0	0
Total	20	100	20	100

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Based on Table 2, it is known that from the first to the last meeting before the given intervention, there was an increase in pregnant women who did not experience anxiety. The first meeting showed some 9 pregnant women (45%) did not experience anxiety. The second meeting showed that most of the 11 (55%) pregnant women did not experience anxiety. The third meeting showed that for almost all pregnant women, 17 people (85%) did not experience anxiety, and at the last meeting or the fourth meeting almost all pregnant women (95%) did not experience anxiety. After the given intervention, there was an increase from 17 pregnant women (85%) in the first meeting become 19 pregnant women in the second meeting (95%).

Bivariate analysis was conducted to determine the effect of telehealth relaxation on the anxiety of pregnant women by calculating using the Wilcoxon test at the first to fourth meetings. The results of the bivariate analysis can be seen in Table 3.

In this study, 20 respondents actively participated in relaxation meeting activities four times, from the four meetings with different relaxations, showed that there was a significant difference in the level of anxiety of pregnant women with a p-value <0.05. The first meeting shows the mean from 9.47 to 1.50 with a p-value of 0.000 < (0.05) which means there is a significant difference in pregnant women before and after being given relaxation using breath relaxation techniques at the first meeting.

Table 3 *The Effect of Telehealth Relaxation on Pregnant Women's Anxiety during the COVID-19 Pandemic*

Category	*mean*	*Z*	*p-value*
1st Meeting			
Pre-Test 1	9.47	-3.552	0.000
Post Test 1	1.50		
2nd Meeting			
Pre-Test 2	9.50	-3,728	0.000
Post Test 2	0.00		
3rd Meeting			
Pre-Test 3	10.31	-3.483	0.000
Post Test 3	3.00		
4th Meeting			
Pre-Test 4	10.42	-2.803	0.005
Post Test 4	4.38		

DISCUSSION

The age of pregnant women is limited to a healthy reproductive age, which is between 20-35 years. According to Sulistyawati, women between 20-35 years are at a healthy age to reproduce because at that age all reproductive functions are in optimal condition, and can accept pregnancy both physically and psychologically. The reproductive and psychological organs of women the age of fewer than 20 years are not 100% ready to undergo pregnancy and childbirth.[23] Age affects a person's psychology, the older the person the better the level of emotional maturity and ability to deal with various problems.[24] Safe pregnancy and childbirth is the age of 20-30 years, namely at the age of healthy reproduction. Age also determines the level of anxiety, anxiety often occurs in young age groups. The age of pregnant women under 20 years or above 35 years is a high-risk pregnancy age because abnormalities or disturbances in the fetus can occur so which can cause anxiety in the pregnant woman.[25] According to Setyaningrum, age can affect a

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person's psychology. In this case, the higher the age, the higher the level of one's emotional maturity and ability to deal with all existing problems.[26] Yasin stated that the more mature the mother's age, the lower the level of anxiety she will feel because mothers of sufficient/mature age will be better prepared both mentally and physically.[27]

Pregnant women who were respondents in the study (55%) had the last education of tertiary education. According to Notoatmodjo, people who have higher education will respond more rationally than those who are not educated, because they are not able to face a challenge rationally.[28] Hawari stated that the level of education affects the process and ability to think.[29] Parity of pregnant women showed that 11 pregnant women had primigravida parity. This means that most mothers do not have experience or imagination about what will happen during pregnancy and after pregnancy and also relates to the acceptance of pregnant women, that the more experience a mother has, the easier it will be to accept knowledge.

Breath relaxation was carried out at the first meeting and showed that there was a significant difference in pregnant women before and after being given relaxation using breath relaxation techniques at the first meeting. Deep breathing relaxation is a technique to relax muscle tension, this will make pregnant women feel calm and can reduce or eliminate the psychological impact of stress on pregnant women. The results are believed to be by research by Sudaryani, which showed that after the deep breathing relaxation technique the mother would feel comfortable and relaxed.[7]

EFT relaxation (Emotional Freedom Technique) was carried out at the second meeting and resulted in a mean difference from 9.50 to 0.00 with a p-value of 0.000 < (0.05) this indicates that there is an effect of providing relaxation with the EFT technique on the anxiety of pregnant women. Midwives provide encouragement and support so that anxiety becomes lighter with the application of EFT using the tapping technique. Thahir et al stated that when tapping is done, it can stimulate endorphins which will stimulate the hormones serotonin and dopamine so that people feel relaxed.[30]

Judging from the data of the third meeting, it is known that there is a difference in the mean pre-test and post-test from 10.31 to 3.00 and the p-value 0.000 < (0.05). The third meeting carried out relaxation by listening to music techniques. Listening to music can divert attention from excessive anxiety so that it becomes more relaxed and reduces the feeling of stress that is felt. Ratnawati also stated that classical music therapy can reduce anxiety in third-trimester pregnant women. According to Asmara et al, classical music therapy can help relax, reduce stress, and create a sense of security and well-being, so that it can release sadness, make you happy, and help release pain.[31]

The fourth meeting was carried out using relaxation techniques by listening to murottal verses of the Qur'an, the results of the mean difference were from 10.42 to 4.38 with a p-value of 0.005 < (0.05). The implementation is done by listening to Surah Ar-Rahman, this is believed to cause waves that the body will respond to so as to reduce anxiety. In accordance with Qadri and Al Kahel, when listening to the recitation of the Qur'an can repair diseased cells, the waves in the body will respond to the vibrations of the sound heard, then the signal will be sent to the central nervous system. Yuliani also stated that murottal Al Qur'an contains elements of meditation, autosuggestion, and relaxation which will give a calming effect on the body.[32]

There was a significant difference in pregnant women before and after being given relaxation using breath relaxation techniques at the first meeting. Deep breathing relaxation is a technique to relax muscle tension, this will make pregnant women feel calm and can reduce or eliminate the psychological impact of stress on pregnant women. The results are believed to be by research by Sudaryani, which showed that after the deep breathing relaxation technique the mother would feel comfortable and relaxed.[7]

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The COVID-19 pandemic has increased anxiety among pregnant women. Stress or high anxiety in pregnant women can also cause several other problems such as premature labor and preeclampsia.[33] Mothers who experience excessive anxiety during pregnancy are also twice as likely to give birth to babies with low birth weight than mothers who do not experience anxiety, this can occur due to a lack of nutritional intake consumed by the mother.[34] If this happens continuously until the baby is born and the lack of energy needed for both mother and baby can cause stunting.[35]

Pregnant women also feel afraid about how the delivery process will be and the process of caring for the baby and breastfeeding later. Therefore we need a way to reduce stress and anxiety in pregnant women so that the mother's mental health can improve. Not listening to news about COVID-19, reading books, cooking, and doing sports such as yoga or progressive muscle relaxation are some effective ways that can be done to reduce stress and anxiety during the Covid-19 pandemic.[33] Research conducted in Tehran City states that the Progressive Muscle Relaxation technique in pregnant women is very effective in reducing anxiety levels due to COVID-19.[6]

Relaxation methods are more effective in reducing anxiety and pain in pregnant women than other non-pharmacological methods.[36] Apart from being safe and more cost-effective, this relaxation method has a positive impact on the body such as reducing the body's metabolism, and lowering systolic and diastolic blood pressure as well as heart rate. Muscle tension can also be reduced, so the mother can become more relaxed. The parasympathetic nervous system will be active when the body is relaxed which then stimulates the production of endorphins and will have a more relaxing effect on the body. When the body is relaxed, the secretion of the cortisol and adrenocortropin hormone (ACTH) will be inhibited so that the anxiety felt by the mother will decrease or disappear.[37]

Research conducted in the western part of Indonesia on parents with children with Autism Spectrum Disorder stated that parents' anxiety levels decreased after an online counseling program was conducted during the COVID-19 pandemic. A total of 15 respondents (32.6%) felt little or no anxiety after online counseling. During online counseling, respondents can share experiences, discuss the anxiety they experience, and can find out how to overcome the anxiety they experience. Mothers also experience more anxiety than fathers.[10] Other studies also state that mothers with ASD children experience severe anxiety.[11]

During this COVID-19 pandemic, there have been many changes in getting access to healthcare. The existence of social distancing, isolation, and quarantine causes anxiety and fear to get health care in hospitals, especially for pregnant women even though pregnancy requires ongoing care and counseling from health workers. Online health applications or telemedicine or telehealth are important tools to be able to provide counseling or treatment without the need to meet face-to-face.[8] The study stated that during this pandemic, half of the total respondents chose not to leave the house, and more than half did not visit the doctor because they were worried about their baby's condition and were afraid of being infected with COVID-19. In addition, the majority of respondents amounting to 77.9% of pregnant women are greatly helped when using mobile applications related to pregnancy. 82.8% of respondents were able to learn about normal changes during pregnancy while 29.5% of respondents sought information about pregnancy and childbirth as well as COVID-19.[9]

In Indonesia itself, there are still many problems in handling COVID-19, such as the lack of an ICU room for isolation of patients with COVID-19, the lack of availability of medical equipment, as well as the use of telemedicine or telehealth that has not been maximized.[38] Even though the use of telehealth especially during the COVID-19 pandemic is very useful. In addition to reducing the risk of COVID-19 transmission between patients and health workers, the use of telehealth can also increase work efficiency.[12] Telehealth can minimize

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in-person visits and face-to-face contact.[13] Therefore, the use of telemedicine or telehealth during the COVID-19 pandemic is highly recommended because of the many benefits that can be obtained, especially for patients who are self-isolating and can reduce morbidity and mortality during the COVID-19 pandemic.[14]

CONCLUSION

Based on research results, relaxation through telehealth on the anxiety of pregnant women when the COVID-19 pandemic is known that the characteristics of pregnant women are at the age of 20-35 years, with most of them coming from Yogyakarta city, and have a university education level. There is a positive effect of telehealth on decreasing the level of anxiety for pregnant women during the pandemic era.

RECOMMENDATION

This recommendation is intended for policymakers in preventing mental health crises, especially anxiety during the pandemic by facilitating access to mental health services and increasing public knowledge about the importance of relaxation. Midwives are expected to be able to carry out telehealth relaxation in classes for pregnant women and continue to evaluate the implementation of relaxation for future development.

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REFERENCES

1. Susilo A, Rumende CM, Pitoyo CW, et al. Coronavirus Disease 2019: Tinjauan Literatur Terkini. *J Penyakit Dalam Indones*. 2020;7(1):45. doi:10.7454/jpdi.v7i1.415
2. Septianingrum Y. Efektivitas Relaksasi Selama Kehamilan Terhadap Penurunan Stress, Kecemasan Ibu Hamil dan Respon Janin dalam Kandungan. *J Ilm Kesehat*. 2015;8:206-212. doi:10.33086/jhs.v8i2.206
3. Annatagia L, Retnowati S. Pelatihan Relaksasi Bumil Sehat Untuk Menurunkan Kecemasan Ibu Hamil Risiko Tinggi. *J Interv Psikol*. 2010;3:125–48. doi:10.20885/intervensipsikologi.vol3.iss1.art6
4. Isnaini I, Hayati EN, Bashori K. Identifikasi Faktor Risiko, Dampak dan Intervensi Kecemasan Menghadapi Persalinan pada Ibu Hamil Trimester Ketiga. *Anal J Magister Psikol UMA*. 2020;12(2):112-122. doi:10.31289/analitika.v12i2.3382
5. Huang PH. Lessening Anxiety, Panic, and Complacency in Pandemics. *SSRN Electron J*. 2020;(20). doi:10.2139/ssrn.3575101
6. Zendehdel M, Elyasi F, Jahanfar S, Emami-Sahebi A. Effectiveness of progressive muscle relaxation technique on anxiety caused by Covid-19 in pregnant women: A randomized clinical trial. *Neuropsychopharmacol Reports*. 2022;(January):1-8. doi:10.1002/npr2.12241
7. Sudaryani D. Asuhan Keperawatan dengan Teknik Distraksi Relaksasi (Nafas Dalam) untuk Menurunkan Kecemasan pada Ibu Hamil dengan PEB di RSUD Kebumen. *stikes muh gombong*. Published online 2017.
8. Fryer K, Delgado A, Foti T, Reid CN, Marshall J. Implementation of Obstetric Telehealth During COVID-19 and Beyond. *Matern Child Health J*. 2020;24(9):1104-1110. doi:10.1007/s10995-020-02967-7
9. Özkan Şat S, Yaman Sözbir Ş. Use of Mobile Applications by Pregnant Women and Levels of Pregnancy Distress During the COVID-19 (Coronavirus) Pandemic. *Matern Child Health J*. 2021;25(7):1057-1068. doi:10.1007/s10995-021-03162-y
10. Lestari NE, Anindya I. Does online counseling reduce anxiety in parents of children

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ISSN: 2599-3224 (Online), ISSN: 2302-6014 (Print)

with autism spectrum disorders during coronavirus disease 2019 pandemic? *Open Access Maced J Med Sci*. 2021;9:66-70. doi:10.3889/oamjms.2021.6492
11. Padden C, James JE. Stress among Parents of Children with and without Autism Spectrum Disorder: A Comparison Involving Physiological Indicators and Parent Self-Reports. *J Dev Phys Disabil*. 2017;29(4):567-586. doi:10.1007/s10882-017-9547-z
12. Hau YS, Kim JK, Hur J, Chang MC. How about actively using telemedicine during the COVID-19 pandemic? *J Med Syst*. 2020;44(6):108. doi:10.1007/s10916-020-01580-z
13. Leung NHL, Chu DKW, Shiu EYC, et al. Respiratory virus shedding in exhaled breath and efficacy of face masks. *Nat Med*. 2020;26(5):676-680. doi:10.1038/s41591-020-0843-2
14. Monaghesh E, Hajizadeh A. The role of telehealth during COVID-19 outbreak: A systematic review based on current evidence. *BMC Public Health*. 2020;20(1):1-9. doi:10.1186/s12889-020-09301-4
15. Obstetrics & Gynecology. Implementing Telehealth in Practice. *Obstet Gynecol*. 2020;135(2):e73–9. doi:10.1097/AOG.0000000000003671
16. Prawiroharjo P, Pratama P, Librianty N. Layanan Telemedis di Indonesia: Keniscayaan, Risiko, dan Batasan Etika. *J Etika Kedokt Indones*. 2019;3(1):1-9. doi:10.26880/jeki.v3i1.27
17. Reynold RM. Telehealth in pregnancy. *Lancet Diabetes Endocrinol*. 2020;8(6):459-461. doi:https://doi.org/10.1016/S2213-8587(20)30158-3
18. Aziz A, Zork N, Aubey JJ, et al. Telehealth for High-Risk Pregnancies in the Setting of the COVID-19 Pandemic. *Am J Perinatol*. 2020;37(8):800-808. doi:10.1055/s-0040-1712121
19. Zhou X, Snoswell CL, Harding LE, et al. The Role of Telehealth in Reducing the Mental Health Burden from COVID-19. *Telemed e-Health*. 2020;26(4):377-379. doi:10.1089/tmj.2020.0068
20. Andrews E, Berghofer K, Long J, Prescott A, Caboral-Stevens M. Satisfaction with the use of telehealth during COVID-19: An integrative review. *Int J Nurs Stud Adv*. 2020;2. doi:10.1016/j.ijnsa.2020.100008
21. Nursalam. *Metodologi Penelitian Ilmu Keperawatan: Pendekatan Praktis*. Salemba Medika; 2017.
22. Hamilton M. The Assessment of Anxiey States by Rating. *Br J Med Psychol*. 1959;32(1):50-55. doi:https://doi.org/10.1111/j.2044-8341.1959.tb00467.x
23. Sulistyawati A. *Asuhan Kebidanan Pada Masa Kehamilan*. Salemba Medika; 2011.
24. Hurlock EB. *Psikologi Perkembangan: Suatu Pendekatan Sepanjang Rentang Kehidupan*. Gramedia; 1980.
25. Abdurradjak K, Mamengko LM, Wantania JJE. Karakteristik Kehamilan dan Persalinan pada usia <20 tahun di RSUP Prof.Dr. R. D. Kandou Manado Periode I Januari 2013 - 31 Desember 2014. *e-Clinic*. 2016;4(1). doi:10.35790/ecl.4.1.2016.12225
26. Setyanigrum RF, Maryanto S, Sukarno. Hubungan Usia Ibu Primigravida dengan Tingkat Kecemasan Ibu Hamil dalam Menghadapi Persalinan di Wilayah Kerja Puskesmas Pembantu Kandangan Bawen. *Stikes Ngudi Waluyo*. Published online 2013:1-10.
27. Yasin Z, Sumarni S, Mardiana ND. Hubungan Usia Ibu dan Usia Kehamilan dengan Kecemasan Ibu Hamil dalam Menghadapi Persalinan di Polindes Masaran Kecamatan Bluto. *J Univ Muhammadiyah Ponorogo*. Published online 2019:55-61.
28. Notoatmodjo. *Metodologi Penelitian Kesehatan*. Rhineka Cipta; 2014.
29. Hawari D. *Manajemen Stress Cemas& Depresi*. FKU; 2016.

Jurnal Kesehatan Ibu dan Anak Vol.17, No.1, July 2023, pp. 1~11
ISSN: 2599-3224 (Online), ISSN: 2302-6014 (Print)

30. Thahir A, Sulastri, Almurhan. Emotional Freedom Technique. *J Kesehat*. 2014;5(1):84–89. doi:http://dx.doi.org/10.26630/jk.v5i1.71
31. Asmara MS, Rahayu HSE, Wijayanti K. Efektifitas Hipnoterapi dan Terapi Musik Klasik Terhadap Kecemasan Ibu Hamil Resiko Tinggi di Puskesmas Magelang Selatan Tahun 2017. *Urecol*. Published online 2017:329-334. https://journal.unimma.ac.id/index.php/urecol/article/view/1389
32. Al-Kaheel A. *Al-Qur'an The Healing Book*. Tarbawi Press; 2011.
33. Rajeswari S, Sanjeevareddy N. Efficacy of progressive muscle relaxation on pregnancy outcome among anxious indian primi mothers. *Iran J Nurs Midwifery Res*. 2020;25(1):23-30. doi:10.4103/ijnmr.IJNMR_207_18
34. Nasreen HE, Kabir ZN, Forsell Y, Edhborg M. Low birth weight in offspring of women with depressive and anxiety symptoms during pregnancy: Results from a population based study in Bangladesh. *BMC Public Health*. 2010;10. doi:10.1186/1471-2458-10-515
35. Hendraswari CA, Purnamaningrum YE, Maryani T, Widyastuti Y, Harith S. The determinants of stunting for children aged 24-59 months in Kulon Progo District 2019. *Kesmas*. 2021;16(2):71-77. doi:10.21109/KESMAS.V16I2.3305
36. Roykulcharoen V, Good M, Bolton FP. Systematic relaxation to relieve postoperative pain. *J Adv Nurs*. 2004;48(2):140-148. doi:https://doi.org/10.1111/j.1365-2648.2004.03181.x
37. Urech C, Fink NS, Hoesli I, Wilhelm FH, Bitzer J, Alder J. Effects of relaxation on psychobiological wellbeing during pregnancy: A randomized controlled trial. *Psychoneuroendocrinology*. 2010;35(9):1348-1355 doi:10.1016/j.psyneuen.2010.03.008
38. Helmi M, Sari D, Meliala A, Trisnantoro L. What is preparedness and capacity of intensive care service in indonesia to response to covid-19? A mixed-method study. *Open Access Maced J Med Sci*. 2021;9(B):1686-1694. doi:10.3889/oamjms.2021.7626