# PROVISION OF ONLINE MODULE SAFE AND CONVENIENT PREPARATION FOR BIRTH AFFECTS ANXIETY IN PREGNANT MOTHERS

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## ABSTRAK PEMBERIAN MODUL ONLINE PERSIAPAN MELAHIRKAN DENGAN AMAN DAN NYAMAN MEMPENGARUHI KECEMASAN PADA IBU HAMIL

Latar Belakang: Kesiapaan baik fisik maupun mental sangat dibutuhkan oleh ibu dalam menerima kondisi kehamilannya serta dalam menghadapi proses persalinan. Ibu yang tidak mempunyai persiapan untuk melahirkan akan lebih cemas dan ketakutan dalam suatu perilaku diam hingga menangis. Sekalipun peristiwa kelahiran sebagai fenomenal fisiologis yang normal, kenyataanya proses persalinan berdampak terhadap perdarahan, kesakitan luar biasa serta bisa menimbulkan ketakutan bahkan kematian baik ibu ataupun bayinya, oleh karena itu diperlukan konseling yang inovatif dengan menggunakan media modul persiapan persalinan.

Tujuan: diketahuinya pengaruh pemberian modul online tentang persiapan menghadapi persalinan yang aman dan nyaman terhadap kecemasan ibu hamil.

Metode: Desain penelitian yang digunakan dalam penelitian ini adalah menggunakan desain quasi experiment dengan rancangan penelitian one group pretest posttest control desain. Subjek dalam penelitian ini adalah Seluruh ibu hamil yang melakukan ANC di Puskesmas Karang Rejo. Pengumpulan data dalam penelitian ini menggunakan instrumen kuisioner.

Hasil: Ada Perbedaan kecemasan ibu sebelum dan sesudah pemberian modul online tentang persiapan menghadapi persalinan dengan aman dan nyaman terhadap kecemasan ibu hamil dengan pengaruh yang signifikan hasil uji p value( 0,001).

Simpulan: Terdapat Pengaruh pemberian modul online tentang persiapan menghadapi persalinan dengan aman dan nyaman terhadap kecemasan ibu hamil.

Saran : Di harapkan bagi tenaga kesehatan terutama bidan untuk dapat meningkatkan program tentang KIE, KIE dapat dilakukan dengan pemberian modul persiapan persalinan yang aman dan nyaman selama kehamilan khususnya memperhatikan tingkat psikologis/ kecemasan yang dialami ibu, sehingga menurunkan angka kecemasan pada ibu hamil.

Kata kunci: Ibu Hamil, Kecemasan, Modul, Persalinan

#### **ABSTRACT**

Background: Preparedness both physically and mentally is needed by the mother in accepting the condition of her pregnancy and in facing the labor process. Mothers who do not have the preparation to give birth will be more anxious and frightened in a silent behavior to cry. Even if the birth event is phenomenally physiologically normal, the fact that the labor process has an impact on bleeding, excruciating pain and can cause fear and even death of both the mother and the baby, therefore innovative counseling is needed using the media of the delivery preparation module.

Purpose: the influence of giving online modules on preparing for a safe and comfortable delivery against the anxiety of pregnant women.

Method: The research design used in this study is to use a quasi experiment design with a one group pretest posttest control design research design. The subjects in this study were all pregnant women who did ANC at the Karang Rejo Health Center. Data collection in this study using questionnaire instruments.

Results: There was a difference in maternal anxiety before and after the provision of online modules on preparing for labor safely and comfortably to the anxiety of pregnant women with a significant influence of p value test results (0.001).

Conclusion: There is an influence of providing online modules on preparing to face childbirth safely and comfortably against the anxiety of pregnant women.

Advice: It is expected for health workers, especially midwives, to be able to improve the program on KIE, KIE can be done by providing safe and comfortable delivery preparation modules during pregnancy, especially paying attention to the level of psychological / anxiety experienced by mothers, thereby reducing the number of anxiety in pregnant women.

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Keywords: Anxiety, Childbirth, Modules, Pregnant Women INTRODUCTION

Pregnancy and childbirth are physiological, but every woman has a different response to the acceptance of pregnancy and the process of childbirth. Physiological labor process will occur when dilation / opening of the cervix and cause pain in the mother and head of the fetus decreases. This condition will cause stress and anxiety in the mother and will have an impact on the well-being of the fetus and psychologically the mother. (Lowdwermilk, 2013).

Preparedness both physically and mentally is needed by the mother in accepting the condition of her pregnancy and in facing the labor process. Mothers who do not have preparations for childbirth will be more anxious and pay attention to fear in a silent behavior to cry. Even if the birth event is phenomenally physiologically normal, the fact is that the labor process has an impact on bleeding, pain. Extraordinary and can cause fear and even death of both the mother and the baby (Janiwarty & Pieter, 2012).

Government policies and strategies in order to reduce the incidence of childbirth complications in Indonesia through the MPS (Making Pregnancy Safer) program. The expected result of such strategies is to increase the active role of the family during pregnancy and childbirth. Four pillars in the framework of Safe Motherhood have been proclaimed to lower AKI. Antenatal service as a second pillar in addition to consisting of antenatal standard checks also includes antenatal counseling. Antenatal counseling is related to increasing knowledge of pregnant women and their families in order to be able to understand the events of pregnancy, childbirth, nifas, and the risks that may be faced. Antenatal counseling is done to reduce the level of anxiety of pregnant women in preparation for childbirth. (Depkes RI, 2014)

Anxiety facing the maternity process is ranked at the top of the most often experienced by pregnant women in the face of pregnancy and the delivery process is ranked the top most often experienced by pregnant women in the face of pregnancy and childbirth after the gestational age of 28 weeks, namely in the third trimester of pregnancy. In Indonesia there are 373,000,000 pregnant women, while those who experience anxiety in the face of childbirth there are as many as 107,000,000 people (28.7%).(Depkes RI, 2014).

Knowledge, pregnancy preparation, and support will reduce anxiety and increase confidence at the time of delivery. Unfortunately, antenatal

counseling provided by health workers is often not up to standard. This can be due to internal factors of individual health workers, as well as external factors in the form of imbalances in the number of pregnant women with number of health workers. Therefore, the improvement of antenatal counseling must be done through various education. (WHO, 2010)

The education provided can be in the form of counseling or print media. Educational interventions in pregnant women by means of counseling when performing antenatal services proved to be able to increase pregnant women's knowledge of their pregnancy, with the final result in the form of a delivery plan. Print media related to education to pregnant women has also been widely used, such as pamphlets. Pamphlets as an educational medium have been studied to have an influence on the level of knowledge and anxiety of pregnant women. (Catarine et al. 2013) One of the pamphlets that can be developed is a pamphlet on preparing for a safe and comfortable delivery, but due to the Covid-19 pandemic, to minimize the spread of print media is replaced with online media.

The purpose of this study is to know the influence of giving online modules on preparing for a safe and comfortable delivery to the anxiety of pregnant women.

## RESEARCH METHODOLOGY

The research design used in this study is to use a quasi experiment design with a one group pretest posttest control design research design.

The population in this study is all pregnant women who do Antenatal Care at the Karang Rejo Health Center in Tarakan City for the Period May-July 2021. While the sample used is total sampling. With the sampling method, accidental sampling. The research step is done by giving pretest then online modules and posttests using questionnaires. Data analysis using univariate and bivariate analysis with c square test.

### RESULTS OF RESEARCH

Based on research conducted by researchers with a sample number of 53 respondents, the results of research on the Influence of Giving Online Modules on Preparing to Face Childbirth Safely And Comfortably Against Anxiety of Pregnant Women. Here are the results of research on maternal characteristics, anxiety levels of pregnant women and the influence of online modules:

# Characteristics of Respondents Table 1 Distribution of Characteristic Frequency of Pregnant

Characteristics	Sum (n)	Percentage (%)
Gestational Age		
TM I	3	5,7 %
TM II	18	34 %
TM III	32	60,3 %
Last Educations		
Primary School	2	3,8 %
Junior High School	11	20,7 %
Senior High School	33	62,3 %
College	7	13,2%
Employment Status		
Working	15	28,3 %
Not Working	38	71,7 %
Parity		
1	20	37,7 %
2-3	30	56,6 %
>4	3	5,7 %
Age		

< 20 Years Old	22	41,5 %
20-35 Years Old	29	54,7 %
> 35 Years Old	2	3,8 %

# Module Granting Effects Table 2 Women's Anxiety Levels Before Online Module Administration

Anxiety Level	Sum (n)	Percentage (%)
Not Anxious	0	0
Mild Anxiety	30	56,6 %
Moderate Anxiety	23	43,4 %
Severe Anxiety	0	0

Table 3
Women's Anxiety Levels After Online Module
Administration

Tingkat Kecemasan	Sum (n)	Percentage (%)
Not Anxious	39	73,6 %
Mild Anxiety	14	26,4 %
Moderate Anxiety	0	0
Severe Anxiety	0	0

Table 4
The Effect of Giving Online Modules About
Preparing For Childbirth Safely And Comfortably Affects Anxiety In Pregnant Women

Variabel	Pretest	Posttest	p Value	
Tingkat Kecemasan				
Not Anxious	0	39		
Mild Anxiety	30	14	0,001	
Moderate Anxiety	23	0		
Severe Anxiety	0	0		

# **DISCUSSION Characteristics of Respondents**

Based on the results in table 1, it is known that the gestational age of the most respondents was at the gestational age in the third trimester as much as 60.3%. During the pregnancy phase in the last three months, anxiety or anxiety about childbirth reappears. Excessive emotional response (anxiety) in third trimester pregnant women is a serious problem that needs to be intervened immediately. Because this can cause the onset of extensions in labor which can lead to the death of the mother and fetus. The discomfort needs to get emotional support from all family members and health workers, especially midwives.

The last education of mothers is mostly in the

category of high school which is as much as 62.3%. Education is one of the basic human needs that are needed to develop themselves, the higher the level of education a person, the easier it is to receive and develop knowledge.

Education and experience can affect a person's knowledge in the face of childbirth. Education helps mothers to better understand the explanations given. The level of anxiety that the mother feels will increase if she does not understand what happened to her or what was conveyed to her. The level of education is also one of the factors that influence a person's sepsis to more easily rhyme the idea of new technology, where the higher one's education the greater the opportunity to seek treatment to the health service.

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The results of the above study on the employment status of mothers are in the category of mothers not working as much as 71.1%. Socioeconomic society can be one of the factors that affect anxiety. Although the mother knows the labor process well, if she feels that she does not have socio-economic readiness because it does not have costs for the delivery process, it can cause anxiety for those who were originally not anxious and who are already worried will become more anxious.

The number of children that mothers have based on the results of the above research is in the category of mutligravida or mothers who have the number of children 2-3 children 56.6%. Anxiety in primigravida can be caused by feelings of fear of facing labor and not having experience in dealing with childbirth. While in multigravida anxiety can be due to bad experiences in previous labor that result in trauma in the face of childbirth.

The age of mothers in this study was most in the 20-35 year category as much as 54.7%. Age here is also an internal factor that affects the anxiety level of pregnant women. The younger the age the less experience and level of knowledge about pregnancy and childbirth gained, so it can be said that young people are more likely to experience anxiety. Anxiety is allowing people to focus on the important thing and put other things aside, so that a person experiences not selective attention but can do something more if given direction.

## **Module Granting Effect**

Based on tables 2 and 3, there was a significant difference, where before being given the module, respondents stated the level of anxiety in the category of mild anxiety as much as 56.6% and moderate anxiety as much as 43.3%, while after being given an explanation using the module it was known that respondents who experienced moderate anxiety 0, mild anxiety as much as 26.4% and not anxious 73.6%. Anxiety in pregnant women is experienced due to the mother's inappropriate perception of the labor process. Childbirth is perceived as a frightening process and causes excruciating pain. Pain during labor is also one of the factors feared by pregnant women so as to cause anxiety at the time of delivery.

Based on the data of table 4 above with a p value of 0.001 states that there is a significant influence in the provision of modules facing childbirth with maternal anxiety facing childbirth.

Anxiety in the time of delivery can cause serious impacts if not handled properly. The impact of excessive anxiety on pregnant women in the face of childbirth can cause a stalled or long delivery

because the muscles in the birth canal are tense and the fetus will be held in the birth canal so that it can cause complications in the fetus, namely lack of oxygen and if not immediately can help can occur until the death of the fetus.

Antenatal anxiety is considered a risk factor for maternal mental health problems, such as increasing the likelihood of postpartum depression and also babies born to pregnant women with high anxiety will be at greater risk of experiencing behavioral problems in the days of neonates and toddlers.

Providing information or health education with online modules on preparation before delivery both physically and psychically, and information about the labor process that will be faced later can make pregnant women more prepared and more confident in facing the labor process so that anxiety in the face of childbirth can decrease as found in the results of research conducted by researchers.

The use of this module also reduces negative influences such as anxiety and fear often caused by scary stories about pregnancy and childbirth, past labor experiences or due to lack of knowledge about the process of pregnancy and childbirth. This situation needs to be balanced with education about the anatomy and physiology of pregnancy and childbirth to pregnant women.

## **CONCLUSION**

There is an influence on the provision of online modules on preparing to face childbirth safely and comfortably against the anxiety of pregnant women.

## **SUGGESTION**

It is expected for health workers, especially midwives, to be able to improve the program on KIE, KIE can be done by providing safe and comfortable delivery preparation modules during pregnancy, especially paying attention to the level of psychological / anxiety experienced by mothers, thereby reducing the number of anxiety in pregnant women.

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#### REFERENCE

Akgor, U., Fadıloglu, E., Soyak, B., Unal, C., Cagan, M., Temiz, B. E., Erzenoglu, B. E., Ak, S., Gultekin, M., & Ozyuncu, O. (2021). Anxiety, depression and concerns of pregnant women

- during the COVID-19 pandemic. Archives of gynecology and obstetrics, 304(1),125–130. https://doi.org/10.1007/s00404-020-05944-1
- Berle, J. Ø., Mykletun, A., Daltveit, A. K., Rasmussen, S., Holsten, F., & Dahl, A. A. (2005). Neonatal outcomes in offspring of women with anxiety and depression during pregnancy. A linkage study from The Nord-Trøndelag Health Study (HUNT) and Medical Birth Registry of Norway. Archives of women's mental health, 8(3), 181–189. https://doi.org/10.1007/s00737-005-0090-z
- Çankaya, S., & Şimşek, B. (2021). Effects of Antenatal Education on Fear of Birth, Depression, Anxiety, Childbirth Self-Efficacy, and Mode of Delivery in Primiparous Pregnant Women: A Prospective Randomized Controlled Study. Clinical nursing research, 30(6), 818–829. https://doi.org/10.1177/1054773820916984
- Catarine et al, Majalah Obstetri & Ginekologi, Vol. 20 No. 3 September – Desember 2012: 111-116
- Damarsanti, P., Anggraini, R. and Setianingsih (2018) 'Pengaruh Rendam kaki dengan Air Hangat terhadap Tingkat Kecemasan pada Ibu Hamil Trimester III di Puskesmas Pegandon Kendal', NURSCOPE, 4(1), pp. 1– 10
- Depkes RI. 2014. Catatan tentang Perkembangan dalam Praktek Kebidanan. Jakarta : Depkes RI.
- Dunkel Schetter, C., & Tanner, L. (2012). Anxiety, depression and stress in pregnancy: implications for mothers, children, research, and practice. Current opinion in psychiatry, 25(2), 141–148. https://doi.org/10.1097/YCO.0b013e3283503 680
- El-Hosary, E., Abbas Soliman, H. F. and ElHomosy, S. (2016) 'Effect of Therapeutic Massage on Relieving Pregnancy Discomforts', IOSR Journal of Nursing and Health Science, 05(04): 57–64.
- Eva A, Sinar P & Etin R. (2019). The Effect Of Prenatal Massage Towards Anxiety Level Of Third Trimester Pregnant Women In The Work Area Of Cibeureum Public Health Center Tasikmalaya 2019. Midwifery and Nursing Research (MANR) Journal 2(1):28-30
- Habibzadeh, H., Milan, Z. D., Radfar, M., Alilu, L., & Cund, A. (2018). Effects of Peer-Facilitated, Video-Based and Combined Peer-and-Video Education on Anxiety Among Patients Undergoing Coronary Angiography: Randomised controlled trial. Sultan Qaboos

- University medical journal, 18(1), e61–e67. https://doi.org/10.18295/squmj.2018.18.01.0
- Hassanzadeh, R., Abbas-Alizadeh, F., Meedya, S., Mohammad-Alizadeh-Charandabi, S., & Mirghafourvand, M. (2020). Fear of childbirth, anxiety and depression in three groups of primiparous pregnant women not attending, irregularly attending and regularly attending childbirth preparation classes. BMC women's health, 20(1), 180. https://doi.org/10.1186/s12905-020-01048-9
- Ilmiasih, Reni (2014) Pengaruh Teknik Hypnobirthing Terhadap Tingkat Kecemasan Ibu Hamil Pada Masa Persiapan Menghadapi Persalinan. In: Prosiding: Tantangan Profesi Kesehatan Pada Masa Akan Datang. UMM Press, Malang, pp. 93-100. ISBN 978-979-796-284-4
- Janiwarty, Bethsaida dan Pieter, Herri Zan. (2013). Pendidikan Psikologi untuk Bidan. Yogyakarta: Rapha Publishing
- Koc, A. E., Colak, S., Colak, G. V., Pusuroglu, M., & Hocaoglu, C. (2021). Investigating fear of childbirth in pregnant women and its relationship between anxiety sensitivity and somatosensory amplification. Journal of obstetrics and gynaecology: the journal of the Institute of Obstetrics and Gynaecology, 41(2), 217–223. https://doi.org/10.1080/01443615.2020.1732
- Kordi, M., Bakhshi, M., Masoudi, S., Esmaily, H. (2017). Effect of a Childbirth Psychoeducation Program on the Level of Fear of Childbirth in Primigravid Women. Evidence Based Care, 7(3), 26-34. https://doi:10.22038/ebcj.2017.25676.1575
- Kristianti S, Suwoyo & Pratiwi I.(2020). Pengaruh Pendidikan Kesehatan Melalui Media Video Terhadap Kecemasan Menghadapi Persalinan Pada Ibu Primigravida Trimester Iii Di Wilayah Kerja Puskesmas Blabak Kediri. Jurnal Midwifery Update 2(2): 84-92
- Lowdermilk, dkk. 2013. Keperawatan Maternitas edisi 8 buku 1. Jakarta : Salemba Medika.
- Maiko Suto, Kenji Takehara, Yumina Yamane, Erika Ota.(2017). Effects of prenatal childbirth education for partners of pregnant women on paternal postnatal mental health and couple relationship: A systematic review.Journal of Affective Disorders 210.115-121.
- https://doi.org/10.1111/j.1552-6909.2009.01054.x Mojahed, S., Tabatabaei, R. S., Reihani, F., Dehghani, A., & Khavari, F. (2021). The effect

# JKM (Jurnal Kebidanan Malahayati), Vol 8, No.2. April 2022, ISSN (Print) 2476-8944 ISSN (Online) 2579-762X, Hal 400-405

- of education on anxiety of pregnant mothers before amniocentesis. Journal of education and health promotion, 10, 61. https://doi.org/10.4103/jehp.jehp\_862\_20
- Mukhoirotin, M., Rahmat, I., & Siswosudarmo, R. (2015). Pengaruh Pendidikan Kesehatan Terhadap Kecemasan Primigravida Dalam Menghadapi Persalinan. Jurnal Kesehatan Reproduksi, 1(3): 166-174
- Novitasari.T. (2013). Efektivitas Konseling Kelompok Pra-Persalinan untuk Mengurangi Tingkat Kecemasan Primigravida Menghadapi Persalinan. Developmental and Clinical Psychology 2 (2): 62-70. http://journal.unnes.ac.id/sju/index.ph
- Palupi, Fitria H. (2014) Perbedaan Tingkat Kecemasan Ibu Primigravida dengan Multigravida dalam Menghadapi Persalinan Kala I di Rumah Bersalin Ngudi Saras jaten Karanganyar. Jurnal KesMaDaSka 5 (1): 9-13
- Primadevi, Inggit & Yuniarti, Retno. (2021).
  Pengaruh Pemberian Pendidikan Kesehatan
  Terhadap Kecemasan Ibu Hamil pada Masa
  Pandemi Covid-19. Majalah Kesehatan
  Indonesia. (2): 55-61
- Puspitasari, Dian & Kumorojati, Ratih. (2019). pengaruh hypnopregnancy terhadap kecemasan ibu hamil dalam menghadapi persalinan di klinik pratama asih waluyo jati bantul yogyakarta. Jurnal Ilmiah Kesehatan. 8: 32-36

- Rahmadani L, Anggraini S & Mulyani S.(2019).
  Pengaruh Konseling Terhadap Tingkat
  Kecemasan Ibu Primigravida Dalam
  Menghadapi Persalinan Di Bpm Hj. Sri
  Lumintu.Placentum Jurnal Ilmiah Kesehatan
  dan Aplikasinya.7(1):1925. https://doi.org/10.20961/placentum.v7i1.2
  5688
- Ross, L. E., & McLean, L. M. (2006). Anxiety disorders during pregnancy and the postpartum period: A systematic review. The Journal of clinical psychiatry, 67(8), 1285–1298. https://doi.org/10.4088/jcp.v67n0818
- Sari, D. K. and Pantiawati, I. (2013) 'Perbandingan Teknik Masase dan Terapi Musik terhadap Penurunan Kecemasan pada Ibu Bersalin Primipara di Kecamatan Brebes Tahun 2013', Bidan Prada: Jurnal Ilmiah Kebidanan, 4(01), pp. 1–15. http://ojs.akbidylpp.ac.id/index.php/Prada/arti cle/view/33.
- Sinesi, A., Maxwell, M., O'Carroll, R., & Cheyne, H. (2019). Anxiety scales used in pregnancy: Systematic review. BJPsych Open, 5(1), E5. https://doi:10.1192/bjo.2018.75
- Sukmaningtyas, W. and Windiarti, P. A. (2016) 'Efektivitas Endorphine Massage terhadap Tingkat Kecemasan Ibu Bersalin Primippara', Bidan Prada; Jurnal Ilmiah Kebidanan, 7(1), pp. 53–62. https://ojs.akbidylpp.ac.id/index.php/Prada/ar ticle/view/141/129.
- World Health Organization. Antenatal Care in Developing Countries: Promises, Achievements, and Missed Opportunities, An Analysis of Trends, Levels, and Differensials .2010