

Research article

Relationship Between Pregnant Women's Knowledge in the Third Trimester About Childbirth and Readiness to Face Labor in Gumuruh Public Health Center

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Abstract.

In the third trimester, pregnant women start preparing for labor to meet all the needs during pregnancy and childbirth and reduce the risk of complications during labor. Pregnant women need at least four visits during the prenatal period, and there are four aspects of preparation for childbirth: physical preparation, psychological preparation, financial preparation, and cultural preparation. Lack of maternal preparation for childbirth is one of the factors leading to high maternal mortality and infant mortality. Indirect causes of maternal death include delays in decision-making about the risks of childbirth, delays in referral, and delays in treatment. The knowledge possessed by pregnant women will determine the way she thinks about childbirth. The more knowledge the woman has about labor, the more prepared she is to face it, so she can anticipate as early as possible if there is an emergency in the labor process. The objective of this research was to identify the relationship between the level of knowledge of pregnant women in the third trimester about childbirth and the readiness to face labor in the UPT Gumuruh District of Batununggal. This study used a cross-sectional approach with 40 pregnant women respondents; sampling was done using accidental sampling. Out of the 40 pregnant women examined, 36 (90%) had a high level of knowledge, and 4 (10%) had sufficient knowledge. 22 out of the 40 pregnant women (55%) had a good level of readiness, and 18 (45%) had enough readiness. The results showed a relationship between knowledge and readiness (p-value = 0.027). The level of knowledge was related to and affected the readiness of the mother to face labor. Therefore, it is essential for pregnant women, especially in the third trimester, to more actively seek information about pregnancy and labor preparations.

Keywords: pregnant women, readiness, knowledge, childbirth

1. INTRODUCTION

The first three months or first trimester is often considered a period of adjustment; the adjustment a woman does is to adapt to the fact that she is pregnant. Most women feel sad and conflicted about the fact that they are pregnant. The second trimester is often known as the period of good health, during which women feel comfortable and free from normal discomfort during pregnancy [1]. In the third trimester, pregnant women have started preparing for labor to meet all pregnancy and maternal labor needs. One of the

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efforts that can be done to reduce and prevent death is to prepare for labor; pregnant women should prepare for a safe delivery and be prepared in the third trimester of [2].

Pregnant women will need at least four visits during the prenatal period, from the first trimester (K1) of pregnancy until the 14th week of pregnancy. Get standard antenatal care in the second trimester (K2), at 14-28 weeks gestation. Plan at least two visits between the ages of 28-36 weeks of pregnancy and after 36 weeks (K3 and K4) and be aware of signs of labor [3]. In 2017, the number of pregnant women in Indonesia was recorded at around 5,324,562 [4]. The estimated number of pregnant women in Bandung in 2019 in 44,101 pregnant women. The highest pregnancy was in Batununggal District, 112.81% (2,404 visits). The area with the most prominent K4 pregnant women visits coverage is in Batununggal District 112.81% (2,404 visits) [5].

Preparation for labor in childbirth there are four things that need to be prepared, namely: physical preparation, psychological preparation, financial preparation, culture preparation [6]. [4] which includes the preparation of labor, namely questions about who will help help the delivery, where will the mother be giving birth who will help and accompany in labor, the possibility of blood donor readiness if problems arise, transportation methods if referral is needed, and cost support. When the mother is not ready for her pregnancy the mother can experience stress during pregnancy and can experience Postpartum Depressive Syndrom (PDS) or depression that occurs after childbirth and the mother should get help regularly during pregnancy to avoid various kinds of stress [7]. The impact that occurs can the mother experience anxiety can trigger the stimulation of uterine contractions. She can increase blood pressure so that it can trigger the occurrence of preeclampsia and miscarriage.

Lack of maternal preparation for childbirth is one of the factors causing high maternal mortality (AKI) and infant mortality (AKB). The occurrence of maternal death is related to direct and indirect causes. The leading direct causes of maternal death in Indonesia are bleeding, eclampsia and infection. Indirect causes of maternal death are delays in decision-making about the risks of childbirth, referral delays, and treatment delays. As for four too, too old pregnant (> 35 years), too young to get pregnant (< 20 years), too much (> 4 children), too close (distance between births < 2 years) [8]

Preparation of labor is essential to be prepared during pregnancy and childbirth because the mother's preparation to give birth can reduce the mortality rate of mother and baby. Factors related to labor preparation: Age, social support, economics, knowledge, education, parity according to research [9][10] Age factors, an age that sufficiently affect a person's maturity level and way of thinking, thus making a person motivated to get their pregnancy checked [6]. The age that is considered the safest to undergo

pregnancy and childbirth is the age of 20-35 years because the physical condition is in top condition. While women aged 35 years are classified in a risky pregnancy. The results of this study are different from the results of Riska Rahmadani's research with the title of factors related to the readiness of childbirth in the Health Center Banguntapan II Bantul Yogyakarta which says that knowledge has no relationship with birth readiness. The difference between this study and the riska rahmadani study in this study did not pay attention to factors of parity, income, and social support.

According to research [11] The relationship of knowledge of pregnant women about childbirth with readiness to face labor in the third trimester at Umbulharjo I Yogyakarta Health Center with knowledge results has a relationship with readiness. While research according to [12] Age, Parity, Social support have a relationship with readiness while knowledge has no relationship with readiness. From the results of the study (Sugiyanti., 2009) factors related to the preparation of labor is parity with a value of 0.353 and significance of 0.021. Family support with a value of 0.325 and significance of 0.29. Age with a value of 0.339 and significance of 0.034. Education with a grade of 0.647 and significance of 0.000. Knowledge, with a value of 0.816 and significance of 0.000. From the results of the above research, knowledge has the most value and significance, the author is interested in taking knowledge among all factors of maternal readiness to face childbirth.

2. RESEARCH METHODS

This study includes a type of correlational research with a cross-sectional approach conducted at the Gumuruh Health Center in Bandung on August 5-19, 2021. The population in this study was a 3rd-trimester pregnant woman in the Gumuruh Health Center Work Area of 402 K4, domiciled in the working area of Gumuruh Health Center, who did not experience pregnancy complications and was willing to be a respondent. The sampling technique in this study uses accidental sampling techniques. Instruments used Knowledge and readiness questionnaires used in prime research. In the knowledge questionnaire, 24 questions were using the Likert measuring scale where for favorable questions had a value of 4 to strongly agree, 3 to agree, 2 to disagree and 1 to strongly disagree. whereas for unfavorable questions the value of 4 for the answer strongly disagrees, the value 3 for the answer disagrees, the value 2 for the answer agrees, the value 1 for the answer agrees with the test validity of the item ranges from 0.116 to 0.559.

In the readiness cookie, 18 questions are using the Likert measuring scale where favorable questions have a value of 4 to strongly agree, 3 to agree, 2 to disagree and 1 to strongly disagree. while for unfavorable questions the value of 4 for the answer strongly disagrees, the value 3 for the answer disagrees, the value 2 for the answer agrees, the value 1 for the answer agrees with the test validity of the item ranges from 0.339-0.577. Test reliability using the formula Alpha Cronbach with a value of a >0.600 then declared reliable. The knowledge questionnaire used the Felicitas coefficient obtained a value of 0.737. The readiness questionnaire used reliabilitas coefficient obtained a value of 0.80 at the stage of collecting questionnaire dissemination data through google form is carried out after the exit of research permission from the health service with Number: PP.06.02/12647/Dinkes/VIII/2021 In data analysis using Univariate analysis using percentage and bivariate analysis using spearman rho test with an error rate of 0.05 and 95% confidence rating The normality test based on the Kolmogorov test was declared abnormal with a p-value of 0.00 (< a 0.05) and the data used ordinal so that it did not meet parametric requirements. correlation test using non-parametric range analysis.

3. Results

TABLE 1: Distribution of Frequency characteristics of respondents based on maternal age, education, occupation.

Characteristics of Respondents		F	%
Mother's age	< 20 year	0	0
	20-35 year	36	90
	35 year	4	10
	Total	40	100.0
Education	Low education	1	2,5
	Higher education	39	97,5
	Total	40	100.0
Work	Work	21	52,5
	Not working	19	47,5
	Total	40	100.0

Source: SPSS Processed Results Data 2021.

Based on the results of the study, it can be known that as many as 36 respondents or most (90%) are mothers aged 20-35 years. Based on education, as many as 39 respondents or almost all (97.5%) are highly educated (SMA / SMK, College). Based on work, as many as 21 respondents or most (52.5%) are working mothers.

TABLE 2: Knowledge of Third Trimester Pregnant Women About Childbirth at Gumuruh Public Health Center Bandung.

No	Knowledge	Frequency	%
1	Low	0	0
2	Enough	4	10,0
3	Tall	36	90,0
	Total	40	100,0

Source: SPSS Processed Results Data 2021.

From Table 4.2. It can be known that of the 36 respondents of knowledge results in Gumuruh Public Health Center Bandung mostly have high knowledge as many as 36 respondents (90.0%).

Details about family support data in the study can be seen in Table 4.3. Here:

TABLE 3: Readiness of Pregnant Women Facing Childbirth at Gumuruh Public Health Center Bandung.

Characteristics Respondent	F	%
Not enough	0	0
Enough	18	45
Well	22	55
Total	40	100.0

Table 4.3 data Based on the results of the study of 40 respondents results of readiness to face childbirth as much as 22 (55%) partially good readiness.

The relationship of knowledge of pregnant women in the third trimester about childbirth with readiness to face labor at Gumuruh Public Health Center Bandung can be seen in the following table:

TABLE 4: The relationship between knowledge of the third trimester pregnant women about labor and readiness to face labor.

knowledge	Readiness			P value	Coeffisien Correlation
	Good	Enough	Less		
Tall	19	17		0,027	0,129
Enough	3	1			
Low					
Total	22	18			

Based on the results of the Spearman Rank test obtained results that respondents who have high knowledge and good readiness there are 19 respondents, high knowledge with enough readiness there are 17 people, enough knowledge, with good readiness three people, enough knowledge, with enough readiness one person and significance value between knowledge and readiness to face childbirth $0.027 < 0.05$ which means there is a significant correlation. A correlation value of 0.129 indicates

that pregnant women's knowledge with readiness to face labor has a low degree of relationship. There is no negative sign (-) in front of the correlation coefficient value, which means that the direction of the relationship between variables there is a positive relationship means that the better the knowledge of pregnant women, the better the readiness of the mother to face labor.

4. Discussion

4.1. Pregnant Women's Knowledge Level

Based on the characteristics of high knowledge respondents, it is possible because of the age factor where almost all 32 respondents (91%) have an age of 20-35 years by the theory put forward [6] that a person's age affects knowledge. Age affects a person's catch and mindset. The older you get, you will develop your fishing power and mindset so that the knowledge you get, the better. Age can affect a person getting older enough; the level of maturity and fear will be more mature in nursalam thinking [13]

Based on the characteristics of high knowledge is possible due to the level of education. Respondents with higher education almost entirely (97.5%) which according to theory [14] the higher a person's level of education, the higher the knowledge they have. Cognitive abilities derived from educational backgrounds will shape a person's way of thinking, including understanding factors related to knowledge of childbirth and readiness. The results of this study are in line with research conducted [9] with the title Of Knowledge Relationship of Pregnant Women About Childbirth With Readiness to Face Childbirth In The Third Trimester At Umbulhardjo I Yogyakarta health center with a sample of 34 people; it was found that 12 respondents (64.7%) pregnant women with higher education, and low education levels as much as 12 (35.3%). Another possible factor is the employment factor, where most of the respondents with high knowledge, as many as 19 people (52%), do not work. The results of this study are not in line with the [9] with the title Of Factors Related to Birth Readiness In Pregnant Women Trimester III At Pleret Bantul Health Center with a sample of 40 people, obtained Pearson correlation results $p < 0.05$ (0.007 so that it can be stated that there is a significant relationship between maternal work and labor readiness.

4.2. Overview of Readiness to Face Childbirth

Good readiness is needed to face labor well and know the signs and symptoms of labor. The labor readiness will reduce confusion and chaos at the time of delivery and increase the possibility that the mother will receive appropriate and timely care [11]. Based on the research results at the Gumuruh Health Center in Bandung, data obtained that most respondents, namely 22 respondents (55%), have good readiness. Based on readiness data, both were influenced by educational factors where 22 respondents (100%) have a higher education level. The results of this study are in line with the study [11] entitled Relationship of Knowledge of Pregnant Women About Childbirth With Readiness to Face Childbirth In The Third Trimester At Umbulhardjo Health Center I Yogyakarta concluded that there is a relationship between education level and readiness.

Other factors that affect readiness are age, which is almost 21 respondents (95.4%) aged 20-35 years, and a small percentage of 1 respondent (4.6%) age >35 years [6]. The age that is considered the safest to undergo pregnancy and childbirth is the age of 20-35 years because the physical condition is in top condition. At the same time, women aged 35 years are classified in a risky pregnancy. Educational factors, education affects a person's learning process; the higher the education, the easier it will be to receive information. The level of education also determines the low or absence of a person to receive and use knowledge or information; in the results of research of mothers who have an excellent readiness higher education almost entirely 39 respondents (97.5%).

4.3. Relationship Of Knowledge Level of Pregnant Women Trimester III About Childbirth With Readiness to Face Childbirth

The knowledge of pregnant women is influenced by several factors, including the level of education. The level of education will be easier to receive information [14]. Based on the results of the spearman rank test analysis, it was obtained that respondents who have high knowledge and good readiness there are 19 respondents, high knowledge and readiness are enough there are 17 respondents, enough knowledge and good readiness there are 3 respondents, enough knowledge and sufficient readiness there is 1 respondent. Based on the results of observations, mothers who have good readiness influenced by the support of the husband, although not examined in the custody, can be observed pregnant women get support from the husband seen when pregnant women visit the health center accompanied by the husband. Based on the results of

observations from the data of visits of pregnant women to the health center, on average, the mother has experienced pregnancy before.

Showing that the relationship of knowledge of pregnant women with readiness to face labor at gumuruh health center with a positive relationship level p-value + 0.027 indicates a positive relationship means the higher the knowledge then the higher the readiness. The results of this study are in line with research conducted by [15] entitled Relationship of Knowledge of Primigravida Mother with Maternal Readiness in Facing Childbirth in the Working Area of Lamongan Regency Deket Health Center with the result that there is a significant relationship of 0.034 means $p > \alpha$ ($0.05 > 0.034$). Most of the respondents were out of work, nearly half had higher education. The knowledge possessed by pregnant women will determine the way the mother thinks and how to view childbirth. The more knowledge pregnant women have about childbirth will form a positive thought about childbirth so that the mother is better prepared for labor. Mothers who have good knowledge about childbirth are expected to be able to prepare for labor as early as possible both physically and mentally. With good knowledge, the mother will have a mature readiness to be able to face labor, so that she can anticipate as early as possible if there is an emergency in the labor process. The limitation of this study is the retrieval of data used through questionnaires so that the results obtained are subjective, where the respondent's answers are largely determined by the mood or feelings of respondents. The honesty of possible respondents can also affect the results of the study.

5. Conclusion

There is a relationship of knowledge of pregnant women with readiness to face labor at Gumuruh Bandung Health Center with a p-value of 0.027. Nila spearman rank correlation of 0.129 indicates that the higher the knowledge, the higher the readiness.

6. Implication

This research can be used as input material for health workers first in the field of maternity nursing to understand the factors that affect labor readiness. So that nurses can approach pregnant women who are preparing for labor to provide advice or input to prepare labor from the start of pregnancy to prevent Postpartum Depressive Syndrome (PDS) or depression that occurs after childbirth.

7. Confession

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References

- [1] Rahmawati S. Hubungan dukungan suami dengan psikososial. Ibu masa kehamilan di wilayah kerja puskesmas janti malang. Malang: Naskah Publikasi; 2017.
- [2] Mardiani P. Sikap ibu hamil trimester III tentang persiapan persalinan. Kendari: Politeknik Kesehatan Kendari; 2017.
- [3] Lestari SS. Faktor-faktor yang berhubungan dengan kunjungan antenatal care K4 di puskesmas karangmojo i tahun 2018. Poltekkesjogja; 2019 Desember 13. Available from: [http://eprints.poltekkesjogja.ac.id/2189/3/3.%20Chapter 2.pdf](http://eprints.poltekkesjogja.ac.id/2189/3/3.%20Chapter%202.pdf)
- [4] Patimah S, Astuti EW, Tajmuati A. Praktik Klinik Kebidanan III. Kemenkes RI. Jakarta. 2018 Agustus 17. <https://bppsdmk.kemkes.go.id>
- [5] Bandung DK. Profil kesehatan kota bandung tahun 2019. Dinas kesehatan kota bandung. 2019 Juni 30. Available from: <https://dinkes.bandung.go.id>
- [6] Trisnawati T. Gambaran dukungan suami dalam persiapan persalinan pada ibu hamil trimester III di puskesmas mlati II. Yogyakarta: Poltekkes Kemenkes Yogyakarta; 2019.
- [7] Novriani W, Sari FS. Dukungan keluarga. Dengan kecemasan menjelang persalinan trimester III. Jurnal Ipteks Terapan. 2017;11(1):55-64
- [8] Rokom R. Strategi Operasional Turunkan Angka Kematian Ibu. Departemen Kesehatan Republik Indonesia. 2011 Februari 09. <https://sehatnegeriku.kemkes.go.id/baca/rilis-media/20110209/47839/5-strategi-operasional-turunkan-angka-kematian-ibu/>
- [9] Rosyidah SS. Faktor yang berhubungan dengan kesiapan persalinan pada ibu hamil trimester III di puskesmas pleret bantul. Yogyakarta: UNIVERSITAS 'AISYIYAH. 2017.
- [10] Wandhini PW. Gambaran asuhan keperawatan pada ibu primigravida trimester III untuk meningkatkan kesiapan persalinan di puskesmas pembantu dauh puri denpasar. Denpasar: Poiltekkes Denpasar; 2018.

- [11] Handayani MK. Hubungan pengetahuan ibu hamil tentang persalinan dengan kesiapan menghadapi persalinan pada trimester III di puskesmas umbulharjo I Yogyakarta. Yogyakarta: Jurnal Keperawatan Respati Yogyakarta; 2018.
- [12] Rahmadani R. Faktor-faktor yang berhubungan dengan kesiapan persalinan di puskesmas banguntapan II bantul Yogyakarta. Yogyakarta: UNIVERSITAS 'AISYIYAH; 2017.
- [13] Nursalam II. Metodologi penelitian ilmu keperawatan: pendekatan praktis edisi 4 (peni puji). Jakarta: Salemba Medika; 2015.
- [14] Putrianti VP. Hubungan pengetahuan dan sikap tentang persalinan dengan kesiapan primigravida menghadapi persalinan. Surakarta: Universitas Seblas Maret; 2014.
- [15] Muthoharoh H. Hubungan pengetahuan ibu primigravida dengan kesiapan ibu dalam menghadapi persalinan di wilayah kerja puskesmas dekat kabupaten lamongan. Lamongan: Kebidanan Universitas Islam Lamongan; 2018.