



The Relationship between Knowledge and Behavior of Pregnant Women in Preparing for Childbirth at the Mamuju Community Health Center

Susi Rabuana^{*1}

¹ *Midwifery Study Program, Institute of Health and Business. St. Fatimah Mamuju, Indonesia*

Abstract

Various health elements are directly involved in the care of mothers and babies, such as doctors, midwives and nurses, or supporting elements, such as community organizations, which will support the EMAS Program. It is hoped that the preparation for childbirth that will be carried out with a midwife can reduce the mother's unpreparedness during childbirth and increase the mother's receipt of optimal care. The aim of the research was to determine the relationship between knowledge and the behavior of pregnant women in preparation for childbirth. This research method is analytical descriptive research with a cross sectional design. The population is all pregnant women, totaling 57 pregnant women. The research sample is the total population, namely 57 pregnant women. Data analysis used the Chi-square test. The results of the study showed that the majority of pregnant women had good knowledge, 31 (54.4%) and the behavior of pregnant women in preparing for delivery was mostly positive behavior, 44 (77.2%), the results of the X^2 table statistical test were 5,591 and the calculated X^2 was 11,339, meaning that the calculated X^2 value is greater than the table X^2 value and the p value = 0.003 or smaller than $\alpha = 0.05$ with a confidence interval of 95%. Conclusion: there is a relationship between knowledge and the behavior of pregnant women in preparing for childbirth at the Mamuju Community Health Center.

Keywords: Knowledge, Behavior of Pregnant Women, Preparation for Childbirth, Mamuju Community Health Center

*Corresponding Author: Susi Rabuana

*Email: susirabuana1@gmail.com





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**1. Introduction**

According to the results of the 2007 Indonesian Demographic Health Survey (SDKI), the maternal mortality rate in Indonesia was 228 per 100,000 live births. One of the direct causes of maternal death is infection at 11%. The factors underlying maternal and newborn deaths are very complex.

The most common causes of maternal death (90%) are due to obstetric complications, namely: bleeding, infection and eclampsia. (1) Data obtained from the Sulawesi Health Service in 2011 was 183/100,000 live births. In 2012, there was an increase in the maternal mortality rate of 186/100,000 live births with a total of 71 maternal deaths, caused by bleeding 30 (42%), eclampsia 15 (21%), infection 6 (8%), and other causes 20 (29%). According to the PWS KIA report from the Health Service in 2018, it included K1 4120 (101.6%), K43924 (97.2%), births by health workers 3678 (95.4%), while data available at the Mamuju Community Health Center in 2018 included K1 411 (110.8%), K4380 (102.4%) and the sending of health workers was 335 (94.6%). This data shows that pregnant women's awareness of the importance of pregnancy checks is good, but in utilizing birth attendants, mothers still use non-health workers.

If obstetric complications are found and the mother does not understand the preparations required for delivery, then the mother does not receive appropriate and timely services resulting in three delays in referral, namely: Delay in making the decision to refer, due to the inability of the mother/family to recognize the signs. danger, not knowing where to seek help, cultural factors, decisions depending on the husband, fear of the costs that need to be paid for transportation and hospital treatment, as well as distrust of the quality of health services, delays in reaching health facilities, influenced by distance, availability and efficiency means of transportation, as well as costs, delays in obtaining assistance at health facilities, are influenced by the number and skills of health workers, availability of equipment, medicines, blood transfusions and consumables, management and condition of health facilities. Based on initial studies at the Mamuju Community Health Center, the data available from November 1 to December 15 2019 contained 131 pregnant women and 57 of them were in the third trimester of pregnancy.





The results of interviews conducted with 12 pregnant women who came to have their pregnancies checked at the Mamuju Community Health Center found that 9 pregnant women did not know the preparations they had to make when giving birth. 3 pregnant women said that the important preparation for childbirth was preparation for the needs of the new born baby. Planned birth preparation with a midwife is expected to reduce maternal unpreparedness during childbirth and increase the likelihood that the mother will receive optimal care.

2. Research Methods

This research method is a descriptive analytical study with a cross sectional plan, namely to obtain the relationship between knowledge and behavior of pregnant women in the third trimester in preparation for childbirth at the Mamuju Community Health Center.

The research variables consist of the independent variable, namely the knowledge of pregnant women in the third trimester in preparation for childbirth and the binding variable, namely the behavior of pregnant women in the third trimester in preparation for childbirth. Known Operational Definition: Maternal knowledge is everything that is understood by pregnant women in the third trimester in preparation for childbirth, including making a birth plan, making a decision-making plan, preparing transportation, making a savings plan, preparing shipping equipment. Assessment for correct answers is given a value of 1 and incorrect answers are given a value of 0. The assessment criteria are as follows:

- a. Knowledge is good if the respondent answered the question correctly in the range 14 – 18 (76 -100%).
- b. Knowledge is sufficient if the respondent answered as many questions correctly as possible 11–13 (56 -75%)
- c. lack of knowledge if the respondent answered ≤ 10 questions correctly ($\leq 55\%$) or range ≤ 10 .





The behavior of pregnant women in the third trimester in preparation for childbirth is everything that mothers do during labor, including making a birth plan, making a decision-making plan, preparing transportation, making a savings plan, preparing birth equipment. A score of 1 is for making preparations and a score of 0 is for not making preparations for delivery. The assessment criteria are as follows:

- 1) Positive Behavior if the respondent made shipping preparations was 9 –18 (>50%).
- 2) Negative behavior if the respondent made 1 – 8 delivery preparations (\leq 50%).

The research was carried out at the Mamuju Community Health Center in November 2019. The research population was all pregnant women in the third trimester, totaling 57 pregnant women. The sample size taken in this study was the total population, namely 57 pregnant women. The instruments in this study used a questionnaire (list of questions) and checklist. regarding preparation for delivery as many as 57. Data collection techniques were obtained directly from respondents using a list of questions (questionnaire) in the form of interviews and checklist sheets for respondents. And data was taken from the Puskesmas profile and the Puskesmas report book. Univariate data analysis, Bivariate analysis using the chi-square test to determine the relationship between knowledge and behavior of pregnant women in the third trimester in preparation for childbirth.

3. Results and Discussion

a. Results

1. Univariate Analysis

Age Distribution of Respondents at Mamuju Health Center. Shows the age distribution of respondents consisting of age <20 years as many as 14 (24.6%), age 20-35 years as many as 34 (59.6%) and age > 35 years as many as 9 (15.8%).

The distribution of respondents' education in Mamuju shows the distribution of respondents' education consisting of elementary school education as many as 10 (17.5%), junior high school as many as 25 (43.9%), high school as many as 20 (35.1%) and university as many as 2 (3.5%).

Distribution of Respondents' Occupations at Mamuju Health Center.





Shows the distribution of respondents' occupations consisting of work as housewives (IRT) as many as 52 (91.2%), honorary as many as 2 (3.5%), students as many as 2 (3.5%), and civil servants as many as 1 (1.8%).

Parity Distribution of Respondents at Mamuju Health Center Shows the distribution of respondent parity consisting of parity <1.

2. Bivariate Analysis

Distribution of Respondents' Knowledge at Mamuju Community Health Center. Shows the distribution of respondents' knowledge regarding delivery preparation at the Mamuju Community Health Center, consisting of good knowledge as many as 31 (54.4%), sufficient knowledge as many as 14 (24.6%) and poor knowledge as many as 12 (21.05%).

Distribution of Respondent Behavior at Mamuju Community Health Center. Shows the distribution of respondents' behavior regarding delivery preparation, consisting of 44 (77.2%) positive behaviors and 13 (22.8%) negative behaviors.

- The relationship between knowledge and behavior respondents about preparation delivery in Public health center can seen in the table below this.

Table 1
Knowledge Relationships with Respondents' Behavior About Preparation Labor in Mamuju Community Health Center

No.	Knowledge	Behavior				X ²	p
		Positive		Negative			
		n	%	n	%		
1	Good	26	45,6	5	8,8	11.339 ^a	0,003
2	Enough	13	22,8	1	1,75		
3	Less	5	8,8	7	12,3		

The table above shows the results of the analysis of the relationship between Knowledge respondents with behavior preparation delivery (mark p= 0.003).

b. Discussion





Based on the results of research and data analysis carried out in this study on 57 respondents, the age distribution results showed that most of the respondents were 20-35 years old, namely 34 (59.6%). This age is a safe age for production. As the theory suggests that healthy reproductive age is 20-35 years, at this age the female reproductive organs have reached maturity so they are ready for pregnancy, childbirth and postpartum. The younger the mother's age, the less attention and experience the pregnant mother has due to the mother's unpreparedness in accepting a pregnancy, in addition to the young age, the reproductive system is not yet mature, so there is a risk of problems occurring during pregnancy. This will result in minimal preparation for childbirth and can have a negative impact during the birth process.

The majority of respondents' education distribution still had low education (primary and junior high school), namely 35 (61.4%). According to the theory, a person's level of education can influence a person's knowledge because the acceptance and understanding of someone who has a higher education is better than someone who has a low education. Because respondents had previously received information from health workers regarding childbirth preparation, even though in this study some respondents had low education.

The job distribution of respondents is that most respondents work as housewives (housewives), namely 52 (91.2%), with more access to information nowadays, even though some respondents work as housewives, they access information from TV, radio and print media. it's easier to get. According to theory, a person's work can influence knowledge because the sources of information obtained are greater.

The parity distribution of respondents consisted of parity < 1 as many as 19 (33.3%), parity 2-3 as many as 33 (57.9%) and parity > 3 as many as 5 (8.8%). Experience in previous pregnancies means that respondents have received health information and also that respondents have directly carried out preparations for childbirth so that this can influence their knowledge. Respondents with knowledge about childbirth preparation at the Mamuju Community Health Center mostly had





good knowledge, 31 (54.4%), 14 (24.6%) had sufficient knowledge, and 12 (21.05%) had poor knowledge. Behavioral respondents regarding delivery preparation mostly had positive behavior, namely 44 (77.2%). Positive behavior is defined as actions that pregnant women in the third trimester should take in preparing for childbirth. Good knowledge supports respondents in behaving positively. Also a good level of knowledge can influence a person.

The results of the analysis show a relationship between the knowledge received by respondents and delivery preparation behavior (X^2_{count} is 11,339^a > X^2_{table} is 5,591 and the value of $p= 0.003$ or smaller than $p= 0.05$). Respondents' knowledge can be influenced by information obtained directly or indirectly, acceptance/understanding and experience. According to a theory that analyzes factors that influence human behavior from the level of health, one of which is knowledge which is a predisposing factor.

This statement is supported by WHO, that knowledge obtained from one's own experience or the experience of others can determine a person to behave in a certain way. Apart from that, the level of knowledge also has a significant relationship with delivery preparation behavior. The results of this research are in line with previous research which states that there is a significant relationship between knowledge and delivery preparation.

4. Conclusion

- a. Knowledge Mother trimester of pregnancy III in preparation for delivery in Mamuju Community Health Center part big 31 (54.4%) had good knowledge.
- b. The behavior of third trimester pregnant women in preparation for childbirth at the Mamuju Community Health Center was mostly positive behavior as many as 44 (77.2%).
- c. There is a relationship between knowledge and the behavior of pregnant women in the third trimester in preparation for childbirth at the Mamuju Community Health Center.

5. Compliance with ethical standards





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Disclosure of conflicts of interest

This research collaboration is a positive thing for all researchers so that conflicts, problems and so on are not at all a problem for all authors.

Statement of informed consent

Every action we take as writers is a mutual agreement or agreement.

Reference

- Adisasmito W. Risk factors for diarrhea in infants and toddlers in Indonesia: A systematic review of academic research in the field of public health. *Makara Health*. 2007 ;11 (1):1–10.
- Aswitami, NGAP, Udayani, NPMY, Sulistianingsih, A., Fitria, F., Pramana, C., Mutia, C., & Supinganto, A. (2022). The effect of pregnancy massage on pregnant women's anxiety before giving birth. *International Journal of Health Sciences*, 6(S1), 845–856. <https://doi.org/10.53730/ijhs.v6nS1.4830>
- Afiat, M., Pariati, P., & Alimuddin, H. (2022). The Effect of Formula Milk on Caries in Preschool Children. *Barongko: Journal of Health Sciences*, 1(1), 35–40. <https://doi.org/10.59585/bajik.v1i1.37>
- Damarini S, Eliana E, Mariati M. Effectiveness of Red Betel in the Treatment of Perineal Wounds in Independent Practicing Midwives. *Public Health Natl Community Healing J*. 2013 ;8 (1):39– 44.
- Erni, Kurniawati. 2011. The Relationship between Mothers' Level of Knowledge About Nutrition and the Nutritional Status of Toddlers in Baledono Village, Purworejo District, Purworejo Regency, 2011. *Journal of Health Communication*, 3 (2): 22-31.
- Endryanto. The effectiveness of diabetes mellitus foot exercises with the Koran on foot sensitivity in type 2 diabetes mellitus patients. 2012
- Hehy, GA, Anita B., Rudolf, BP 2013. The relationship between worms and nutritional status in elementary school children in Bunaken Village, Bunaken District, Manado City in 2013. Faculty of Public Health, Sam Ratulangi University, Manado.
- Indonesia B, TGE Commission. 2010. Indonesian Perekon Report Several editions, Bank Indonesia Jakarta. 2003.





- Jannah N. (2012). *Midwifery Care Textbook - Pregnancy*. Yogyakarta: Andi;
- Komaryah S. (2009). The relationship between knowledge, attitudes and behavior of pregnant women regarding pregnancy checks with pregnancy check-up visits in the working area of the Sukorame Mojoroto Kediri Community Health Center [Thesis]. Surakarta: PS Master of Family Medicine Educational Interests for Health Workers University eleven March.
- Manuaba IBG. *Obstetric Pathology Textbook - For Midwifery Students*. Jakarta: E.G.; (2008).
- Notoatmojo S. (2007). *Health Promotion and Behavioral Science*. Jakarta: Rineka Cipta;
- Niken Kurnia Febyanti, Dwi Susilawati. (2012). The Relationship between Pregnant Women's Knowledge About Antenatal Care and Pregnancy Visiting Behavior. *Soedirman Nursing Journal (Soedirman Nursing Journal)*.
- Wachidanijah. 2002. Knowledge, Attitudes and Behavior of Children and the Home Environment
- Elisa Pahlevi, A. 2012. Determinants of Nutritional Status in Elementary School Students. *Journal of Public Health*, 7(2), 122–126.
- Fredy Saputra, MK, Adam, AM, Anto, S., Yusufik, Y., Werdyaningsih, E., & Sari, AM (2022). Factors Associated With Not Supporting Primary School Children's Learning. Barongko: *Journal of Health Sciences*, 1(1), 50–52. <https://doi.org/10.59585/bajik.v1i1.40>
- Hartiningtiyaswati S. The relationship between abstaining from food and the length of healing of perineal wounds in postpartum women in Srengat District, Blitar Regency. Sebelas Maret University; 2010.
- Indonesian Ministry of Health. *Technical Instructions for Measuring Risk Factors for Diabetes Mellitus*. Indonesian Ministry of Health: Jakarta; 2014.
- Masdarwati, M., Kadir, E., Serli, S., Ruben, SD, Pannyiwi, R., & Rante, A. (2023). Counseling about Complementary Foods for Breast Milk and the Nutritional Status of Toddlers. *Social Friends: Journal of Community Service*, 1(2), 40–42. <https://doi.org/10.59585/sosisabdimas.v1i2.28>
- Mubarak WH (2006). *Introduction to Community Nursing 2*. Jakarta: Sagung Seto.
- Miller, CA *Nursing for Health in Older Adults. Theory and Practice*. 4th Edition. Philadelphia: Lippincott Williams & Wilkins; 2012.
- Nurjanah S, Puspitaningrum D, Ismawati. Relationship between characteristics and behavior of postpartum mothers in preventing perineal wound infections at Roemani Muhammadiyah Hospital, Semarang. In: *Proceedings of National & International Seminars*. 2017 Nursalam. Application of Nursing Science Research Methodology. Jakarta: Salemba Medika; 2011.
- Notoadmodjo, Soekidjo. 2003. *Public Health Science*. Jakarta: Rineka Cipta





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- Purnomo, J Gunawan, Magdalena, et al. 2005. Atlas of Medical Helminthology. Jakarta: Gramedia Pustaka Utama.
- Prof. Djamhoer Martaadi soebrata d, spog(K), (MSPH), Prof. Dr. Word F. Wirakusumah d, spog(K), Prof. Dr. Jusuf S. Effendi d S. Obstetric Pathology. 2013.
- Priyanto, S., Sahar, J. & Widyatuti. The Effect of Foot Exercises on Foot Sensitivity and Blood Sugar Levels in the Aggregate of DM Elderly in Magelang. Yogyakarta: Proceedings of the Central Java PPNI National Conference; 2013.
- Qurratuani. Factors Associated with Controlled Blood Levels in DM Patients at Fatmawati Central General Hospital (RSUP) in 2009 [thesis]. Jakarta: Faculty of Medicine and Health Sciences, State Islamic University (UIN) Syarif Hidayatullah; 2009.
- Ratnawati, D., Sahar, J., Permatasari, H. LANSET DM Program as a Community Nursing Intervention Strategy in Controlling the Problem of Diabetes Mellitus in the Elderly in Cisalak Pasar Subdistrict, Kec. Cimanggis, Depok City. Bina Widya Journal, Veterans National Development University, Jakarta. 2015; 26(1): 6-17.
- Rifdah, Ifdah. 2007. The Relationship between Environmental Sanitation Conditions and Personal Hygiene with the Incidence of Worm Worms in Public Elementary School Students in Cibinong District, Bogor Regency in 2007.
- Rosdiana, R., Djunaedi, D., & Aditia, D. (2023). Parents' Knowledge of Elementary School Children Regarding Persistent Health Cases. Barongko: Journal of Health Sciences, 1(3), 122–128. <https://doi.org/10.59585/bajik.v1i3.109>
- Ruben, G., Rottie, JV, & Karundeng, MY The Effect of Diabetic Foot Exercises on Changes in Blood Sugar Levels in Type 2 Diabetes Mellitus Patients in the Enemawira Community Health Center Working Area Nursing Journal. 2016: 4(1): 1-5.
- Rusli, GR, & Farianingsih, S. Diabetic Foot Exercises Reduce Blood Sugar Levels in Type 2 Diabetes Mellitus Patients. Journal of the PSIK FIKES Ners Community, Gresik University & PPNI East Java. 2015; 6(2): 189-197.
- Sinabutar AM, Setianingsih EL. Supervision of the Handling of Street Children by the Social, Youth and Sports Services in the City of Semarang. J Public Policy Management Rev. 2017 ;6 (2):607–20.
- Stephenson, LS, Latham, MC, & Ottesen, EA 2001. Global malnutrition. Parasitology, 121: 5-22.
- Susanti, R., Imran, A., Brianiannita, A., Akbar, A., Yermi, Y., B, M., Pannyiwi, R., & Rasyid, D. (2023). Counseling on Clean and Healthy Living Behavior in Minasatene District, Pangkajene Islands Regency. Social Friends: Journal of Community Service, 1(3), 92–98. <https://doi.org/10.59585/sosisabdimas.v1i3.70>
- Tarwoto, et al. Medical Surgical Nursing for Endocrine System Disorders. Jakarta: Media Info Trans; 2012.
- Trisnawati, SK, & Setyorogo, S. Risk Factors for Type II Diabetes Mellitus in the





- Cengkareng District Health Center, West Jakarta in 2012. The 2nd University Research Coloquium 2015 ISSN 2407-9189 230. Muh University Health Scientific Journal. Husni Thamrin Jakarta. 2013; 5(1): 6-11.
- WHO. Understanding and Diagnosis of Diabetes Mellitus and Intermediate Hyperglycemia. WHO: Catalogung Library in Publication Data; 2012.
- Suminar, S., Bare Telan, A., M Dukabain, O., Suluh, Ditjen, Vanchapo, AR, Agustina, A., & Aulia Rahmat, R. (2023). Implementation and Utilization of Family Latrines in Allu Hamlet, Minasa Baji Village, Bantimurung District, Maros Regency. *International Journal of Health Sciences*, 1(2), 93 – 101. <https://doi.org/10.59585/ijhs.v1i2.58>
- Ulasaswini, AA, Haris, M., Hidayat, T., Yusriyanto, Y., Syafri, M., Mustari, S., & Hermawan, A. (2023). Effectiveness of Clean Water Filtering on the Water Quality of Dug Wells in Patingalloang Village, Ujung Tanah District, PT Pertamina Patra Niaga IT Makassar Corporate Social Responsibility Program 2023. Barongko: *Journal of Health Sciences*, 1(3), 228–242. <https://doi.org/10.59585/bajik.v1i3.147>
- Widiyono 2004, Authority and Responsibility, Ghalia Indonesia, Bogor
- Wibowo, J. 2008. The relationship between Soil Transmitted Helminths Infection and Learning Achievement of Primary School Children 03 Pringapus, Semarang Regency, Central Java. UNDIP Faculty of Medicine Thesis. Semarang.
- Yuslinda, Y., nurhaedah, N., Nurekawati, N., Ahmad, A., Masita, S., & Rahmat, RA (2022). Mother's Knowledge About the Kangaroo Method at BPM Lestari Gowa, Gowa Regency. Barongko: *Journal of Health Sciences*, 1(1), 29–34. <https://doi.org/10.59585/bajik.v1i1.19>
- DKPDI Yogyakarta. DI Yogyakarta Provincial Health Profile 2011. Yogyakarta Special Region Provincial Government. Yogyakarta; 2012.

