

## Determinant Factors Related to the Successful Smooth Delivery Process in the West Aceh District

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### ABSTRACT

The proportion of deliveries carried out at home and assisted by traditional birth attendants, especially in rural areas, is still high. Most cases of maternal deaths occur in hospitals and are referral cases. These conditions indicate that maternal deaths are due to being late in recognizing danger signs, and being late in taking care decisions is still high. The research focuses on identifying factors related to the smooth delivery process in West Aceh District. This research is an analytic survey using a cross-sectional approach. The research was conducted in West Aceh District. The population in this study were all mothers giving birth in West Aceh Regency in August-September 2021, as many as 94 people. The results showed that the husband's support had a significant relationship with the smooth delivery process in Aceh Barat District (p-value 0.089). Midwife support and maternal readiness are significantly related to the smooth delivery process in Aceh Barat District (P-value 0.001).

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## INTRODUCTION

Health is a fundamental human right and one factor that significantly determines the quality of human resources (HR). This is the reason for the need for health to be maintained and improved quality and protected from harmful threats. However, globally, maternal health and maternal mortality are still the focus of attention and are politically a priority in developing countries, including Indonesia. Global efforts to reduce maternal mortality (MMR), including in Indonesia, have been carried out through increasing access and maternal health services, emergency pregnancy and childbirth services, maternal health education, and community empowerment [1]. These efforts have succeeded in increasing the coverage of maternal health services, significantly increasing the coverage of antenatal care, deliveries assisted by health workers, deliveries in health facilities, and the coverage of complications of pregnancy and childbirth handled [2],[3],[4] to reduce the mortality rate. Mothers (MMR) in Indonesia still need hard work. The results of the Indonesian Demographic Health Survey (IDHS) in 2018, the Maternal Mortality Rate (MMR) in Indonesia reached 359 per 100,000 live births. Complementing this report, data from regions the Indonesian Ministry of Health

received shows that the number of mothers who died due to pregnancy and childbirth in 2018 was 5019. One of the factors for the smooth delivery process is the utilization of institutional delivery services. Maternal services have been shown to improve maternal health and well-being and reduce maternal mortality [5]. It also helps reduce complications during labor and postpartum [6]. In some cases, the Safe Motherhood Initiative emphasizes institutional delivery as an element of emergency obstetric care where complicated cases can be handled safely [7]. It is estimated that institutional delivery can reduce 16 to 33% of maternal deaths [8][9].

The facts show that maternal mortality due to delay in recognizing the danger signs of pregnancy and childbirth and delay in making decisions accounts for more than two-thirds of maternal deaths [10]. More than 80 percent of maternal deaths in Indonesia are referral cases in health facilities [11],[12]. This shows that maternal mortality due to late factor three and unsafe delivery behavior in Indonesia is still high. Unsafe delivery is delivery that is not carried out in a health facility. Safe delivery is carried out in adequate health facilities according to the risk factors of pregnant women. The proportion of deliveries at home reached 36.0 percent, and traditional birth attendants assisted 13.5 percent. In rural areas, 52.4 percent of deliveries are carried out at home, and 20.5 percent are assisted by traditional birth attendants [13]. While in urban areas, 19.3 percent of deliveries were carried out at home, and 6.7 percent were assisted by traditional birth attendants [13]. Minister of Health Regulation No. 97 of 2014 states that childbirth must occur in health care facilities [14].

Efforts to prevent maternal death due to factor three, late and unsafe childbirth, are to conduct health education for pregnant women. The purpose of health counseling for pregnant women is to improve the ability of pregnant women to recognize the danger signs of pregnancy and childbirth, the ability to make decisions, and the ability to carry out safe deliveries. Based on the latest data recorded in West Aceh Regency, it was found that the number of expected deliveries in July 2019 reached 58 deliveries, and there was no maternal mortality rate (0 people), the birth referral rate was 11 (5.18%) with the cause of obstructed labor 4 (6.89%) anemia 2 (3.44%) bleeding 3 (5.17%) and malformation 3 (5.17%). Based on the results of a survey that the author conducted in March 2020 on eight maternity mothers who were hospitalized at the Cot Seumereung Health Center, Aceh Barat, it was found that 6 out of 8 mothers gave birth without being accompanied by their husbands. The maternity mothers admitted that their husbands were busy working, so they required their mother or in-laws to accompany them. Then the writer asked about the feelings of those who gave birth without being accompanied by their husbands; they admitted that they felt like they were not being cared for and supported by birth. At the same time, 2 of them admitted that they were pleased to be accompanied by their husbands. Based on the problems above, the authors are interested in researching the determinant factors related to the smooth delivery process in Aceh Barat Regency.

## RESEARCH METHOD

This quantitative descriptive research uses an analytical survey design with a cross-sectional approach to determine the relationship between the dependent variable and the independent variable. This research was conducted in the Public Health Center in West Aceh Regency. The population in this study were all mothers giving birth at the Public Health Center in Aceh Barat Regency, with a sample of 94 people taken by purposive sampling technique. Data collection instruments were used questionnaires, observation sheets, and interview sheets—data analysis using multiple linear regression equation. The chi-square statistical test was used to test the effect of the independent and dependent variables together.

## RESEARCH RESULTS

### Univariate Analysis

**Table 1** Distribution of Husband's Support in West Aceh District in 2021

No	Support husband	Amount	%
1.	Well	54	57.4
2.	Not enough	40	42.6
	Total	94	100

Based on the overall score of the husband's support indicator regarding the smooth delivery process, it can be categorized into good and poor. The results showed that from 94 respondents, support was more dominant, namely in the excellent category as many as 54 respondents (57.4%).

**Table 2.** Distribution of Midwife Support in Aceh Barat District

No	Support Midwife	Amount	%
1.	Well	63	67
2.	Not enough	31	33
	Total	94	100

Based on the overall score of the Midwife support indicator on the Smoothness of the Delivery Process, it can be categorized into good and poor. The results showed that from 94 respondents, support was more dominant, namely in the excellent category as many as 63 respondents (67%).

**Table 3.** Distribution of Maternal Readiness in Aceh Barat District in 2021

No	Mother's readiness	Amount	%
1.	Well	63	67
2.	Not enough	31	33
	Total	94	100

Based on the overall score of the Midwife support indicator on the Smoothness of the Delivery Process, it can be categorized into good and poor. The results showed that from 94 respondents, support was more dominant, namely in the excellent category as many as 63 respondents (67%).

**Table 4.** Distribution of Maternal Readiness in Aceh Barat District

No	Mother's readiness	Amount	%
1.	Well	63	67
2.	Not enough	31	33
	Total	94	100

Based on the overall score of the Midwife support indicator on the Smoothness of the Delivery Process, it can be categorized into good and poor. The results showed that from 94 respondents, support was more dominant, namely in the excellent category as many as 63 respondents (67%).

**Table 5.** Distribution of the Delivery Process in Aceh Barat District

No		Amount	%
1.	Spontaneous	69	73.4
2.	Refer	25	26.6
	Total	94	100

Based on the overall scoring of the indicators of the labor process, it shows that out of 94 respondents, spontaneous delivery is more dominant, namely 69 respondents (73.4%).

## Bivariate Analysis

**Table 6.** Cross Tabulation of the Relationship between Husband's Support and Smooth Delivery Process in West Aceh

Husband's support	Process smooth						p-value
	Spontaneous		Refer		Total		
	f	%	f	%	f	%	
Well	43	45.7	11	11.7	54	57.4	0.089
Not enough	26	27.7	14	14.9	40	42.6	
	69	73.4	25	26.6	94	100	

The cross-tabulation table above shows that the more dominant category is the husband's support in the excellent category, with a spontaneous delivery process of 43 respondents (45.7%). West is known that the probability value (0.089) < sig\_α=0.05.

**Table 7.** Cross Tabulation of the Relationship between Midwife Support and the Smooth Delivery Process in West Aceh District

beam support	Process smooth						p-value
	Spontaneous		Refer		Total		
	f	%	f	%	f	%	
Well	55	58.5	8	8.5	63	67	0.000
Not enough	14	14.9	17	16.7	31	33	
	69	68.4	25	26.7	94	100	

From the cross-tabulation table above, it can be seen that the more dominant category is midwife support in the excellent category with spontaneous delivery as many as 55 respondents (58.5%). From the chi-square analysis results in the chi-square test table attachment between the influence of the husband's support on the smooth delivery process, it is known that the probability value (0.000) > sig\_α = 0.05.

**Table 7.** Cross Tabulation of the Relationship between Mother's Readiness and the Smooth Delivery Process in West Aceh Regency

Mom's readiness	Process smooth						p-value
	Spontaneous		Refer		Total		
	f	%	f	%	f	%	
Well	55	58.5	8	8.5	63	67	0.000
Not enough	14	14.9	17	16.7	31	33	
	69	68.4	25	26.7	94	100	

The cross-tabulation table above shows that the more dominant category is Maternal Readiness in the excellent category with spontaneous delivery as many as 55 respondents (58.5%). From the results of the chi-square analysis, the probability value (0.000) > sig\_α=0.05.

## Discussion

The results showed that the husband's support affected the smooth delivery process in west Aceh Regency, as evidenced by the P value (0.000) < sig\_α= 0.05. The husband's support for his wife, who is about to give birth, brings enormous benefits related to the safety of the mother and baby. Accompanying childbirth here is not only done during the birthing process but has been started since pregnancy and after delivery. At the time of delivery, encouraging the delivery to take place, stroking the mother's stomach so that the pain is reduced and there is a sense of security beside her. Research related to the husband's assistance to his wife during childbirth explains that the husband's support for maternity mothers is very much expected so that maternity mothers feel calm and

comfortable so that in the process of mental preparation, a mother who will give birth becomes a full encouragement which is finally able to prevent depression [15]. Especially if it is the first time giving birth, you do not have experience; you're still confused, so you need your husband's assistance in adapting to becoming a new mother. As with other research results, it is explained that the assistance of the closest people in dealing with childbirth makes the mother feel calm and reduces anxiety significantly so that delivery goes smoothly [16]. The benefits of childbirth assistance can provide comfort during childbirth and positively affect delivery outcomes in the sense that it can reduce pain during childbirth, reduce tension in pregnant women and improve emotional status [17]. The study's results also showed the influence of Midwife support on the smooth delivery process in Aceh Regency with a value of  $(0.000) < \text{sig}_\alpha = 0.05$ . that midwives must provide services to mothers in labor, preventing depression during or after childbirth [18].

Anxiety about childbirth is natural, but a midwife must be able to face it and provide motivation and solutions to reduce maternal anxiety. The role of midwives in improving the delivery planning program to prevent complications by motivating, educating, and providing the best care is essential. A health worker must be able to provide motivation, direction, and guidance so that the delivery planning program for preventing complications runs well. The midwife's role can be divided into three leading roles: motivator, educator, and facilitator. The roles and responsibilities of midwives in reproductive health, especially in preparation for childbirth, significantly affect the mother's psychological health. The statistical analysis results also show an influence of maternal readiness on the smooth delivery process in Aceh Barat Regency with a p-value  $(0.000) < \text{sig}_\alpha = 0.05$ . Mothers who are not prepared to give birth will be more anxious and display fear in silent behavior to the point of crying. Even though birth is a normal physiological phenomenon, the birth process impacts bleeding and extreme pain and can cause fear and even death for both the mother and the baby (Janiwarty, Pieter, 2012 ).

## CONCLUSION

The results showed that the husband's support had a significant relationship with the smooth delivery process in Aceh Barat District (p-value 0.089). Midwife support and maternal readiness are significantly related to the smooth delivery process in Aceh Barat District (P-value 0.001).

## References

1. Ministry of Health, RI (2013). Action plan to accelerate the reduction of maternal mortality in Indonesia. Jakarta: Directorate General of Nutrition and MCH.
2. Morrison, J., Thapa, R., Basnet, M., Budhathoki, B., Tambahangphe, K., Manandhar, D., ... & Osrin, D. (2014). We are exploring the first delay: a qualitative study of home deliveries in Makwanpur district, Nepal. *BMC pregnancy and childbirth*, 14 (1), 1-7.
3. Morrison, J., Thapa, R., Hartley, S., Osrin, D., Manandhar, M., Tambahangphe, K., ... & Costello, A. (2010). Understanding how women's groups improve maternal and newborn health in Makwanpur, Nepal: a qualitative study. *International health*, 2 (1), 25-35.
4. Lewycka, S., Mwansambo, C., Rosato, M., Kazembe, P., Phiri, T., Mganga, A. , ... & Costello, A. (2013). Effect of women's groups and volunteer peer counseling on rates of mortality, morbidity, and health behaviors in mothers and children in rural Malawi (MaiMwana): a factorial, cluster-randomized controlled trial. *The Lancet*, 381 (9879), 1721-1735.
5. Yarinbab, TE, & Balcha, SG (2018). Delays in utilizing institutional delivery service and its determinants in Yem Special Woreda, Southwest Ethiopia: an institution-based cross-sectional study. *J Gynecol Women's Health*, 10(3), 555793.
6. Ronsmans, C., Graham, WJ, & Lancet Maternal Survival Series steering group. (2006). Maternal mortality: who, when, where, and why. *The Lancet*, 368 (9542), 1189-1200.
7. Tunçalp, ., Were, WM, MacLennan, C., Oladapo, OT, Gülmezoglu, AM, Bahl, R., ... & Bustreo, F. (2015). Quality of care for pregnant women and newborns – the WHO vision. *Blog*, 122 (8), 1045.

8. Maclean, GD (2010). A historical overview of the first two decades of striving toward Safe Motherhood. *Sexual & Reproductive Healthcare*, 1 (1), 7-14.
9. Graham, WJ, Bell, JS, & Bullough, CH (2001). Can skilled attendance at delivery reduce maternal mortality in developing countries? Safe motherhood strategies: a review of the evidence.
10. Belton, S., Myers, B., & Ngana, FR (2014). An ethnographic study of maternal deaths in eastern Indonesia: 20 years and still walking. *BMC pregnancy and childbirth*, 14 (1), 1-10.
11. rasanty GD, Hakimi M, and Hasanbasri M. 2008. Prevention of Late
12. Maternal Referrals in Majene Regency. *Journal of Health Services Management*
13. . 11(3):122 - 129.
14. Qomariyah N, Purnami, SW, and Pramono MS. 2013. Modeling of Factors
15. Affecting Maternal Mortality in East Java with the GWPR (Geographically Weighted Poisson Regression) Approach in Health Facilities. *Permits Journal of Science and Arts*. 2(2):2337-3520
16. BPS, BKKBN, Ministry of Health, ICF International. 2013. Indonesian Health Demographic Survey 2012. Jakarta
17. Ministry of Health. 2013d. Action Plan for the Acceleration of Reduction in Maternal Mortality Rates in Indonesia. Directorate of Maternal Health Development. Directorate General of Nutrition and MCH. Ministry of Health. Jakarta
18. Kurniasari, D., & Astuti, YA (2015). The relationship between the mother's characteristics, the baby's condition, and the husband's social support with postpartum blues in mothers with CS delivery at the Ahmad Yani Metro General Hospital in 2014. *Holistic Journal of Health*, 9 (3).
19. Sari, DEA, Sari, NI, & Zulaikha, NP (2020). The relationship between the husband's assistance in childbirth with the progress of the first stage of labor in the active phase in RB. *Mother of Tembilahan Puja. Selodang Mayang: Scientific Journal of the Regional Development Planning Agency of Indragiri Hilir Regency*, 6 (1), 31-38.
20. Astutik, VY, & Sutriyani, T. (2017). The Relationship of Pregnant Gymnastics, Husband's Support and Midwife's Support with Mother's Anxiety Levels Ahead of Delivery at BPS NY. Hj. M. Indriyati. *Care: Scientific Journal of Health Sciences*, 5 (1), 140-148.
21. Reality, F., & Rahmawati, A. (2017). Husband's Motivation In Accompanying The Wife During The Labor Process. *Journal of Midwifery Science and Health*, 8 (1).