



Early Detection of Complications in Pregnancy

Nurul Komariah¹, Sari Wahyuni²

^{1,2}Prodi Sarjana Terapan Kebidanan, Jurusan Kebidanan, Poltekkes Palembang, Palembang, Indonesia

ARTICLE INFO

Article history:

Received Nov 22, 2023

Revised Nov 28, 2023

Accepted Dec 5, 2023

Keywords:

Complications;
Early Detection;
Pregnant Women.

ABSTRACT

Detection of risk factors in pregnant women both by health workers and the community is one of the important efforts in preventing maternal death and morbidity. The ability of pregnant women to find out whether they are at high risk or not is very helpful in early detection so that treatment can be carried out quickly and appropriately. However, the ability of pregnant women is often an obstacle in knowing whether she has a high risk or not. Method Descriptive Design, 30 Samples, analyze distribution frequency. Result shows the attitude of mothers regarding early detection of complications in pregnancy. About 11 people (36.7%) want to be able to detect pregnancy complications themselves. About 15 people (50%) want their family to be able to detect pregnancy complications. About 17 people (56.7%) want to know where to get their pregnancy care according to the condition of their pregnancy. 53.3% (16 people) want to know where to give birth. About 46.7% agreed and 46.7% strongly agreed to know if my condition included caution, danger and low risk. Future Research to Study What Dominant Factor to early detection Complication Pregnant Women.

This is an open access article under the [CC BY-NC](https://creativecommons.org/licenses/by-nc/4.0/) license.



Corresponding Author:

Nurul Komariah,
Prodi Sarjana Terapan Kebidanan,
Poltekkes Kemenkes Palembang,
Jalan Jenderal Sudirman Km 3,5, Palembang, 30152 Indonesia
Email: nurulkomariah2007@gmail.com

1. Introduction

Maternal Mortality Rate (MMR) is one of the indicators in health development. One of target in the Sustainable Development Goals (SDGs) is to realize health which is good by reducing MMR, where the target to be achieved in 2030 is 70/100,000 live births (Republic of Indonesia Ministry of Health, 2015). Based on the Inter-Census Population Survey (SUPAS) in 2015 stated that MMR in Indonesia is 305 per 100,000 Live Births (KH) (Central Bureau of Statistics, 2016).

Health conditions during pregnancy are one of the factors determinants of maternal mortality during pregnancy and childbirth (Angraini, 2016). Lowering MMR in Indonesia. One way is to cope with pregnancy complications. Research (Aeni N, 2013) showed that the risk factors for maternal mortality in Pali Regency are the presence of pregnancy complications and a history of disease before pregnancy, the effect is 64.3% against maternal death. Increasing number of pregnant women who have a high risk of pregnancy. Make it a priority in handling so as not to become a complication in labor.

One of the efforts is by means of early detection. Detection of risk factors in pregnant women both by health workers and the community is one of the important efforts in preventing maternal death and morbidity. The ability of pregnant women to find out whether they are at high risk or not is very helpful in early detection so that treatment can be carried out quickly and appropriately. However, the ability of pregnant women is often an obstacle in knowing whether she has a high risk or not (Ristrini, 2014).

Early detection of pregnancy risk is an effort to find seawall possible abnormalities, complications and complicates pregnancy and prepares the mother for normal delivery. Early detection Complications in antenatal services are screening efforts carried out by health workers to find early any deviations / abnormalities that occurs in risky pregnant women during pregnancy, to be treated adequately so that can prevent the occurrence of maternal and fetal pain and death (Konstania, 2015).

In order for pregnancy complications to be recognized by pregnant women, pregnant women need to do self-screening of pregnancy complications. (Kencanawati & Mirong, 2019) did Active surveillance activities in identifying pregnancy complications carried out by Family with the name Community Screening. Community screening is useful as a tool Help decision-making in the family to seek health help. Based on this background so was done this Study. The Benefits of this study, mother know about early detection in pregnancy and it was can do bay herself. This study was conducted to assess the perception of pregnant women about early detection of complications in pregnancy. This Research told about perception pregnant women about early detection and how way to do to improve it then they will do early detection of complication in pregnancy by themselves.

2. Methods

The design of this study was descriptive, with the subject of the study being pregnant women who checked their pregnancy at PMB Husniyati. The inclusion criterion is willing to be a respondent. Exclusion: Mothers who have complications in pregnancy. How to collect data: Questionnaire, Data collection instrument: Questionnaire using Likert scale. Sampling technique is purposive sampling. Number of samples: 30 people. Data Analysis Used Excel to calculate presentation. Data Analysis: Frequency Distribution.

3. Results and Discussion

The results of this study can be seen in tables 1 and 2 below.

Table 1
Age of respondent responden

No.	Age Of Respondent	Frequency	Persentase
1.	Mother's age		
	-No Risk	26	86,7
	-Risky	4	13,3
	Amount	30	100

Table 1 shows that 26 people (86.7%) are at no risk, aged < 35 years and 4 people (13,3%) are at risk ≥ 35 years old. Mother's Education was showed in table 2.

Table 2
Mothers' education

No.	Education Of Respondent	Frequency	Persentase
1.	Education		
	-Basic	2	6,7
	-Middle	27	90
	-High	1	3,3
	Amount	30	100

From table 2 we know that 27 people (90%) has a middle education (senior and junior high School). And 2 people (6,7%) basic (Elementary School), and 1 people (3,3%) in the high school (University).

Table 3
Mother's attitude towards early detection of complications in pregnancy

No.	Statement	Mother's Attitude										
		Strongly Disagree		No Agree		Nervous		Agree		Very Agree		
		n	%	n	%	n	%	n	%	n	%	
1.	I want to get information and education related to my pregnancy							15	50	15	50	
2.	I want to know if my pregnancy is at risk							13	43,3	17	56,7	
3.	I want to be able to detect my pregnancy complications myself			3	10	2	6,7	11	36,7	1	4,7	
4.	I want my family to be able to detect my pregnancy complications			2	6,7	2	6,7	15	50	11	36,7	
5.	I want to know where I should get pregnancy care according to the condition of my pregnancy.					1	3,3	12	40	17	56,7	
6.	I want to know where I should give birth.			1	3,3			13	43,3	1	3,3	
7.	I want to know if my condition includes caution, danger and low risk			1	3,3	1	3,3	1	4,7	46,7	1	4,7

Source: Processed data

Table 3 shows the attitude of mothers regarding early detection of complications in pregnancy. About 11 people (36.7%) want to be able to detect pregnancy complications themselves. About 15 people (50%) want their family to be able to detect pregnancy complications. About 17 people (56.7%) want to know where to get their pregnancy care according to the condition of their pregnancy. 53.3% (16 people) want to know where to give birth. About 46.7% agreed and 46.7% strongly agreed to know if my condition included caution, danger and low risk.

Early detection of pregnancy complications is a screening effort made to find deviations that occur during early pregnancy. Early detection leads to the discovery of at-risk pregnant women so that they can be adequately addressed so that morbidity and mortality can be prevented. (Evi Rinata, askeb book pathology).

Early detection of pregnancy can be used as an effort to detect and treat high-risk pregnancies in pregnant women. A high-risk pregnancy is a pregnancy in which the life and health of the mother and/or baby may be threatened. (Budiyasa, 2021). Risk pregnancy is a pregnancy that has a greater than usual risk for both mother and baby, which can result in illness or death before and after childbirth (Kumalasari D, 2020).

The ability of pregnant women to detect early pregnancy risk is still below average which is one of the causes of complications that can endanger the welfare of the mother and fetus. The ability of families in early detection of high risk of pregnancy needs to be considered so that families are independent and have efforts to maintain the health of pregnant women in their families. (Ika Mardiyanti et al., 2023).

The higher the knowledge about the danger signs of pregnancy, the lower the incidence of danger in pregnant women, otherwise if pregnant women have low knowledge or do not know about the danger signs in pregnancy, they will be at high risk of experiencing danger in pregnancy. If pregnant women know about the danger signs in pregnancy, they will be more aware so that it does not occur again in the next pregnancy (Ummah DA & Kostania G, 2019).

Knowledge or cognitive is a very important domain for the formation of one's actions. Based on experience and research, it turns out that behavior based on knowledge will be more lasting than behavior that is not based on knowledge. Knowledge is an important factor in determining a person's

behavior because knowledge can cause changes in the perception of people's habits, including acting. The formation of a person's attitude is also influenced by the level of knowledge. The higher one's knowledge, the better one's attitude in dealing (Notoatmodjo, 2012). A significant influence on the ability to detect high-risk pregnancies early. Expectant mothers with better personal autonomy will detect risks and assess their pregnancies and can choose health care institutions (Sugiarti et al., 2012).

One of the efforts in the risk approach to carry out screening activities for pregnant women by involving the closest person to pregnant women, namely the husband / family. After the discovery of risk factors, Communication, Information and Education are carried out to pregnant women and husbands / families for obstetric care during pregnancy and safe childbirth planning and preparation of planned referrals in case of emergencies (Rochjati P, 2011).

The husband is the first and foremost person in providing support and encouragement to the wife for pregnancy care as a result of discussions with the husband that previously they had never accompanied the wife during pregnancy check-ups and rarely even communicated with the wife related to the current pregnancy. This is due to their work as fishermen who spend more time at sea. This lack of attention of husbands also results in them not knowing that the wife's current pregnancy is one of the risky pregnancies (Kamal, 2013).

Support, a husband's attention to a pregnant wife will have a good impact on fetal development. Pregnant women who have risk factors will be prevented from complications because the husband will provide support by routinely bringing his wife to check her pregnancy. After being educated husbands understand that their role is very necessary for the health of the wife and fetal development. (Alio et al, 2013) explained that the role of the husband is needed to maintain the health of at-risk pregnant women. The role of the husband includes being a decision maker for preventive measures for complications by preparing nutritional needs during pregnancy, preparing funds in emergency conditions and providing mental and emotional support to mothers. The role of husbands and cadres is very necessary for screening risky pregnancies so that the occurrence of pregnancy emergencies can be prevented as early as possible in the community (Purba A et al., 2021).

In the risk approach strategy, screening activities are an important component in pregnancy services, which must be followed by communication, information, and education (KIE) to pregnant women, husbands, and families, for safe delivery planning to prepare planned referrals if needed. Through this activity, several risk factors that exist in pregnant women have been able to predict / estimate the possibility of complications that will occur. Therefore, screening activities must be carried out repeatedly so that risk factors that develop early can be found at a later gestational age (Angraini DID, 2017).

Family and community support are reinforcing factors for expected practices. Through continuous explanation and socialization, assistance and counseling from health workers, providing advice and strengthening from family and community are appropriate steps to improve maternal behavior in preventing pregnancy complications. Family support is enhanced through the involvement of husbands and other families in the Pregnant Women Class as well as supervisors and monitors of pregnant women's activities (Sriatmi A et al., 2020).

The purpose of screening with the Poedji Rochjati Scorecard (KSPR) is to make a grouping of pregnant women with Low Risk Pregnancy (KRR), High Risk Pregnancy (KRT), Very High Risk Pregnancy (KRST), in order to develop behavior of place needs and birth attendants in accordance with the conditions of pregnant women and empower pregnant women, husbands, families and communities to care and provide support and assistance in mental readiness, costs and transportation to make planned referrals (Hastuti P et al., 2018). KRST is the risk group for pregnant women with the highest number of maternal death cases, followed by KRT and KRR the least. This is something natural, because death is a condition that is always preceded by a very severe disease state with very high risk factors. But there are still low-risk pregnancies, this proves that there is no pregnancy that is not risky. In accordance with the score system in KSPR, that 2 is the minimum score in each pregnancy (Widarta GD et al, 2015).

Early detection of high risk is very important to prevent delays in handling and referral, because one of the factors causing the high mortality of mothers and babies due to the presence of 4 delays

include: late detection of danger signs, late in making referral decisions, late arriving at the referral place, and late getting help at the referral place. The delay in detecting problems is anticipated by educating pregnant women and their families, so that they can recognize danger signs. Delays in making decisions are anticipated by changing the way decisions are made. Improve the transportation system so that access to health care centers can be easier and faster and there are no more delays in arriving at the referral place (Yalina N et al., 2017)

4. Conclusion

Most pregnant women want to be able to do early detection of pregnancy complications independently. Early Detection of Pregnancy Complications is needed so that mothers and families can act appropriately so as to prevent death and complications in mothers and babies. This Study only descriptive design so only perception aspect we studied. For The Future Researcher to Study What Dominant Factor to early detection Complication Pregnant Women.

References

- Aeni N. (2013). Risk Factors for Maternal Death. *Public Health. Kesmas*, 7(10), 453–459.
- Alio et al. (2013). Community Perspective on The Role of Fathers During Pregnancy: A Qualitative Study. *BMC Pregnancy and Childbirth*.
- Angraini, D. . (2016). *Individual, Family, Social, Economic and Cultural Determinants of Chronic Energy Deficiency in Women of Childbearing Age in Central Lampung Regency*. 2016. University of Lampung: Faculty of Medicine.
- Angraini DID. (2017). Training for Posyandu Cadres in Early Detection of High Risk Pregnant Women (Resti) at Karang Anyar Community Health Center, South Lampung Regency. *JPM Ruwa Jurai*, 4(1), 1–17.
- Budiyasa. (2021). *Training for Groups of Pregnant Women and Patient Waiters in Early Detection of High Risk Pregnancies*. 20(24), 168–172.
- Central Bureau of Statistics. (2016). *Intercensal Population Survey (SUPAS)*. <https://sirusa.bps.go.id/index.php/dasar/pdf?kd=2&th=2015>.
- Hastuti P, Suparmi, Sumiyati, Widiastuti A, & Yuliani, D. . (2018). Pudji Rochjati score Card for Antenatal Skrining. *Link*, 14(2), 110–113.
- Ika Mardiyanti, Esti Puji Rahayu, Nur Zuwaria, Priyo Mukti Pribadi Winoto, & Hartatiek Nila Karmila. (2023). Empowering pregnant women and families in carrying out early detection of risky pregnancies by utilizing the 2020 KIA book and the D’Risk application. *Bernas: Journal of Community Service.*, 4(4), 3131–3135.
- Kamal. (2013). Factors Associated with The Timing of Antenatal Care Seeking in Bangladesh Asia Pacific. *Journal Of Public Health*.
- Kencanawati, D. A. P. M., & Mirong, I. D. (2019). Increasing Community Participation in Early Detection of Maternal and Id Health Using Community Screening in Bello Village. *Proceedings of the National Seminar on Sanitation*, 151–157.
- Konstania, G. (2015). *Pregnancy Midwifery Care Module*.
- Kumalasari D. (2020). *Detection of Growth and Development and Emotions of Toddlers in Cases of Maternal Death as an Illustration of the Quality of the Nation’s Generation*. 6(1), 17–22.
- Notoatmodjo. (2012). *Health Promotion and Health Behavior*. Rineka Cipta.
- Purba A, Sirait A, & Sinaga TR. (2021). Pregnancy Risk Factor Screening and Empowerment of Husbands and Cadres in Pantai Labu Serdang Bedagai Village. *Warta Pengabdian*, 15(1), 37–45.
- Republic of Indonesia Ministry of Health. (2015). *Health in the Sustainable Development Goals (SDG’s) Framework*.
- Ristrini, O. (2014). Efforts to increase early detection of high-risk pregnancies through completing MCH books by midwives in Bangkalan Regency, Tiur Java in 2013. 215–225. *Health Systems Research Bulletin*, 17(3), 215–225.
- Rochjati P. (2011). *Antenatal Screening in Pregnant Women Introduction to Risk Factors*. Airlangga Press.
- Sriatmi A, Jati, S. P., & Budiyanti RT. (2020). Support and Perceptions of Pregnancy Complication Prevention Behavior. *HIGEIA Journal Of Public Health REsearch and Develoment*, 4(3).
- Sugiarti, Soedirham, o, & Mochny I.S. (2012). Efforts to Empower Pregnant Women for Early Detection of High Risk Pregnancy in the First Trimester. *The Indonesian Journal Of Public Health*, 9(1), 27–36.
- Ummah DA, & Kostania G. (2019). Using the Text Massaging Program to improve the ability of pregnant women to detect early danger signs of pregnancy. *Jurnal Ilmiah Bidan*, IV(3).
- Widarta GD et al. (2015). Early Detection Risk Of Pregnant Women with Poedji Rochjati Score Card to prevent four late factor. *Majalah Obstetri and Ginekologi*, 23(1), 28.
- Yalina N, Santi D.R, & Azis MA. (2017). Early Warning Information System Of Pregnancy Risk As an Effort to reduce maternal mortality Rate. *ACMInternational Conference Proceeding Series. Part F1320 (November 2015)*, 50–54.