



Antenatal Care Description and Pregnancy Risk of Pregnancy in Pregnant Mother in Palu City 2019: Study of Co-Ass Assistance for IKM-KK Faculty of Medicine, Tadulako University

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Abstract

The purpose of this study was to obtain an overview of pregnancy risk factors in pregnant women accompanied by young doctor from the IKM-KK department of the Faculty of Medicine at Tadulako University during a stage at the Primary Health Care in the city of Palu. The design of this study was descriptive in order to obtain an overview of pregnancy risk factors obtained from the checklist for assisting pregnant women. The population in this study were all pregnant women who received young doctor from the IKM-KK department in the last 2 (two) years, totaling 147 pregnant women. While the sample in this study was 3rd trimester pregnant women whose notes in the accompanying book are complete. The results showed that: 1) Compliance with the lowest Antenatal Care standard in laboratory tests (70%); 2) Pregnant Women with Low Risk Pregnancy (KRR) of 58.2%, High Risk Pregnancy (KRT) of 32.2% and Very High Risk Pregnancy (KRST) of 9.6%; 3) The three highest risk factors for pregnancy are getting pregnant too soon again <2 years (31.3%), had cesarean section (22.9%) and pre-eclampsia (16.7%); and 4) Pregnant women with very high risk pregnancies (KRST) at most (72.7%) were found in urban health centers, including: kamonji (36.3%), Singgani (18.2%) and Talise (18.2%).

Introduction

Maternal health services are a top priority for national and global health development (Kemenkes RI, 2017). The Government of the Republic of Indonesia has even targeted increasing coverage of maternal health services as stated in the 2015-2019 National Mid-Term Development Plan (RPJMN) and the Ministry of Health Strategic Plan 2015-2019 (Kemenkes RI, 2015).

The percentage of women who first check for pregnancy (K1) at the age of the womb less than 4 months increased from 75% in the 2007 IHDS to 82% in the 2017 IHDS. While the K4 coverage increased from 66% in the 2007 IHDS to 77% in the 2017 IHDS (Badan Pusat Statistik et al., 2017). In Central Sulawesi itself, K1 coverage in the last 5 years also increased from 80% in 2014 to 90.3% in 2018. While K4 coverage increased from 77% in 2014 to 78.3% in 2018 (Dinas Kesehatan Provinsi Sulawesi Tengah, 2018).

However, pregnancy complications are still a problem or health problem that often occurs during pregnancy, and can have an impact not only on maternal health but also on newborns.

Complications related to pregnancy that occur in pregnant women include continuous vomiting and unwilling to eat, high fever, swollen feet, hands and face accompanied by seizures, fetus lack of movement, bleeding in the birth canal, and premature rupture of membranes (Kemenkes, 2010).

The 2017 IHDS report presents that pregnancy disorders or complications experienced by women 15-49 years reach 19% (Kemenkes RI, 2017). WHO estimates that 15-20 percent of pregnant women in both developed and developing countries will experience a high risk (risk) and / or complications (World Health Organization, 2016). WHO also reports that the main causes of maternal death are bleeding, eclampsia, and infections and contribute to 60% of total maternal deaths. This condition can be prevented if early detection of pregnancy risk factors is adequate when antenatal care (Hanson et al., 2018).

Several risk factor approaches for preventing maternal deaths have been developed in Indonesia. Factor 4 is too late and 3 is a well-known risk factor concept for quite some time in Indonesia (Kemenkes RI, 2018). Likewise, the Poedji Rochjati Scorecard has been used in general in Indonesia, especially in Central Sulawesi, to detect early risk factors for pregnancy that can adversely affect pregnant women and the fetus they contain.

To help village midwives conduct early detection of these pregnancy risk factors, the Public Health and Community Medicine (IKM-KK) department of the University of Tadulako has a pregnant mother assistance program. Every co-ass student who stases in the IKM-KK department is obliged to assist pregnant women. Using a handbook for assisting pregnant women, coass students conduct an assessment of the health status of pregnant women, conduct counseling and train pregnant women to conduct early detection of risk factors for pregnancy independently by using the pudji rochyati score card.

Methods

This research is a descriptive study to obtain an overview of pregnancy risk factors obtained from the checklist for assisting pregnant women. The population in this study were all pregnant women who received co-ass assistance from the IKM-KK department that had been stationed at the Palu City Health Center in the last 2 (two) years, totaling 147 pregnant women. The researcher decided to conduct a total sampling in this study, with inclusion criteria for trimester 3 pregnant women and the results of the recording in the accompanying book are complete. There are 115 pregnant women who meet the inclusion criteria above.

Results and Discussion

This study aims to obtain an overview of pregnancy risk factors in pregnant women accompanied by student co-ass section of the IKM-KK Faculty of Medicine at the Tadulako University during a stase at the Primary Health Care in the city of Palu. The length of stase in the IKM-KK department is 8 weeks, divided into 3 parts: 3 weeks at the Palu City Primary Health Care, 3 weeks at the Primary Health Care outside Palu City and 2 weeks on campus to complete tasks during the stase at the Primary Health Care. One of the competencies that must be possessed by IKM-KK co-ass students is conducting a major assessment of pregnancy risk. By using a guide book towards a Healthy Pregnant Woman, the co-ass students take 6 steps in mentoring: 1) Establishing a relationship with pregnant women, 2) Conducting an ANC standard check list, 3) Recording laboratory examination scores, 4) Conducting checks list of compliance with the consumption of added blood tablets, 5) Conduct counseling according to the MCH handbook and 6) Assess the risk of pregnancy by using a modified pudjirochyati score card.

Characteristics of Respondents

Table 1. Characteristics of Respondents Getting Assistance Student of Co-Ass IKM-KK Faculty of Medicine Untad in 2019

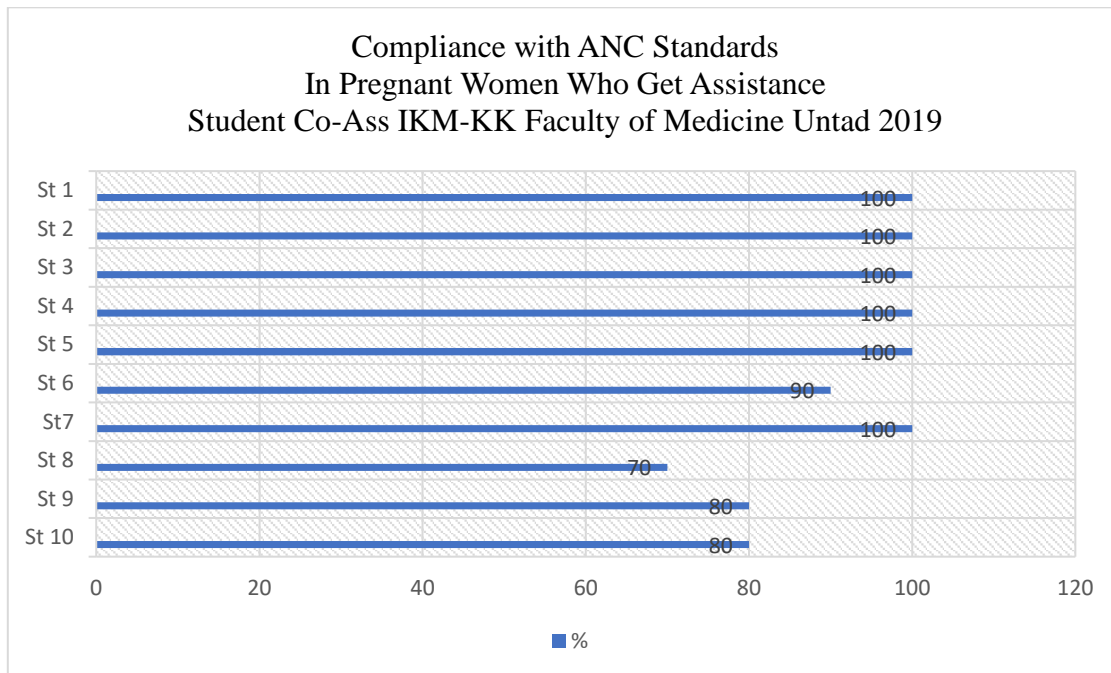
No	Variable	Category	Amount	%
1	Mother's Age	< 20 years	36	31,3
		20 – 35 years	75	65,2
		>35 years	4	3,5
2	Education	Primary school	7	6,1
		Junior high school	14	12,2
		Senior High School	67	58,2
		Diploma 3 / bachelor degree	27	23,5
3	Profession	Housewife	54	46,9
		State civil apparatus	27	23,5
		Entrepreneur	34	29,6
4	Gravida	Primigravida	37	32,2
		Multigravida	78	67,8
5	Laboratory examination	Anemia	7	6,1
		Normal	108	93,9
6	consumption of Fe tablets	Not obey	47	40,9
		Obedient	68	59,1

Source: primary data, 2020

Based on the table above, there are 4 respondents (3.5%) who are at high risk based on age characteristics (> 35 years). There are 7 respondents (6.7%) who have anemia and there are still many respondents who are not compliant in consuming blood-added tablets (40.9%).

Antenatal Care Compliance (ANC)

Co-Ass students check the 10 Antenatal Care (ANC) standards, including : (1) Measurement of body weight and height; (2) Blood Pressure Checks; (3) Measurement of upper arm circumference; (4) Examination of uterine fundus height; (5) Determine fetal presentation and fetal heart rate; (6) Determine immunization status; (7) Getting blood added tablets; (8) Laboratory tests (Hb); (9) Counseling and (10) Case management. The results are as follows:



Source: primary data, 2020.

Antenatal Care standard which is still low in achievement is laboratory examination (Hb). During pregnancy, a mother should get 2 (two) laboratory examinations at the Primary Health Care. Most of the respondents who did not get a complete laboratory examination were pregnant women who did a pregnancy check at the Posyandu and they were reluctant to come again to the Primary Health Care. Achievement rates for Counseling and Case Management, which is still less than 100%, have been backed up by Co-Ass students during mentoring. There are still 10% of respondents who have not received complete Tetanus Toxoid immunization. During the mentoring, Co-Ass students have educated pregnant women to increase the rate of adherence to ANC standards.

Great Pregnancy Risk and Risk Factors

According to Ward et al (1994) that the determinant of a proxy for maternal death is the pregnancy itself and the complications of pregnancy. That is, every mother, family, community, and also health workers must realize that pregnancy itself is a risk. So that the examination of pregnancy becomes a very important part in order to conduct early detection of the risks that may occur, by assessing the determinants between and contextual determinants (Gabrysch & Campbell, 2009).

By using the Pudjirochyati score card, the risk factors can be identified. Co-Ass students teach pregnant women to self-assess the risk of pregnancy. Based on the number of pregnancy scores divided into 3 (three) groups: low risk pregnancies (KRR) with a total score of 2, high risk pregnancies (KRT) with a total score of 6-10, and very high risk pregnancies (KRST) with a total score of > 10. The results are as follows:

Table 2. Large Pregnancy Risk and Risk Factors in Pregnant Women Who Get Assistance Student of Co-Ass IKM-KK Faculty of Medicine Untad in 2019

No	Variable	Category	Amount	%
1	Pudjirochyati	2	67	58,2
	Score	6 - 10	37	32,2

		>10	11	9,6
		Total	115	100,0
2	Risk Factor	Getting pregnant too soon (<2 years old)	15	31,3
		Never had a Fault Operation	11	22,9
		Pre-Eklampsia	8	16,7
		Anemia	7	14,6
		Too old, age> = 35 years old	4	8,3
		Pregnant too young <= 16 years	3	6,2
		Total	48	100,0

Source: primary data, 2020

There are 11 pregnant women (9.6%) who have a Very High Risk Pregnancy (KRST) and must be educated early to give birth in the Hospital. There are 37 pregnant women (32.2%) who have a High Risk Pregnancy who must get strict control. This group has the potential to be included in the High Risk Childbirth category if there is no adequate management.

The risk factors that most contributed to the large risk score for pregnancy were pregnancy too soon <2 years (31.3%), cesarean section (22.9%), pre-eclampsia (16.7%) and anemia (14.6%) (%). The rest contributed 14.5%, namely the age of pregnancy that was too old > = 35 years (6.2%) and the age of pregnancy that was too young <= 16 years (6.2%).

If you look at the risk factors above, then one of the contributing factors is counseling for pregnant women to use inadequate contraception, to control the distance of the pregnancy. Failure of contraception is also one of the factors of unwanted pregnancy. Meanwhile, according to PKBI (2018), the main causes of unwanted pregnancies include not using contraception when having sexual intercourse and failure to use contraception when having sexual intercourse (Rahadian, 2018).

Primary Health Care with Very High Risk Pregnancy (KRST)

Data of 11 pregnant women with Very High Risk Pregnancy (KRST) are distributed in several Puskesmas areas in Palu City, as the table below:

Table 3. Distribution of Very High Risk Pregnancy (KRST) based on the location of the Puskesmas in Palu City in 2019

No	Primary Health Care	Amount	%
1	Kamonji	4	36,3
2	Singgani	2	18,2
3	Talise	2	18,2
4	Tawaeli	1	9,1

5	Bulili	1	9,1
6	Pantoloan	1	9,1
	Total	11	100,0

Source: primary data, 2020

Kamonji, Singgani Puskesmas and Talise are Primary Health Care located in Palu City (urban characteristics). These three Primary Health Care have the most population, respectively, compared to other Primary Health Care. Most (72.7%) of the total pregnant women with Very High Risk Pregnancy (KRST) were in the three health centers.

Conclusion

Adherence to the lowest Antenatal Care standard in laboratory tests (70%), pregnant women with Low Risk Pregnancy (KRR) of 58.2%, High Risk Pregnancy (KRT) of 32.2% and Very High Risk Pregnancy (KRST) of 9.6%, the three highest risk factors for pregnancy are pregnant too soon again <2 years (31.3%), had cesarean section (22.9%) and pre-eclampsia (16.7%) and most pregnant women with very high risk pregnancies (KRST) (72.7%) were found in urban health centers, including: kamonji (36.3%), Singgani (18.2%) and Talise (18.2%). Primary Health Care give attention to mothers with very high risk pregnancies and mothers with high risk pregnancies because they have the potential for high risk childbirth.

References

- Badan Pusat Statistik, Badan Kependudukan Dan Keluarga Berencana Nasional, Kementerian Kesehatan, & USAID. (2017). *Survei Demografi Kesehatan Indonesia*. Jakarta, Indonesia.
- Dinas Kesehatan Provinsi Sulawesi Tengah. (2018). *Profil Kesehatan Provinsi Sulawesi Tengah Tahun 2018*. Profil Kesehatan Provinsi Sulawesi Tengah Tahun 2018. <https://doi.org/10.1007/s13398-014-0173-7.2>
- Gabrysch, S., & Campbell, O. M. (2009). Still too far to walk: literature review of the determinants of delivery service use. *BMC pregnancy and childbirth*, 9(1), 34.
- Hanson, K. T., Pupilampu, K. P., Shaw, T. M., Pupilampu, K. P., & Essebey, G. O. (2018). *From MDGs to SDGs. In From Millennium Development Goals to Sustainable Development Goals*. <https://doi.org/10.4324/9781315228068-4>
- Kemendes RI. (2010). *Pedoman Pelayanan Antenatal Terpadu*. Direktur Jenderal Bina Kesehatan Masyarakat.
- Kemendes RI. (2015). *Rencana Strategis Kementerian Kesehatan Republik Indonesia 2015-2019*. Kementerian Kesehatan RI.
- Kemendes RI. (2017). *Survey Demografi dan Kesehatan Indonesia. In Survei Demografi dan Kesehatan Indonesia 2017*. <https://doi.org/0910383107> [pii]r10.1073/pnas.0910383107
- Kemendes RI. (2018). *Profil Kesehatan Indonesia 2017*. Data dan Informasi. Kementerian Kesehatan RI; 2018. Jurnal Ilmu Kesehatan.
- Rahadian, A. (2018). *Kematian Ibu dan Upaya-Upaya Penanggulangannya*. Available from: <https://pkbi.or.id/kematian-ibu-dan-upaya-upaya-penanggulangannya/>

Ward, V. M., Maine, D., McCarthy, J., & Kamara, A. (1994). A strategy for the evaluation of activities to reduce maternal mortality in developing countries. *Evaluation Review*, 18(4), 438-457

World Health Organization. (2016). *WHO Millennium Development Goals (MDGs)*. Available from: https://www.who.int/topics/millennium_development_goals/