HIGH RISK PREGNANCY OVERVIEW AND REGULARITY ANTENATAL CARE (ANC)

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ABSTRAK: GAMBARAN KEHAMILAN RESIKO TINGGI DAN KETERATURAN ANTENATAL CARE (ANC

Latar Belakang: Kehamilan risiko tinggi adalah keadaan yang dapat mempengaruhi keadaan ibu maupun janin pada kehamilan yang dihadapi. Dampak dari kehamilan risiko tinggi ini dapat dicegah melalui pemeriksaan kehamilan (*antenatal care*) secara teratur.

Tujuan: Mengetahui gambaran kehamilan risiko tinggi dan keteraturan antenatal care di wilayah kerja Puskesmas Kauman Tulungagung

Metode: Penelitian ini menggunakan rancangan deskriptif observasional dengan pendekatan cross-sectional. Populasi dalam penelitian ini berjumlah 56 orang. Sampel dipilih menggunakan teknik *non probability sampling* yaitu *total sampling*

Hasil: Hasil dari penelitian ini adalah Gambaran kehamilan risiko tinggi di wilayah kerja Puskesmas Kauman sebagian besar calon ibu yang terancam (resti) karena terlalu tua > 35 tahun, memiliki jumlah anak sebanyak 4/lebih, memiliki latar belakang operasi caesar/SC, hamil lagi terlalu dini < 2 tahun dan masa lalu yang penuh dengan penyakit . Hasil penelitian ini juga menggambarkan keteraturan ANC yang standar.

Kesimpulan: Sebagian besar ibu hamil rutin melakukan pemeriksaan kehamilan (*antenatal care*).

Saran: Diharapkan ibu hamil lebih aktif lagi mencari informasi terkait kehamilannya, yang nantinya dapat didiskusikan dengan Bidan.

Kata kunci: *antenatal care,* kehamilan resiko tinggi

ABSTRACT

Background: High risk pregnancy is a condition that can affect the condition of the mother and fetus in the pregnancy being faced. The impact of this high-risk pregnancy can be prevented through regular pregnancy check ups (antenatal care).

Purpose: Knowing the description of high risk pregnancies and the regularity of antenatal care in the work area of the Kauman Tulungagung Health Center

Methods: This study uses a descriptive observational design with a cross-sectional approach. The population in this study amounted to 56 people. The sample was selected using a non-probability sampling technique, namely total sampling.

Result: The results of this study are a description of high-risk pregnancies in the Kauman Health Center work area, most prospective mothers are threatened (resti) because they are too old > 35 years old, have 4/more children, have a history of caesarean section/CS, get pregnant again too early < 2 years and a past full of disease. The results of this study also describe the regularity of standard ANC.

Conclusion: Most pregnant women routinely have pregnancy check-ups (antenatal care).

Suggestions: It is hoped that pregnant women will be more active in seeking information related to their pregnancy, which can later be discussed with the midwife.

Keywords: high risk pregnancy, pregnancy check

INTRODUCTION

High-risk pregnancy is a condition that can affect the condition of the mother and fetus during the pregnancy being faced. Pregnant women who experience medical disorders or health problems will be included in the high-risk category, so that the need for the implementation of care during pregnancy becomes greater (Lestari & Nurrohmah, 2021). There are several classifications to remember for high-risk pregnancies, namely the age of the prospective mother who is too young <16 years. In addition, the age is over> 35 years, and the pregnancy gap is too far> 10 years (Andriyani, 2019). The impact of this high-risk pregnancy can

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be prevented through regular pregnancy check-ups (antenatal care) which aims to keep the mother healthy during pregnancy, childbirth, and postpartum. The importance of integrated Antenatal Care in examining high-risk pregnant women is expected to be carried out according to the minimum standards of antenatal care which are carried out continuously and comprehensively so that they are able to detect and handle high risks in pregnant women. Health services for pregnant women should meet basic standards in each trimester at least once in the first trimester / I (0-12 weeks of development), about once in the next trimester (12-24 weeks of improvement), and twice in the third trimester (24 weeks of development until birth). This standard of care time is set to ensure the welfare of pregnant women and children through early identification of dangerous elements, expectations and treatment as early considerations in dealing with pregnancy hazards (Ministry of Health of the Republic of Indonesia, 2020).

This high-risk pregnancy can be identified if the mother always undergoes regular Antenatal Care (ANC) checks. As is now the case, efforts have been made to differentiate high-risk pregnancy analysis early, especially by utilizing the Poedji Rochjati Score Card (KSPR) strategy as a tool for finding pregnancy risk and as a conclusion for detailing maternity specialists. KSPR can be utilized when patients make ANC visits. Therefore, midwives can provide education and guidance to prospective parents, carry out actual assessments, and convey antenatal considerations in normal pregnancies as an effort to identify high-risk early pregnancies (Yusuf et al., 2018).

According to data from the National Population and Family Planning Agency (BKKBN) in 2020, the single high-risk category (4 Too) reached 23.4%, with details of birth spacing under 24 months at 5.2%, maternal age 34 years at 4.8%, and too many children (more than 4 people) at 9.4%. The pregnancy group included in the risk category is around 5-10% (Nursal, 2020).

Data shows that the maternal mortality rate (MMR) worldwide has reached 287,000 deaths, or around 800 deaths per day, with an estimated one death in two minutes (WHO, 2023). The maternal mortality rate (MMR) in Indonesia is 305 per 100,000 live births, still far from the target of 183 per 100,000 live births in 2024 (Ministry of Health, 2023). In Indonesia, the direct causes of maternal death are bleeding of 3,114 people (27%), eclampsia of 2,653 people (23%). While in East Java it is eclampsia 26,965 and bleeding 26.96%, heart disease 13.91%, infection 6.09% (East Java Health Office).

In the high-risk category, pregnant women have characteristics of low weight, height less than 145 cm, history of previous poor pregnancy and childbirth, anemia or low blood pressure, blood pressure, fetal malposition, chronic diseases, bleeding during pregnancy, and non-medical factors. In addition, pregnant women who are over 35 years old, too young (under 20 years old), too many (more than 4 times), or too close to birth (less than 2 years) can have a high risk of pregnancy (Isnaini, 2020). The impacts caused by high-risk pregnancies are miscarriage, fetal distress, premature pregnancy, and poisoning during pregnancy (Susanti, 2020). High-risk pregnancies are more susceptible to complications. The 4T risks found in pregnancy can cause bleeding, miscarriage, prolonged labor, and anemia (Nufra, 2021). Pregnancy under twenty years of age can endanger the health of the mother and fetus because their reproductive organs are not yet mature (Hazairin, 2021). In addition, pregnancy that is too old can cause bleeding, hypertension, gestational diabetes, and placenta previa in the mother (Utami, 2020).

RESEARCH METHODS

The method in this study is an observational method with a cross-sectional approach, where the study was conducted only once, namely in January 2025. This study describes high-risk pregnancies and regularity in Antenatal examinations with non-probability sampling samples with the total sampling method. The population in this study were all pregnant women with high-risk pregnancies at the Kauman Health Center, Tulungagung Regency, namely 56 pregnant women. The sample in this study were all high-risk pregnant women with inclusion criteria: high-risk pregnant women who gave birth in 2025, underwent pregnancy checks at the Kauman Health Center unit, had complete records in the cohort of pregnant women and resided in the Kauman Health Center work area..

RESEARCH RESULTS

Table 1
Characteristics of Research Subjectstics

Characteristics	N	%
Age		
<25 years	25	44,6
25 – 35 years	25	44,6
>35 years	6	10,7

Education		
junior high school	11	19,6
senior high school	38	67,9
Bachelor degree	7	12,5
Work		
housewife	38	67,9
private	7	12,5
self-employed	5	8,9
government	6	10,7
employees		

Based on the data above, it was obtained that almost half of the respondents were aged <25 years, namely 25 (44.6%) and 25-35 years, namely 25 (44.6%), seen from education, the majority of respondents had a high school education, namely 38 (67.9%) and seen from their occupation, the majority of respondents were housewives, namely 38 (67.9%).

Table 2
Results of the Distribution of High-Risk Pregnancy Respondents based on pregnancy risk factors based on Puji Rochjati's score

Faktor Resiko	N	%
Too old to get pregnant I >35 tahun	3	5,3
Too long to get pregnant again (> 10 tahun)	6	10,7
It's too early to get pregnant again (< 2 tahun)	4	7,1
Too many children, 4/ lebih	5	8,9
Too old > 35 tahun	6	10.7
Too short < 145 cm	1	1,7
Have experienced a failed pregnancy	7	12,5
Have had a cesarean section	8	14,2
Diseases in pregnant women (Anaemia, Malaria, Tuberculosis, Pneumonia, Coronary Disease, Diabetes, Infectious Diseases	4	7,1
Enlargement of face/legs and hypertension	0	0
Pregnant with 2 or more twins	2	3,5
Baby dies in the womb	0	0
Breech position	3	5,3
Latitude	7	12,5
Bleeding during pregnancy	0	0

The frequency distribution of each parameter is as follows, the parameter of pregnancy >35 years as many as 3 people or 5.3%, the parameter of pregnancy duration >10 years as many as 6 people or 10.7%. Too old for adults >35 years 6 individuals increased by 10.7%. Too short <145 cm and above for 1 person is 1.7%. Seven pregnant women in this study experienced failed pregnancies (early termination) or 12.5%. In the parameter of CS history as many as 8 people or 14.2%. History of illness in pregnant women at this time as many as 4 people or 7.1%. There are no factors of enlargement of the feet/face and hypertension. Mothers who are pregnant with twins or more get a frequency distribution of 2 people or 3.5%. There are no parameters of stillbirths in the womb. The parameter of breech position as many as 3 people or 5.3%, pregnant with a transverse position as many as 7 people (12.5%). There is no parameter of bleeding during pregnancy.

Regularity of Antenatal Care for Pregnant Women with High Risk

Regularity of Antenatal Care	F	%
Regular	41	73,2
Irregular	15	26,8

Based on the data above, the majority of respondents carried out antenatal care regularly, namely 41 (73.2%) high-risk pregnant women.

DISCUSSION

Description of high-risk pregnancy at Kauman Tulungagung Health Center

Characteristics in this study obtained data from respondents aged <25 years as many as 25 (44.6%), 25-35 years as many as 25 (44.6%) age >35 years as many as 6 (10.7%), seen from education most respondents last education high school namely 38 (67.9%), junior high school 11

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(19.6%), S1 7 (12.5%) and seen from work most respondents are housewives as many as 38 (67.9%), private 7 (12.5%), self-employed 5 (8.9%) and civil servants 6 (10.7). High-risk pregnancy consists of several parameters, including the description for high risk pregnancy at age > 35 years only gets a percentage of 5.3%. Pregnant women aged > 35 years are high-risk pregnancies, because at this age the reproductive organs experience decreased function, muscles lose their elasticity and are related to diseases suffered by the mother.

The results of this study are in line with research conducted by Ningrum, Amanah Perdana, (2015), which examined the relationship between age and anemia in pregnancy in pregnant women at the Wates District Health Center, Kulon Progo Regency. The highest distribution results were pregnant women aged 20-35 years as many as 218 people or 54.6%. And the lowest distribution was the age of 35 years as many as 181 (45.4%) respondents. Another study conducted by Tambunan, (2011), reported that as many as 64 people or 80% of pregnant women were aged 20-35 years, and as many as 16 (20%) pregnant respondents were 35 years old. The parameter of the length of pregnancy again >10 years as many as 6 people or 10.7%. Too old to get pregnant again >35 years 6 people increased by 10.7%. Too short <145 cm or others for 1 person is 1.7%. Based on Edyanti and Indawati's (2014) research, height <145 cm has a p value of 0.001 so that it can be stated that there is a relationship between height and obstetric complications. Height <145 cm causes the mother's pelvic area and the size of the fetus' head to be disproportionate, (Widatiningsih & Dewi, 2017). Seven pregnant women in this study had experienced failed pregnancies (early end) or 12.5%. Another article that supports this study was written by Faturohmah et al., (2017) which stated that 147 (24.6%) respondents experienced an early end. The pathophysiology of sudden death begins with damage to part or all of the placental tissue so that it shrinks and requires oxygen. The tissue pieces that are sent will be considered foreign objects and finally the uterus will agree to remove the object.

In the parameter of the history of Sectio Caesarea (SC) in this study, the distribution results showed as many as 8 people or 14.2%. This study is in line with research by Probowati et al., (2019), obtaining distribution results of 75 people or 12.1% of mothers who had a history of Sectio Caesarea. Suryawinata et al., (2019), explained the pathophysiology of surgical wounds, which will experience changes during pregnancy, then the wound will experience thinning and increase in size. So that this can cause uterine rupture in pregnancy and childbirth with a history of Sectio Caesarea. Thinning of the lower uterine segment (SBR) due to Sectio Caesarea surgery can also increase the risk of placenta accreta and previa. Parameters of medical history in pregnant women (anemia, malaria, pulmonary tuberculosis, heart failure, diabetes, sexually transmitted diseases) where as many as 4 people or 7.1%. From the results of this study, data was obtained that a small number of pregnant women had a history of the disease. This study is supported by research from Khasanah (2016), which found that 3.2% of pregnant women had a history of pulmonary tuberculosis and 9.7% of asthma. The negative impacts of a history of illness during pregnancy can affect the mother's physical condition, energy, and breast milk (ASI) is reduced, babies are born prematurely, and fetuses die in the womb (Widatiningsih & Dewi, 2017). The description of the parameters of swelling in the legs/face and high blood pressure stated that no pregnant women experienced it or as much as 0%. This study shows that swelling in the legs/face and high blood pressure are experienced by several pregnant women. The results of this study are supported by research by Probowati et al., (2019) where the incidence of hypertension in pregnant women got a distribution of 4.2%. Khasanah (2016) in his study got a distribution value of 9.7% of pregnant women respondents suffered from high blood pressure, 6.5% suffered from preeclampsia and 3.2% were obese. This study is supported by the results of research by Rusnoto, Hidayah et al., (2019) which stated that there is a relationship between pregnancy hypertension and the degree of edema with a significance value of 0.000 <α (0.05). The parameters of twin pregnancies 2/more are distributed as many as 2 people or 3.5%. The results of this study indicate that 2.9% of mothers have had twin pregnancies. In twin pregnancies, the mother's uterus enlarges and presses on internal organs and causes complaints such as shortness of breath, edema of both labia and legs, varicose veins, and hemorrhoids. The dangers that can occur are pregnancy poisoning, hydramnios, anemia, premature labor, abnormal position, difficult labor, and bleeding during labor. Supported by research conducted by Hanifah et al., (2017), which states that gameli (twin) pregnancy is related to the incidence of preterm labor as indicated by a value of p = 0.030 <α (o,05). The description of the incidence of twin pregnancies was also carried out by Astuti, (2018), obtaining a distribution result of

5% for mothers with twin pregnancies. The description of the parameters of stillbirths in the womb was non-existent. This study is in line with the research of Pulungan, (2019) which obtained the result that 72.7% experienced fetal death in the womb. If the dead fetus in the womb is not immediately removed for more than 4 weeks, it can cause a greater blood disorder (hypofibrinogemia).

The breech position parameter description was found in 3 (5.3%) respondents, followed by the transverse position category of 7 (12.5%) respondents. The results of this study reported that pregnancies with a high risk of fetal abnormalities were still experienced by several pregnant women. This study is reinforced by research conducted by Probowati et al., (2019), which stated that 0.6% of mothers experienced breech pregnancies and 1.3% experienced transverse pregnancies. The description of bleeding parameters in this pregnancy obtained a distribution of only 0.7% or as many as 1 person experienced it.

Researchers assume that the mother's age during pregnancy affects pregnancy and childbirth. The standardization of gestational age can be used as a guideline to reduce cases of high-risk pregnancies. Pregnancy intervals of <2 years are at risk of experiencing physical and psychological disorders, this is because after giving birth the mother really needs recovery of body organs. Researchers also argue that pregnant women who undergo Sectio Caesarea operations in previous deliveries have a greater risk than mothers with a history of normal delivery. If the mother routinely performs early detection during pregnancy, dangerous things can be detected earlier. Pregnancies with a history of disease and swelling of the legs/face with and high blood pressure are required to undergo routine monitoring and screening, although the incidence of cases can be said to be minimal, the impact of pregnancy with a history of disease is very dangerous. Given that the maternal and child mortality rates in Indonesia are still quite high. Mothers with multiple fetuses are required to undergo Antenatal Care because being pregnant with multiple fetuses is not easy. So that some complications in pregnancy and childbirth can be detected early. The history of stillbirth in the womb is still a big task that has not been completed, for that routine early detection of complications that may occur in pregnancy. Abnormal fetal position, is highly emphasized in education and regularity in conducting antenatal care monitoring. The right education in this case is planning the delivery process to protect the lives of the mother and her baby, so that the risk of bleeding and death of the mother and baby can be avoided.

Overview of ANC regularity at Kauman Tulungagung Health Center

The description of ANC regularity at Kauman Health Center is divided into two categories, namely the majority of regular categories, namely 41 respondents (73.2%) and the irregular category, namely 15 people (26.8%).

The results of this study indicate that most pregnant women in the working area of the Kauman Health Center Technical Implementation Unit routinely perform Antenatal Care. The regularity of ANC in this study was seen from pregnant women who made at least 4 visits during their pregnancy from the first trimester to the third trimester. This study is supported by research from Tambunan, (2011), which showed that 42.4% of pregnant women routinely made Antenatal Care visits in the third trimester, followed by 31.3% routinely made Antenatal Care visits in the first trimester, and the remaining 26.3% routinely made Antenatal Care visits in the second trimester. Pregnant women make antenatal care visits at least four times, namely: fetal development in the womb and maternal health until delivery. The second visit/K2 (Trimester II) mothers are advised to make an antenatal care visit at least once. The examination is mainly to assess the risk of pregnancy, fetal growth rate, or birth defects. The third and fourth visits/K3 and K4 (Trimester III) mothers make antenatal care visits every two weeks until there are signs of birth. Entering Trimester III, the mother makes antenatal care visits every two weeks until there are signs of birth. During this period, examinations are carried out: anamnesis of complaints and fetal movements, observation of fetal movements, physical and obstetric examinations, advice on pregnancy exercises, pregnancy risk assessment, Counseling Information Education (KIE) for pregnant women, ultrasound examination, repeat laboratory examinations (Wagiyo & Putrono, 2016).

Regular ANC visits for pregnant women can prevent the risk of complications during labor, this is because the mother already knows and is aware of the condition of the pregnancy she is undergoing. In every ANC visit, the midwife and health workers will conduct an anamnesis and physical examination of the pregnant woman and an examination of her fetus, in addition the midwife will provide counseling or education to the mother regarding the pregnancy she is undergoing. With regular ANC visits, things that may complicate labor can be detected early

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and can be overcome. It is different if in the case of pregnant women who do not routinely or even do not make ANC visits at all, it will be difficult to know the complications that may occur during labor. Pregnant women who do not routinely make ANC visits do not know their physical condition and the fetus they are carrying, the risk of complications in labor cannot be detected early, so it can endanger the mother and her fetus.

CONCLUSION

The results of this study illustrate that high-risk pregnancies at Kauman Health Center are mostly high risk because they are too old >35 years, have an excessive number of 4/more children, a history of caesarean section/CS, getting pregnant again too early <2 years and a history of illness suffered and Description of the regularity of antenatal care in the work area of Kauman Health Center Most pregnant women with high risk routinely make ANC visits..

SUGGESTION

Pregnant women with high risk are expected to be more active in seeking various information regarding their pregnancy condition which can be discussed with the midwife.

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