



Association Between Unwanted Pregnancy and Antenatal Care Attendance in Mojokerto, Indonesia

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ABSTRACT

The unwanted pregnancy (KTD) occurs when one or both parties of the couple do not want a pregnancy to occur or a pregnancy is actually desired but not at that time. Unwanted pregnancy is directly related to poor utilization of health services or low attendance for visits to antenatal care. This study aims to determine the relationship between unwanted pregnancies and the regularity of ANC at the Jatirejo Community Health Center, Jatirejo District, Mojokerto Regency.

This research is quantitative, the data source comes from questionnaires and KIA books. The sample was taken by accidental sampling of 30 pregnant women respondents. Data were analyzed univariately and bivariately, then statistical tests were carried out with Fisher's Exact Probability Test using the SPSS program.

Almost all of them did not have an accident, as many as 24 respondents (80%), only 6 respondents (20%) had an accident. Almost all of them regularly carry out ANC, namely 24 respondents (80%), those who do not carry out ANC regularly are still quite high at 20%. Bivariate analysis with statistical tests using Fisher's Exact Probability Test, obtained a P value of $0.001 < 0.05$, which means there is a relationship between Unintended Pregnancy and ANC Regularity.

The results of this research can be a reference for research sites as a reference in providing midwifery care, especially pregnancy. Considering the importance of pregnancy monitoring through ANC activities, it is hoped that respondents and other pregnant women can play an active role for the health of the mother and baby

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INTRODUCTION

Unintended pregnancy is a pregnancy that occurs when one or both partners do not wish to become pregnant or when the pregnancy occurs earlier than desired [1]. In recent years, the proportion of women seeking to avoid unintended or mistimed pregnancies has increased due to urbanization and socioeconomic changes that influence family planning preferences. Previous studies have shown that unintended pregnancy is associated with adverse health, economic, social, and psychological outcomes for both women and children [2].

According to the National Population and Family Planning Agency (BKKBN), the prevalence of unintended pregnancy in Indonesia reached 17.5% in 2020 [3]. Unintended pregnancy may contribute to pregnancy and childbirth complications, which remain major causes of morbidity and mortality among adolescent girls aged 15–19 years [3]. The rate of child marriage in Mojokerto Regency, East Java, remains relatively high. Many applications for marriage dispensation involve adolescents under the age of 19, primarily due to premarital pregnancy. Pregnancy outside marriage has been identified as one of the major contributing factors to child marriage in the region [4]. This condition is closely related to unintended pregnancy and highlights the need for adequate maternal health services, particularly antenatal care (ANC).

Unintended pregnancy has been associated with delayed initiation of antenatal care, inadequate utilization of maternal health services, and an increased risk of adverse pregnancy outcomes, including preterm birth, preeclampsia, postpartum hemorrhage, and childhood malnutrition [5]. Furthermore, women experiencing unintended pregnancies are more likely to delay prenatal care, engage in unhealthy behaviors during pregnancy, and experience elevated levels of stress and anxiety [6]. Several studies have demonstrated that unintended pregnancy is directly related to poor utilization of maternal healthcare services, including lower attendance at antenatal care visits [7]. Women with unintended pregnancies often receive less social support and are less likely to engage in positive self-care behaviors during pregnancy, such as taking nutritional supplements, receiving vaccinations, and maintaining adequate nutrition [7].

Considering the potential adverse consequences of unintended pregnancy and the importance of antenatal care in preventing maternal and neonatal complications, this study aimed to determine the relationship between unintended pregnancy and ANC regularity among pregnant women attending UPTD Jatirejo Community Health Center, Mojokerto Regency

METHOD

Study Design

This study employed an analytical cross-sectional design to examine the relationship between unintended pregnancy and the regularity of antenatal care (ANC) visits among pregnant women. The study was conducted at UPTD Jatirejo Community Health Center, Mojokerto Regency, East Java, Indonesia, from January to March 2025.

Population and Sample

The target population comprised all pregnant women who attended antenatal care services at UPTD Jatirejo Community Health Center during the study period. A total of 30 pregnant women who met the inclusion criteria were recruited using an accidental sampling technique. The inclusion criteria were: (1) pregnant women who attended ANC services during the study period, (2) willing to participate in the study, and (3) able to communicate effectively. Pregnant women with incomplete maternal and child health (MCH) records or those unwilling to participate were excluded.

Variables and Measurement

The independent variable was unintended pregnancy, defined as a pregnancy that was either unwanted or mistimed at the time of conception. Data on pregnancy intention were collected using a structured questionnaire. The dependent variable was ANC regularity. ANC regularity was assessed using data recorded in the Maternal and Child Health (MCH) Handbook (Buku KIA). Pregnant women were categorized as having regular ANC visits if they attended antenatal care according to the national ANC service recommendations, whereas those who did not meet the recommended schedule were categorized as irregular.

Data Collection

Primary data were collected using a structured questionnaire administered directly to respondents. Secondary data regarding ANC visits were obtained from the Maternal and Child Health (MCH) Handbook. Before data collection, respondents were informed about the study objectives and provided informed consent.

Data Analysis

Data were analyzed using the Statistical Package for the Social Sciences (SPSS) version 25. Descriptive statistics were used to summarize respondents' characteristics and study variables. Univariate analysis was presented as frequencies and percentages. Bivariate analysis was conducted to determine the relationship between unintended pregnancy and ANC regularity. Initially, the Chi-square test was considered; however, because more than 20% of the cells had expected frequencies less than five, Fisher's Exact Test was used as an alternative. Statistical significance was determined at a p-value of <0.05 .

Ethical Considerations

This study was conducted in accordance with the principles of the Declaration of Helsinki. Participation was voluntary, and confidentiality of respondents' information was maintained throughout the study.

RESULT AND DISCUSSION

Result

A total of 30 pregnant women participated in this study. The results are presented in four sections: respondent characteristics, unintended pregnancy status, ANC regularity, and the relationship between unintended pregnancy and ANC regularity.

Table 1. Characteristics of Respondents (n = 30)

Variable	Category	n	%
Age	<20 years	2	6.7
	20–35 years	25	83.3
	>35 years	3	10.0
Occupation	Employed	10	33.3
	Unemployed	20	66.7
Education	Basic (Elementary–Junior High School)	8	26.7
	Secondary (Senior High School)	18	60.0
	Higher Education	4	13.3
Parity	Primipara	7	23.3
	Multipara	23	76.7
	Grand Multipara	0	0
Contraceptive Use Before Pregnancy	Oral Contraceptive Pill	6	20.0
	Injectable Contraceptive	9	30.0
	Implant	3	10.0
	No Contraceptive Use	12	40.0

The majority of respondents were aged 20–35 years (83.3%), unemployed (66.7%), had secondary education (60.0%), and were multiparous (76.7%). In addition, 40.0% of respondents did not use any contraceptive method before pregnancy

Table 2 Frequency Distribution of Unwanted Pregnancy (KTD) at UPTD Jatirejo Health Center, Mojokerto Regency

No	KTD	Frequency (f)	Percentage (%)
1	Yes	6	20
2	No	24	80
Total		30	100

Table 2 shows that 6 respondents (20.0%) experienced unintended pregnancy, while the majority of respondents (80.0%) reported intended pregnancy

Table 3 Distribution of Frequency of Regularity of ANC at the UPTD Jatirejo Health Center, Mojokerto Regency

No	Regularity of ANC	Frequency (f)	Percentage (%)
1	Regular	24	80
2	No Regular	6	20
Total		30	100

Table 3 shows that most respondents attended antenatal care regularly (80.0%), whereas 20.0% had irregular ANC visits

Table 4 Cross Tabulation of Unwanted Pregnancy (KTD) with ANC Regularity at UPTD Jatirejo Health Center, Mojokerto Regency

KTD	Regularity of ANC		Total
	Regular	No Regular	
Yes	1	5	6
No	23	1	24
Amount	24	6	30

Fisher's Exact Probability Test = 0.001

Among respondents who experienced unintended pregnancy, 83.3% had irregular ANC visits and only 16.7% attended ANC regularly. In contrast, among respondents with intended pregnancies, 95.8% attended ANC regularly and only 4.2% had irregular ANC visits. The Fisher's Exact Test yielded a p-value of 0.001 ($p < 0.05$), indicating a statistically significant relationship between unintended pregnancy and ANC regularity among pregnant women at UPTD Jatirejo Community Health Center, Mojokerto Regency

Discussion

Unintended Pregnancy Among Pregnant Women

The present study found that 20.0% of respondents experienced unintended pregnancy, while 80.0% reported intended pregnancies. This finding is consistent with previous studies conducted in Indonesia, which reported that unintended pregnancy remains a significant public health concern despite improvements in family planning programs [8].

Unintended pregnancy may occur due to contraceptive failure, inconsistent contraceptive use, inadequate reproductive health knowledge, and limited access to family planning services [9]. In this study, 40.0% of respondents reported not using contraception before pregnancy, which may have contributed to the occurrence of unintended pregnancies. Furthermore, previous research has shown that married women may also experience unintended pregnancies because of unmet contraceptive needs, misconceptions regarding fertility, and lack of pregnancy planning [10].

Unintended pregnancy has important implications for maternal and child health. Women experiencing unintended pregnancies are more likely to face psychological distress, delayed recognition of pregnancy, and reduced utilization of maternal healthcare services [11]. Such conditions may negatively affect maternal well-being and pregnancy outcomes if not addressed through appropriate counseling and reproductive health education.

Regularity of Antenatal Care Visits

The findings revealed that 80.0% of respondents attended ANC services regularly. This result indicates a relatively good level of maternal awareness regarding the importance of antenatal care during pregnancy.

Regular ANC attendance plays a crucial role in monitoring maternal and fetal health, identifying pregnancy complications, and providing preventive interventions throughout pregnancy [12]. According to Indonesian maternal healthcare guidelines, routine ANC visits enable healthcare providers to detect pregnancy-related risks at an early stage and improve maternal and neonatal outcomes [13].

Several factors may influence ANC regularity, including maternal age, educational level, parity, socioeconomic status, accessibility of health services, family support, and knowledge regarding pregnancy care [14]. In the present study, most respondents were aged 20–35 years and had secondary education, characteristics that may facilitate better understanding of maternal health information and encourage regular ANC attendance.

Relationship Between Unintended Pregnancy and ANC Regularity

The main finding of this study demonstrated a statistically significant relationship between unintended pregnancy and ANC regularity ($p = 0.001$). Women experiencing unintended pregnancies were more likely to have irregular ANC visits compared with women whose pregnancies were intended. Among respondents with unintended pregnancies, 83.3% attended ANC irregularly, whereas only 16.7% attended regularly. In contrast, among respondents with intended pregnancies, 95.8% attended ANC regularly. These findings suggest that pregnancy intention plays an important role in influencing maternal healthcare-seeking behavior.

This finding is consistent with previous studies indicating that unintended pregnancy is associated with delayed initiation of ANC and lower utilization of maternal health services [14], [15]. Women who experience unintended pregnancies often face emotional stress, denial of pregnancy, lack of readiness for motherhood, and reduced motivation to seek healthcare services, which may contribute to irregular ANC attendance [16], [17].

A study conducted in Ethiopia reported that women with unintended pregnancies were significantly less likely to receive adequate antenatal care than women with intended pregnancies [18], [19] [20]. Similarly, systematic evidence has demonstrated that unintended pregnancy is associated with inadequate maternal healthcare utilization, delayed prenatal visits, and increased risk of adverse pregnancy outcomes [21], [22].

The findings of the present study support the theory that pregnancy intention influences maternal health behavior. Women who desire their pregnancies tend to be more motivated to maintain their health, comply with ANC schedules, and seek information related to pregnancy care. Conversely, women experiencing unintended pregnancies may delay healthcare utilization due to psychological, social, or economic barriers [23], [24], [25].

Therefore, healthcare providers should strengthen reproductive health education, family planning counseling, and early pregnancy screening to reduce the incidence of unintended pregnancy and improve ANC attendance. Midwives and primary healthcare workers play an essential role in identifying women at risk of unintended pregnancy and ensuring that they receive appropriate support throughout pregnancy.

CONCLUSION

The conclusion consists of a summary of the article that presents a summary of the results of research that has been carried out, and is the answer to the formulation of the problem. Conclusions must be aligned with the formulation of the problem and research objectives. If the conclusion is more than one, then it's written using numbered paragraphs, not by using bullets, and the writer can also add the prospect of development of the results of the research or study, as well as how further implications will be the prospects of research or further research.

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