

Original Research Paper

The frequency of antenatal care visits in the covid-19 pandemic era and new normal at Ngaglik Public Health Centre Sleman Yogyakarta Indonesia

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Abstract

The worst antenatal care visits resulting risks and complications of pregnancy are not detected early, antenatal visits at least 4 times is one effort to reduce complications related to pregnancy, childbirth, and postpartum in mothers and newborns. Research objective: there is a relationship between education and ANC frequency during Covid-19 pandemic and new normal at the Ngaglik Public Health Centre Sleman Yogyakarta Indonesia. Factors that affect the reduction in ANC frequency during the pandemic are lack of information about Covid, fear of contracting it, PSBB. This research uses descriptive Correlative research method with cross sectional approach. The sample used in this study is cluster sampling with a sample of 40 respondents. The statistical test used in this study is chi square statistical test. The results obtained Univariate analysis found that the majority of Gravida 2 was 18 (45%), the majority of high school education was 23 (57.5%) and ANC visits were in the good category $> 4 \times 25$ (62.5%), while the bivariate analysis stated that education with ANC visits had p-value 0.012 means p-value $< \alpha$ that is $0.012 < 0.05$ which means that H_0 is rejected and H_a is accepted with the conclusion that there is a correlation between education and ANC visit.

Keywords: frequency of antenatal care visits; the Covid-19 pandemic

1. Introduction

ANC (Antenatal Care) is a planned program of observation, education, and medical treatment for pregnant women, with the aim of: keeping the mother healthy during pregnancy; childbirth, and puerperium as well as getting a healthy born baby; safe and satisfying pregnancy and childbirth processes; monitoring possibilities risks of pregnancy; planning optimal management of high risk pregnancy; and decrease morbidity and perinatal maternal and fetal mortality (WHO, 2020).

The low antenatal booking visit coverage illustrates that there are still many pregnant women who have made their first antenatal care visit, but do not continue until the 4th visit in trimester 3, so that the pregnancy is out of control of health workers. These conditions open up opportunities of maternal and infant mortality. These conditions must be anticipated by increasing counseling to the community and conducting intensive communication and education to pregnant women and their families to check their pregnancies according to standards (Dinas Kesehatan Province DIY, 2010). Data on the coverage of K1 visits in DIY in 2017 has reached 100% in all districts. For K4 visits in Yogyakarta it has reached 91.85% with the highest rate in Sleman Regency (96.03%), and lowest in Gunungkidul Regency (86.02%) (Dinas Kesehatan DIY, 2017). Based on Basic Health Research data in 2018, the effort to tend the proportion of K4 examinations in Indonesia is 74.1% where this has increased from Basic Health Research in 2013 by 70.4%. In Special Region of Yogyakarta the tendency of the proportion of K4 Examination is more than the National achievement which is 91.85% where this has increased compared to 2013 which was 85.5% (Risksdas, 2018). With increased achievements of pregnant women Visit K4 is expected to get more quality Antenatal services.

According to the World Health Organization (WHO), Antenatal care for early detection of high risk of pregnancy and childbirth and can reduce maternal mortality and monitor the fetus condition [WHO, 2020]. Examination of pregnancy in Antenatal Care (ANC) based on established criteria is according to theory 1 time in the first trimester, 1 time in the second trimester and 2 times in the third trimester (Saifudin, 2002). The worst antenatal care visits resulting risks and complications of pregnancy are not detected early, antenatal visits at least 4 times is one effort to reduce complications related to pregnancy, childbirth, and the puerperium for mothers and newborns (Depkes RI, 2005).

According to the 2012 Indonesian Demographic and Health Survey (IDHS), the average maternal mortality rate (MMR) was recorded at 359 per 100,000 live births. The average mortality rate is much higher compared to the results of the 2007 IDHS which reached 228 per 100,000 live births. Basically, the cause of maternal death can be prevented, so that MMR in Indonesia can be reduced. One effort to reduce morbidity and maternal and perinatal mortality rates is by antenatal care (Antenatal care) (Manuaba, 2010).

According to Saifuddin, antenatal visits to monitor and supervise the welfare of mothers and children at least four times during pregnancy in the following times: first trimester pregnancy (<14 weeks) one visit, second trimester pregnancy (14-28 weeks) one visit, and third trimester pregnancy (28-36 weeks and after 36 weeks) two visits (Sugiyono et al., 2006). Antenatal supervision provides benefits with the discovery of various abnormalities that accompany early pregnancy, so that steps can be estimated and prepared in childbirth. It is known that the fetus in the womb and its mother is a unit that affects each other, so that optimal maternal health will improve the health, growth, and development of the fetus (Manuaba, 2010).

Until now, knowledge about COVID-19 infection in relation to pregnancy and the fetus is still limited and there are no specific recommendations for the management of pregnant women with COVID-19. Based on these limited data and some cases in previous Coronavirus (SARS-CoV and MERS-CoV) and some COVID-19 cases, it is believed that pregnant women have higher risk to severe illness, morbidity and mortality compared to the general population (Chen et al., 2020). Doctors and other medical staff should take an history about the travel history of a pregnant woman with symptoms of fever and upper respiratory tract infection following the guidelines in accordance with the 2019 nCoV Novel Coronavirus Infection Preparedness Guide (Favre et al., 2020).

The principles of COVID-19 management in pregnancy include initial isolation, standard infection prevention procedures, oxygen therapy, avoidance of fluid overload, administration of empirical antibiotics (considering secondary risk due to bacterial infection), SARS-CoV-2 examination and other co-infection examination, fetal monitoring and uterine contractions, early mechanical ventilation in the event of a respiratory disorder progressive, labor planning based on an individual approach or obstetric indications, and a team-based approach with multidisciplinary (WHO, 2020).

The novelty of this study is the investigation of the reduction in ANC visits because mothers rarely visit health facilities on the grounds that they are afraid of contracting or being infected with Covid 19, because of PSBB and lack of information about Covid 19.

Based on the results of a preliminary study at the Ngaglik Public Health Center Sleman, the coverage of K1 to K4 visits in 2020 reached 11.85%, this has decreased the ANC visit in the previous year. The urgency of this research is to know the extent of ANC visits during the pandemic and approaching new normal.

The purpose of this study was to analyze the frequency of antenatal visits during the Covid-19 pandemic and new normal pandemics at Ngaglik Public Health Center Sleman Yogyakarta Indonesia. Research objective: there is a relationship between education and ANC frequency during Covid-19 pandemic and new normal at the Ngaglik Public Health Centre Sleman Yogyakarta Indonesia.

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2. Research Methods

This research uses descriptive Correlative research method with cross sectional approach. The sample used in this study is cluster sampling, which is sampling in groups or groups, researchers do not list all members or units in the population, but rather simply register the number of groups or groups that are in the population. Cluster sampling is by taking 3 villages from Ngaglik Public Health Center Sleman in Ngaglik Sleman sub-district with 40 trimester III pregnant women. The data collection tool used check list, the researcher also looked at the MCH (Mother and Child Health) book to see the frequency of ANC visits. The statistical test used in this study is the chi square statistical test.

3. Results and Discussion

3.1. Results

Table 1. Distribution of gravida univariate, education and ANC visit

Characteristics	Amount	Percentage (%)
Gravida		
1	12	30
2	18	45
3	7	17.5
4	3	7.5
Education		
Elementary school and junior high school	6	15
High school	23	57.5
College	11	27.5
ANC visit		
Good > 4x	25	62.5
Less < 4x	15	37.5
amount	40	100

Source: Primary Data, 2020

Based on Table 1 states that the majority of gravidas 2 are 18 (45%), the majority of high school education is 23 (57.5%) and ANC visits are in the good category > 4x 25 (62.5%).

Table 2. Bivariate distribution

Variable	ANC visit				P-value
	Good		Less		
	f	%	f	%	
Gravida					159
1	6	15	6	15	
2	9	22.5	9	22.5	
3	6	15	1	2.5	
4	3	7.5	0	0	
Education					0.012
Elementary school and junior high school	1	2.5	5	12.5	
High school	88	45	5	12.5	

Source: Primary Data, 2020

Based on Table 2 states that the bivariate analysis of education with ANC visit has a p-value of 0.012 meaning p-value $< \alpha$ that is $0.012 < 0.05$ which means H_0 rejected and H_a is accepted with the conclusion that there was a correlation between education and ANC visits during a pandemic.

3.2. Discussion

In table 1 it is concluded that the majority of gravida 2 is 18 (45%), the majority of high school education is 23 (57.5%) while the bivariate analysis of education with ANC visits has a p-value of 0.012 meaning p-value $< \alpha$ of $0.012 < 0.05$ which means H_0 rejected and H_a is accepted with the conclusion that there was a correlation between education and ANC visits.

This states that good education will facilitate to getting information or new knowledge related to maternal health during pregnancy (Destaria & Pramono, 2011). Handling nutrition and health in the family will be limited if pregnant women have a low level of education (Notoadmodjo, 2013). This is in line with this research because most of the research is high school education, which means high school education is higher education than elementary school so that understanding of pregnant women is more mature.

ANC visits based on the results of this study stated that the majority were in the good category $> 4x$ 25 (62.5%). Based on the Ministry of Health's policy, during pregnancy the ANC visit frequency of pregnant women should be done at least four times (Sumarmi et al., 2016).

ANC is a planned program of observation, education and medical treatment for pregnant women, with the aim of: keeping the mother's health during pregnancy; labor, and childbirth and get a baby that is born healthy; safe and satisfying pregnancy and childbirth processes; monitor for possibilities of risks pregnancy; planning optimal management of high risk pregnancy; and decrease morbidity and perinatal maternal and fetal mortality (Masrianto et al., 2001).

Pregnant women who have the motivation to make ANC visits, will most likely think about determining attitudes, behaving to prevent, avoid or overcome the risk of pregnancy. Mothers have the awareness to conduct ANC visits to check their pregnancy, so that if there is a risk during pregnancy it can be handled early and appropriately by health workers, so that it can help reduce maternal mortality rates that are quite high in Indonesia (Depkes RI, 2004).

Midwives have roles and functions in midwifery care for individuals, group, and society. One indicator of the success of its role can be seen from the scope of the ANC (Rizki, 2012). In ANC, midwives carry out their role in pregnant women, families and the community. It is necessary to increase support for the role of midwives (Wylie & Linda, 2010).

RCOG (2020), Follow-up antenatal care is carried out 14 days after the period of acute illness ends. This 14-day period can be reduced if the patient is declared cured. Antenatal ultrasound is recommended for fetal growth monitoring, 14 days after resolution of acute disease. Although there is no evidence that disruption Fetal growth (IUGR) is a risk of COVID-19, two-thirds pregnancy with SARS is accompanied by IUGR and placental abruption occurs in the case of MERS, so ultrasound follow-up is required (RCOG, 2020).

During the Covid-19 pandemic and approaching new normal COVID-19 management principles in pregnancy include initial isolation, standard infection prevention procedures, oxygen therapy, avoidance of excess fluid, empirical antibiotics (considering secondary risks due to bacterial infection), SARS-CoV-2 examination and examination of co-infection the other, fetal monitoring and uterine contractions, early mechanical ventilation in the event of progressive respiratory distress, delivery planning based on an individual approach or obstetric indications, and a team-based approach with multidisciplinary (Burhan et al., 2020).

Special consideration for pregnant women is that radiographic examination must be with protection against the fetus. The frequency and type of fetal heart rate monitoring must be considered individually, taking into account the gestational age of the fetus and the condition of the mother. Maternal

stabilization is a priority before delivery and if there are other accompanying disorders such as severe pre-eclampsia, an appropriate treatment must be obtained. The decision to give birth needs to be considered, if labor will help the effectiveness of maternal resuscitation or because there is a fetal condition that requires immediate delivery. Giving corticosteroids for fetal lung maturation should be consulted and communicated with the team of doctors who treat them. Giving corticosteroids for fetal lung maturation must be as indicated (ACOG, 2019). So, mothers do not need to worry to undergo ANC visits during Covid-19 pandemic and new normal.

4. Conclusion

Based on univariate analysis, it was found that the majority of gravidas 2 was 18 (45%), the majority of high school education was 23 (57.5%) and ANC visits were in the good category $>4 \times 25$ (62.5%), while the bivariate analysis stated education with ANC visits has a p-value of 0.012 meaning p-value $< \alpha$ which is $0.012 < 0.05$ which means H_0 rejected and H_a was accepted with the conclusion that there was a correlation between education and ANC visits.

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