DETERMINANT OF TEENAGE PREGNANCIES

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Article Info

Abstract

The number of teenage pregnancies in Banyumas district in 1727 as a pregnant teenager less than 20 years old and young teenagers maternity by 1382 either through premarital or marital. The research was conducted in 2016 aimed to determine the factors that affect pregnancy young age in Banyumas. This research is a quantitative research with cross sectional approach. The population was all pregnant women under 20 years of pregnancy and childbirth are recorded in the data in Puskesmas Jatilawang, Puskesmas I Cilongok, health center II Donates totaled 614 people. Calculation of the estimated proportion of the sample using the formula obtained 107 samples, taken using simple random sampling technique. The data collection is done by using a questionnaire that advance has been tested questionnaire to meet the validity and reliability of a measuring instrument. Yan data analysis used univariate analysis with descriptive statistics, bivariate analysis using chi square, and multivariate analysis by logistic regression. The results showed the level of education, marital status, knowledge, access to information, health care utilization, the role of the family has no effect on pregnancy young age. Attitudes and access to health information is the most dominant variable affecting the pregnancy young age.

Introduction

Based on Indonesian Health and Demographic Survey, in 2012 the national Maternal Mortality Rate (MMR) was 359 per 100.000 living birth. In 2015, the maternal mortality per 100,000 living birth was 111.16 as recorded in Central Java. Maternal Mortality Rate in Banyumas was 100.6 per 100,000 living birth which was still beneath Central Java MMR target, which is 60 per 100.000 living birth (Dinas Kesehatan Kabupaten Banyumas, 2015).

The direct cause of maternal death in Banyumas was obstetric complication (90%), one of the obstetric complication was younger age for reproduction, under 20 years old, because the reproductive organs weren't mature enough to handle pregnancy and delivery. Based on research data, the younger age of pregnancy has 2-4 times greater risk of maternal death compared to pregnancy in 20-35 years of age. Based on a study by Kurniawan (2017), there was a case of neonatal death from a 17 year-old mother.

The data from Dinas Kesehatan Kabupaten Banyumas recorded 1727 teen pregnancy in below 20 year-olds and 1382 teen birth in unmarried and married teens. The three highest teen pregnancy rate and teen birth rate in primary healthcare in Banyumas were in Puskesmas I Cilongok, Puskesmas II Sumbang, and Puskesmas Jatilawang respectively. The teen pregnancy

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was also mentioned in a research by Kurniawan et al (2017) which stated that the phenomenon of unmarried teen pregnancy (unwanted pregnancy) happens at a young age, under 19 years old. This serves as the reason for teenagers dropping out of school and getting married younger than 20 years old. Based on the research results by Gamelia et al, 2013, that 7.4% of pregnant women in *Puskesmas Ajibarang* were under 20 years old. Ginting's Research (2011), stated that pregnancy-related knowledge, attitudes and behaviors are associated with teen pregnancy, in addition to parental education and occupation. Environmental factors, like culture, also take a role in the occurrence of young pregnancy. Based on the research by Fiatin (2011), patriarchal culture in a community places girls in the domestic sector, making them choose to marry off girls at a young age. This study aims to determine the factors that affect young pregnancy in Banyumas regency.

Method

This research is a quantitative research with cross sectional approach. The independent variables consisted of education level, marital status, knowledge, access to information, utilization of health service and family role and the dependent variable is teen pregnancy. The population of this study were all adolescents under 20 years old with pregnancy and history of maternity recorded in Puskesmas Jatilawang, Puskesmas I Cilongok and Puskesmas II Sumbang in Banyumas Regency with a total number of 614 people. The sample calculation using estimate proportion formula obtained 107 samples, taken using simple random sampling technique. The inclusion criteria were willing to be respondents, while exclusion criteria were adolescents who did not live in Puskesmas Jatilawang, Puskesmas I Cilongok and Puskesmas II Sumbang work area. Data collection was done using questionnaires (structured question) with interview method which has been tested first to fulfill the validity and reliability of a measuring instrument. The data analysis used was univariate analysis with descriptive statistic which aimed to explain and describe the characteristics of each research variable. Bivariate analysis was conducted to find out the relationship between free variable

and dependent variable by using Chi Square test which shows a significant correlation if p-value ≤0.05. Multivariate analysis was used to find out the relationship of more than one independent variable with dependent variable and to know the most dominant variable by using multiple logistic regression test.

Result and Discussion

From the study we found the teen pregnancy characteristic in Banyumas as follows in Table 1.

From table 1 we knew that most of the respondents were 19 years old (47.7%) when pregnant, unemployed (86.9%), had low family income (59.8%), had first pregnancy at 18 years old (42.1%), and had good pregnancy history (87.9%).

The measured criteria for teen pregnancy is when pregnancy occurs at young age whether planned or unwanted. From the research results data was obtained as follows.

Based on Table 2, the results of the univariate analysis showed that most of the respondents had planned young pregnancies (72%), had not graduated from elementary education (85%), married (98.1%), good knowledge level (57%), bad attitude (61.7%), good access to health information (57.9%), good health service utilization (84.1%), and good family support (52.3%).

Factors affecting teen pregnancy were analyzed one by one in bivariate analysis. The independent variables used were the level of education, marital status, knowledge, attitude, access to health information, food quality, and parenting. While the dependent variable was teen pregnancy.

From chi-square test result we know the relation of these independent variables with teen pregnancy, shown in Table 3.

Based on Table 3 showed a significant correlation between knowledge with teen pregnancy (0.001), attitude with teen pregnancy (0.001), health information access with teen pregnancy (0.001), and utilization of health service with teen pregnancy (0.037). There is no correlation between educational background with teen pregnancy (1.00), marital status with teen pregnancy (0.077), and parenting with teen pregnancy (0.438).

The results of this study indicated a

Table 1. Teen Pregnancy Characteristic in Banyumas

No	Characteristic	Category	f (people)	Percentage (%)
1	Age	15	1	0.9
		16	5	4.7
		17	9	8.4
		18	41	38.3
		19	51	47.7
2	Job	Employed	14	13.1
		Unemployed	93	86.9
3	Family income	High	43	40.2
		Low	64	59.8
4	First pregnancy age	15	7	6.5
		16	11	10.3
		17	22	20.6
		18	45	42.1
		19	22	20.6
5	Pregnancy history	Good	94	87.9
		Poor	13	12.1

Source: processed primary data

Table 2. Univariate Analysis

No	Variable	Category	f (people)	Percentage (%)
1	Education	Non graduated elementary	1	0.9
		Elementary School	90	84.1
		High School	16	15
2	Marital Status	Married	105	98.1
		Unmarried	2	1.9
3	Knowledge	Good	61	57
		Poor	46	43
4	Attitude	Good	41	38.3
		Bad	66	61.7
5	Information Access	Good	62	57.9
		Poor	45	42.1
6	Health care utilization	Good	90	84.1
		Poor	17	15.9
7	Parenting	Good	56	52.3
		Poor	51	47.7
8	Teen pregnancy	Planned	77	72
		Unwanted	30	28

correlation between knowledge and teen pregnancy (0.001), attitude and teen pregnancy (0.001), access to information and teen pregnancy (0.001), and health care utilization and teen pregnancy (0.037). The results of Imamura's (2007) study showed that healthcare access is a consistent protective factor, whereas risk-taking behavior and lifestyle, sexual health knowledge, attitudes and behaviors were unclear. The findings of this study indicated

Table 3. Bivariate Analysis

Variable	Teen Pregnancy				Total		p-value
	Planned		Unwanted				
	Quantity	%	Quantitty	%	Quantity	%	
Educational Background							
High School	12	75	4	25	16	100.0	
Ungraduated and Elementary	65	71.4	26	28.6	91	100.0	1.00
Marital Status							
Married	77	73.3	28	26.7	105	100.0	
Unmarried	0	0	2	100	2	100.0	0.077
Knowledge							
Good	34	55.7	27	44.3	61	100.0	
Poor	43	93.5	3	6.5	46	100.0	0.00
Attitude							
Good	13	31.7	28	68.3	41	100.0	
Bad	64	97	2	3	66	100.0	0.00
Health Information Access							
Good	34	54.8	28	45.2	62	100.0	
Poor	43	95.6	2	4.4	45	100.0	0.00
Health Care Utilization							
Good	61	67.8	29	32.2	90	100.0	
Poor	16	94.1	1	5.9	17	100.0	0.037
Parenting							
Good	38	67.9	18	32.1	56	100.0	
Poor	39	76.5	21	23.5	51	100.0	0.438

Note: *$p \leq 0.05$

Source: processed primary data

that all these factors interacted with each other. Raj's research (2007) proved that the basic knowledge of adolescents about sexual health is still low, but rarely applied. Utilization of health services to be a protective factor was still low and consistent.

Macleod (2010), explained the factors contributing to teen pregnancies in South Africa which supported the outcome of this study were reproductive system ignorance, risky behavior and poor health, early onset of menarche, psychological problems, peer influence, sexual coercion, dysfunctional family patterns, and poor health service. Thobejane (2015), stated in his research, teen pregnancy in Matjitjileng village, Mogalakwena sub-rural

area, South Africa were an impact from risky behavior due to influence from their peers who were pregnant at young age and ignorance of contraception. Mutanana's (2015) study, showed contributing factors to teenage pregnancy in rural communities from Zimbabwe were the influence of peers, lack of sex education, no use of contraceptives, tradition, and low self-esteem.

Nguyen (2016), stated in his research that the prevalence of teen pregnancies in Vietnam were women aged 14 to 19, and variables that were positively correlated were age, experience of domestic violence and early sexual behavior. Van Eijk (2015), said that the problem of teen pregnancy was an important issue in

the Cook Islands, teen pregnancy in Cook Islands is caused by their knowledge, attitude and access to information about reproductive health. Utilization of available RH information becomes the focus of approach to tackle teen pregnancy problems in the hope that it would change their knowledge and attitude. Teen pregnancy in sub-Saharan Africa stated that teen pregnancy is associated with a community level of poverty, unemployment, and lack of understanding about teen pregnancy in sub-Saharan Africa.

The result of this study shows no correlation between educational background (1.00), marital status (0.077), and parenting with teen pregnancy (0.438).

A study by Odejimi (2014), showed that literacy rates, contraceptive prevalence rates and health care spending rates were factors affecting teenage pregnancy. The results of logistic regression analysis in the study showed that literacy rate became the best predictor of teenage pregnancy in Africa. Mutanana's (2015) study, showed contributing factors to teenage pregnancy in rural communities from Zimbabwe is socio-economic background, and low levels of education. Nguyen (2016), stated in his research the variables of education level, and sexual education in schools are significantly related to teenage pregnancy.

This is not in accordance with the results of this study which indicated that education level is not related to teen pregnancy. A possible factor to disrupt the education level variables in this variable is that there is no significant difference in the level of knowledge of reproductive health between different levels of education. This is because health is not a separate subject taught in lower formal education in Indonesia. The results also showed no relationship between marital status and teenage pregnancy. This is because almost all respondents who had registered or religious marriage still have young pregnancy. This was influenced by the role of parents which meant that the respondents come from a good family made up as much as 52.3%, with 47.7% of respondents did not have a good family role.

Thobejane (2015) stated in his research, teenage pregnancy in Matjitjileng village, Mogalakwena sub-rural area, South Africa

happened due to the lack of guidance and role model of teenage parents in the village. Domenico (2007), stated that factors affecting teenage pregnancy were age when having first sexual intercourse, family structure, and parents' roles, which was the most significant factor in the prevention of pregnancy. This is also reinforced in the study by Goicolea (2009), suggesting that factors associated with an increased risk of teenage pregnancy through multivariate analysis were sexual harassment experienced in childhood, early sexual behavior, parental roles and household poverty.

Multivariate analysis was performed to determine the association of independent variable with dependent variable (teen pregnancy), predicting the effect of free variable on teen pregnancy and to know the most influential variable to teen pregnancy. By using logistic regression from selected variable (variable in bivariate analysis with value of Omnibus Tests of Model Coefficients) variables with p value <0.25 were marital status, knowledge, attitude, access to health information and health service utilization.

The results of this study showed that the attitude was the most influential factor in teen pregnancy. The results showed that most of the adolescents had an unfavorable attitude (61.7%). This was in accordance with Azinar's (2013) study, which found that there is a significant influence between attitudes and risky pre-marital sexual behavior. Attitude is the determinant of existence, attitudes began from the perceived knowledge as a good or bad thing, then become internalized into him (Dalimunthe, 2012). Influence of mother's attitude with teen pregnancy was supported by Langille's (2007) research, that one factor that affect teen pregnancy was attitude. Poor attitudes influence the occurrence of young pregnancies. Based on the results of research respondents, those who have the view that teen pregnancy is not a problem that is at 56.1%. Those respondents assume that teen pregnancy does not harm health. This attitude affects the ability of teenagers to take decisions in planning pregnancy after being married at a young age. Access to health information is also a factor affecting younger pregnancies supported by Mouli's (2014) study, which stated that the lack

of access to health information affects high teen pregnancies.

This requires appropriate intervention to improve adolescent attitudes about teen pregnancies. Teen pregnancy rates were 39% lower among people receiving interventions than those receiving standardized practice (no intervention). Interventions conducted were early childhood programs and youth development programs, which were appropriate strategies to reduce unwanted teen pregnancies. Interventions aimed at promoting engagement with schools through learning support, improving unhappy childhood experiences through social guidance and support, and enhancing aspirations through career development and work experience. However, none of these approaches directly handle all, community factor, and family-level factors that affect the teenagers to become young parents.

Conclusion

This study showed that attitude and information access of reproductive health were significant factors towards teen pregnancy rate in Banyumas regency. Factors that were related to teen pregnancy including knowledge, attitude, access to information, and utilization of health services. Factors unrelated to teen pregnancy including education level, marital status, and family roles. The need for special treatment for adolescents to have a good attitude towards teen pregnancy, good knowledge, and improvement access to reproductive health information is available and utilized by adolescents.

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