

## Intrapersonal Factors Relationship in Adolescent Pregnancy

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### Abstract

IDHS (2017) shows that there is most unwanted pregnancy among young women in the age group of 15-19 years (16.4%). The unwanted pregnancy can be caused by several factors. Malang Regency had a 15-19 year ASFR of 47.71 in 2018, which was higher than the national target. For this reason, it is significant to conduct research for addressing adolescent pregnancy and to analyze the relationship between interpersonal factors (level of education, employment status, and dating experience) and adolescent pregnancy. The researchers used a case-control design in 50 villages in 15 subdistricts of Malang District. The respondents consisted of 114 adolescent women (20-25 years old) divided into case groups (who had been pregnant at age 19 years) and the control group (who did not get pregnant at age 19 years). They were then interviewed using questionnaires, and the data were analyzed using statistical tests. The results showed that there is a significant relationship between the level of education and adolescent pregnancy ( $p = 0.000 < \alpha$ ,  $C = 0.618$ ). On the other hand, there is no relationship between employment status ( $p = 0.424$ ), dating experience ( $p = 0.438$ ), and adolescent pregnancy. Therefore, adolescents do not only need to be encouraged to pursue higher education to improve adolescent self-quality but they also need to prevent themselves from pregnancy.

**Keywords:** pregnancy among adolescents; dating; education level; intrapersonal factors; maternal health

### Introduction

A teenager is someone aged 10-24 years and not married. According to the 2010 population census, the number of 10-19-year-olds in Indonesia is 43.5 million, or around 18% of the total population (Ministry of Health of the Republic of Indonesia, 2019). Adolescence is a period of rapid growth and development, both physically, psychologically, and intellectually.

The characteristic of adolescents is that they have a great desire to like adventure and challenges and tend to be brave enough to take risks for their actions without being preceded by careful consideration. If the decisions made in dealing with conflict are not correct, they will fall into risky behavior. They may have to bear the short and long-term consequences of various physical and psychosocial health problems (Kementerian Kesehatan RI, 2019).

Based on the results of the IDHS (2017), 5% of women aged 15-19 years have given birth, and 2% are pregnant with their first child ((BKKBN et al., 2018). The results of the IDHS for adolescents (2017) show that there are 11.9% of women with unwanted pregnancies. Unwanted pregnancies among women in the 15-19 age group were twice as large (16.4%) than in the 20-24 year group (8%). The number of men aged 15-19 and 20-24 years whose partner had experienced an unwanted pregnancy was 7.4%. Women (20.6%) and men (9.8%) with the education that did not complete high school most reported unwanted pregnancies (BKKBN et al., 2018). The birth rate for women aged 15-19 years is 36 births per 1000 women and the birth rate for women aged 20-24 years is 111 births per 1000 women (BKKBN et al., 2018). The number of births in women aged 15-19 years has met the 2019 BKKBN strategic plan target of 38 per 1000 women.

ASFR in the age group of 15-19 years in East Java in 2018 was 37 per 1000 adolescents aged 15-19 years. Compared with the set target of 50 per 1000 adolescents aged 15-19 years, this achievement is classified as low. However, this achievement still needs to be pressed again because the ASFR aged 15-19 years is detrimental to the Population and Family Development Program (BKKBN Representative for East Java, 2018). One area in East Java with an ASFR of 15-19, which is still high compared to the national target, is Malang District which has an ASFR of 47.71. This achievement is, of course, a particular concern for the government to be overcome immediately.

The results of Banepa's study (2017) show that factors that influence adolescent pregnancy include risky sexual behavior before marriage, knowledge of reproductive health and low educational status, and not participating in contraceptive use (Banepaa, Meo and Gatum, 2017). Social pressure to have children after marriage regardless of age, inability to plan a family life, fear of older

husbands, and lack of knowledge also trigger early pregnancy. Rahayu's research results (2017) show that the determinant factors of adolescent pregnancy are the respondent's level of education, the level of education of the mother, and the parents' income (Rahayu, Purwandari and Wijayanti, 2017). In addition, according to Omarsari (2008), adolescents with frequent courtship have a risk of experiencing premarital pregnancy of 2, 67 times when compared to the frequency of infrequent courtship (Omarsari and Djuwita, 2008). The results of Hardiani's research (2019) state that work status is related to adolescent pregnancy (Hardiani et al., 2019). The prevalence of early pregnancy is more common in women who do not work. Based on the results of research by Rahmadewi (2011), mothers who do not work and mothers who do not have family planning have the opportunity to experience pregnancy four too, one of which is pregnancy at a young age (Rahmadewi and Herartri, 2011).

Adolescent fertility is an essential issue because it is related to the morbidity and mortality of mothers and children. Mothers who are teenagers are more at risk of experiencing health problems and death related to childbirth than older women (BKKBN et al., 2018). Physical problems that arise due to pregnancy in adolescents are anemia, impaired fetal growth in the womb, risk of premature labor, risk of abortion, and the occurrence of preeclampsia. All of these problems have the risk of causing maternal death. Meanwhile, psychological problems are due to immature adolescence, and emotional instability will emerge, affecting fetal growth and development. Children born to teenage mothers often experience developmental and behavioral disorders (Rahayu, Purwandari and Wijayanti, 2017). It is necessary to carry out further research related to factors related to adolescent pregnancy. This study aimed to analyze intrapersonal factors (level of education, work, and dating experience) in adolescent pregnancy.

## **Research Method**

This study is an observational study with a case-control design. This research was conducted in Malang Regency, East Java. The sample was randomly selected from 15 sub-districts out of 33 sub-districts in Malang Regency which were previously divided into four zones (central, west, north, and south). Of the 15 sub-districts, the data were obtained from women aged 20-25 years who had been pregnant at the age of  $\leq 19$  years (case group) and had never been pregnant at the age of  $\leq 19$  years (control group) from midwives and Islamic religious educators from the sub-district KUA (Religious Affairs Office). From the data of the 2 groups, 114 respondents were randomly selected according to the calculation based on the sample size formula consisting of 57 respondents who had been pregnant at the age of  $\leq 19$  years and had never been pregnant at the age of  $\leq 19$  years. The respondents in the control group were taken from the same area in the case group.

Respondents in the survey were adolescent girls aged 20-25 years who had experienced pregnancy at  $\leq 19$  years as a case group and adolescent girls aged 20-25 years who never experienced pregnancy at  $\leq 19$  years of age as a control group, regardless of their marital status. Information in this study was obtained directly through interviews with the help of a questionnaire and door-to-door method. The research questionnaire before being used has been tested for the validity and reliability of the questionnaire. The variables studied were education level,

employment status, dating experience, and experience getting information and youth counseling. Data analysis used the Mann-Whitney test and Fisher's exact test. The Mann-Whitney test was performed to compare the ever-pregnant and never-pregnant group  $\leq 19$  years, while the Fisher Exact test was performed to determine the relationship between nominal data that did not meet the requirements to use the Chi-Square test.

## **Results**

### *Characteristics of Intrapersonal Factors*

The characteristics of intrapersonal factors consist of several variables, namely place of residence, latest education, employment status, and the experience of dating. The characteristics of the intrapersonal factors of the research results are shown in Table 1.

Half of the adolescents who live in the village and kelurahan and whether they have ever or never got pregnant at  $\leq 19$  years of age show almost the same amount. Most adolescents with elementary and junior high school education and not completing high school have got pregnant at  $\leq 19$  years of age. In general, adolescents with high education (graduated from high school, academy, university) never get pregnant at  $\leq 19$  years. Working adolescents are mostly never pregnant at  $\leq 19$  years of age. Most of the adolescents who have had the experience of dating have been pregnant at  $\leq 19$  years of age (52.9%).

**Table 1. Characteristics of Intrapersonal Factors**

Variable	Respondent Status					
	Not pregnant			Pregnant		
	<i>n</i>	% Total	% In Group	<i>n</i>	% Total	% In Group
<b>Residence</b>						
Village	58	51.8	98.3	54	48.2	98.2
Kelurahan	1	50.0	1.7	1	50.0	1.8
<b>Education Lastly</b>						
Not completed in elementary school	0	0.0	0	1	100.0	1.8
Graduated from elementary school	2	25.0	3.5	6	75.0	10.5
Not completed in junior high school	1	33.3	1.8	2	66.7	3.5
Graduated from junior high school	12	25.0	21	36	75.0	63.1
Not completed in high school	0	0.0	0	3	100.0	5.3
Graduated from high school	19	70.4	33.3	8	29.6	14
Graduated from the Academy	7	100.0	12.3	0	0.0	0
Completed College	5	83.3	8.8	1	16.7	1.8
>Bachelor	11	100.0	19.3	0	0.0	0
<b>Job status during pregnancy</b>						
Work	21	56.8	36.8	16	43.2	28.1
Does not work	36	47.4	63.2	41	53.2	71.9
<b>Experience dating</b>						
Ever	52	48.6	91.2	55	52.9	96.5
Never	5	71.4	8.8	2	28.6	3.5
<b>Experience getting information and youth counseling</b>						
Ever	35	57.4	61.4	26	42.6	45.6
Never	22	41.5	38.6	31	58.5	54.4

Most adolescents who have never experienced dating never got pregnant at  $\leq 19$  years of age (71.4%). Most of the adolescents who received information counseling services about KRR (Adolescent Reproductive Health) never got pregnant when they were  $\leq 19$  years of age. Most adolescents who have no experience receiving information counseling services about KRR were pregnant at  $\leq 19$  years of age (58.5%).

#### *Effect of Education Level on Adolescent Pregnancy*

The results of research on the level of adolescent education on adolescent pregnancy are shown in table 2. The statistical test in table 2 shows significant results. The level of education with adolescent pregnancy has a significant relationship, with a p-value of 0.000 ( $p > \alpha$ ,  $\alpha = 0.05$ ). The statistical test results of Cramer's V coefficient of 0.618

show a strong correlation between the latest educational status and adolescent pregnancy  $\leq 19$  years. Adolescents who were pregnant at the age of  $\leq 19$  years were more numerous at a lower education compared to adolescents who were not pregnant at the age of  $\leq 19$  years.

#### *Effect of Employment Status on Adolescent Pregnancy*

The results of the work status study on adolescent pregnancy are in table 3. The statistical test in table 3 shows insignificant results with a p-value of 0.424 ( $p > \alpha$ ,  $\alpha = 0.05$ ). The employment status of respondents who have been pregnant or have never been pregnant aged  $\leq 19$  years has a number that was not many different. Therefore, the results show that there is no difference in employment status found in the two groups.

**Table 2. Relationship between Education Level and Adolescent Pregnancy**

Education	Adolescent Pregnancy				Amount		p-value
	Not		Yes		n	%	
	n	%	n	%			
Not graduated from elementary school	0	0.0	1	100.0	1	0.8	
Graduated from elementary school	2	25.0	6	75.0	8	7.2	
Not graduated from junior high school	1	33.3	2	66.7	3	2.6	
Graduated from junior high school	12	25.0	36	75.0	48	42.1	
Not graduated from high school	0	0.0	3	100.0	3	2.6	
Graduated from high school	19	70.4	8	29.6	27	23.7	p = 0.000 (Mann Whitney test) Cramer'S V = 0.618
Not graduated from vocational program	0	0.0	0	0.0	0	0.0	
Graduated from vocational program	7	100.0	0	0.0	7	6.1	
Not graduated from undergraduate program	0	0.0	0	0.0	0	0.0	
Graduated from undergraduate program	5	83.3	1	16.7	6	5.3	
Above undergraduate program	11	100.0	0	0.0	11	9.6	
Amount	57	50.0	57	50.0	114	100.0	

**Table 3. Relationship of Work Status with Adolescent Pregnancy**

Job-status	Adolescent Pregnancy				Amount		p-value
	Not		Yes		n	%	
	n	%	n	%			
Work	21	56.8	16	43.2	37	32.5	p = 0.424 (exact test from Fisher)
Does not work	36	47.4	41	53.2	77	67.5	
Amount	57	50.4	57	49.4	114	100.0	

### *Relationship between Dating Experiences and Adolescent Pregnancy*

The results of the research on dating experiences in adolescent pregnancy are shown in table 4. The statistical test in table 4 shows insignificant results. Dating experience with adolescent pregnancy does not have a significant relationship, with a p-value of 0.438 ( $p > \alpha$ ,  $\alpha = 0.05$ ). Respondents who have been pregnant and have never been pregnant at the age of  $\leq 19$  years were almost the same in the group with dating experience and not, so the results were not related.

## **Discussion**

### *Characteristics of Intrapersonal Factors*

The residence of young girls in both villages and districts has almost the same percentage of adolescent pregnancy. In this sophisticated era, access to information is straightforward to obtain through various media, even in villages. With this convenience, even in the village of teenagers, harmful content such as pornographic content can also be used. Moreover, teenagers have a great curiosity

about something. This condition can lead to stimulation to trigger deviant adolescent sexual behavior that causes pregnancy at the age of adolescence (Sari, 2016).

The level of education is related to adolescent pregnancy. Many respondents' parents believe that a woman will eventually return to the kitchen and the mattress despite being in higher education. Having provided with this perspective, parents feel that their daughters do not need to have a higher education (Astuti, Abidin and Siswoko, 2013). Dropping out of school or completing elementary school education will encourage a child to be married off by his parents. This adolescent marriage will trigger an adolescent pregnancy (Badan Pusat Statistik, 2017). Education, especially up to the senior secondary level, provides the strongest protection against early marriage and pregnancy and brings girls to adulthood,

Most working girls do not experience pregnancy. Teens who work not only spend time at home but also spend time at work. Working provides opportunities to exchange information from friends at work related to reproductive health. This condition allows the teenager to delay pregnancy.

**Table 4. Relationship between Experience of Dating and Adolescent Pregnancy**

Dating experience	Adolescent Pregnancy				Amount		p-value
	Not		Yes		n	%	
	n	%	n	%			
Ever	52	48.6	55	51.4	107	100.0	p = 0.438 (exact test from Fisher)
Never	5	71.4	2	28.6	7	100.0	
Amount	57	50.0	57	50.0	114	100.0	

Nearly half of adolescents who have had previous experiences of parenthood are due to pregnancy. Dating for some adolescents who do not have good reproductive health knowledge can encourage premarital sexual relations, which impact premarital pregnancy. Nowadays, many teenagers no longer consider dating as a place to get to know the opposite sex but to learn to engage in sexual activity with the opposite sex. The sexual activity they do starts from looking at the body, holding hands, kissing while hugging, touching the partner's body, stroking each other's erogenous areas to the riskiest, namely having sex (Omarsari and Djuwita, 2008).

The majority of adolescents who have received information and counseling services do not experience pregnancy. Information and counseling services for adolescents teach adolescents regarding correct and accountable reproductive health. Adolescent information and counseling services can improve adolescent knowledge and skills in preventing special health problems in adolescents and increasing youth involvement in planning and evaluating adolescent health services (Sari, 2016).

*Relationship between Education Level and Adolescent Pregnancy*

The results of this study indicate that the level of education affects adolescent pregnancy. This study also showed that the higher the educational status of adolescents,

the more they do activities and time for learning and school activities. Respondents who had experienced pregnancy ≤ 19 years continued their pregnancy and decided to get married. The pregnancy experienced by the respondents made them drop out of education/school.

A high level of education allows adolescents to receive more reproductive and sexual health information from both school and parents, peers, and the media to influence adolescent behavior in their development (Amalia and Azinar, 2017). However, the role of schools in providing complete knowledge of reproductive health starting at the elementary, junior high, or high school levels is not yet optimal, which also affects the level of knowledge of adolescents about reproductive health and pregnancy (Soenarnatalina et al., 2019). In addition, health workers must also provide quality services, including knowledge about reproductive health to adolescents who are already pregnant, to prevent pregnancy complications and prevent maternal and infant mortality (Wulandari et al., 2019). Research in Bali shows that a lack of knowledge about reproductive health and adolescent pregnancy provides a 12.8 times greater risk of adolescent pregnancy (Meriyani, Kurniati and Januraga, 2016).

Gyan's study (2013) in Chorkor, Ghana, looked at the factors influencing adolescent pregnancy on girls' educational attainment (Gyan, 2013). The causes of pregnancy that occur in adolescents are poor parenting,



poverty, and peer influence. Most of them had dropped out of school and did not complete primary education.

The results in this study are in line with the results of Rahayu's (2017) study, which states that education level is related to the adolescent pregnancy (Rahayu, Purwandari and Wijayanti, 2017). The lower the education of adolescents, the more risk of experiencing pregnancy in adolescence. Lack of education will hinder the development of one's attitudes towards the newly introduced values. In addition, adolescents with low education at the time of receiving information about adolescent pregnancy may not fully understand it. This condition is at risk for the occurrence of pregnancy in adolescence (Astuti, Abidin and Siswoko, 2013).

Education is the main factor affecting individuals in terms of knowledge, attitudes, and behavior. By having a high education, one will get information that will impact himself, so education is the main determining factor in a person's lifestyle and status (BKKBN et al., 2018). Investing in secondary school education for girls, especially graduating from high school, is one of the best ways to ensure girls reach adulthood before marriage and pregnancy (Badan Pusat Statistik, 2016).

#### *Relationship between Work Status and Adolescent Pregnancy*

The results of this study indicate that there was no significant effect of work status on adolescent pregnancy. The respondents who have worked make their time and activities more focused on work, while the respondents who have been pregnant or have never been pregnant aged  $\leq 19$  years show almost the same amount. It shows that the association between the two groups of adolescents who worked and did not work was not different so there was no difference between the groups.

This result is in line with Sari's research (2019), which states that adolescent pregnancy is not due to work factors (Sari,

Handayani and Yolanda, 2019). A person does not immediately accept the influence. Specific work environments do not just have the same effect on everyone. Therefore, there is no difference in getting the influence to undergo marriage and pregnancy between those who work and those who do not.

The results of Sari's research show that there is no significant relationship between work and pregnancy in adolescents (Sari, 2016). Based on the results of Astuti's research (2013), parents will not forbid their children to get pregnant and have children if they already have the desire to have children as married teenagers. Even though the teenager already has a job or does not have a job (Astuti, Abidin and Siswoko, 2013). This is because adolescents are still considered children who still need help from their parents and are still obliged to help meet their needs. Most parents do not mind if their child lives in the same house and is still the responsibility of the parents.

#### *Relationship between Dating Experiences and Adolescent Pregnancy*

The results of this study indicate that dating experience did not have a significant effect on adolescent pregnancy. The experience of dating was not influenced by adolescent pregnancy. Adolescents who have been pregnant at the age  $\leq 19$  years and have never been pregnant at the age  $\leq 19$  years are almost the same numbers in the group with dating experience and no dating experience, so the results show no relationship. Adolescents who have dating experience have a greater chance of getting pregnant. However, those who have dating experience also make them know the behaviors that can lead to pregnancy or not, so they can behave as well to avoid pregnancy.

Although adolescents have a lot of dating experience, they tend to behave healthily even if these adolescents have sufficient reproductive health knowledge, and thus,

the risk of pregnancy in adolescence can be avoided because of one's awareness (Sari, 2016). Adolescents with good knowledge of reproductive health will comply with the norms on how to have a relationship with the opposite sex. Relationships with the opposite sex that are positive and do not result in pregnancy can be formed if adolescents understand healthy life skills, understand the risks of sexual intercourse, and reject unwanted relationships.

## **Conclusion and Suggestion**

### *Conclusion*

Based on the results of this study, it can be concluded that the level of education and knowledge has a significant effect on teenage pregnancy. Low education due to dropping out of school, the influence of peer group association, and poverty factors are other determinants that play a role in supporting the occurrence of relationships that cause adolescent pregnancy. The lower the education of adolescents, the more likely it is to get pregnant in adolescence. The higher the level of education of adolescents, the more likely they are not to become pregnant at youth.

### *Suggestion*

#### a. Community

The community, especially parents, can support their children to complete their education to a higher level. The culture and practice of early marriage in families that are at risk of causing pregnancy in adolescents need to be reconsidered since it may harm adolescents' development. Parents must pay more attention to the age of their child before deciding to marry off their child. Also, relationship of teenagers needs to be supervised so that they do not fall into promiscuity which can lead to child marriage.

#### b. Government

The local government is expected to increase the empowerment of youth creativity and innovation program by establishing the Center for Information and Youth Counseling in schools and the community to increase knowledge of adolescents through the Marriage Age Maturation (PUP) program to prevent teenage pregnancy.

All parties are responsible for improving the quality of human resources in the form of life skills and psychosocial skills through the empowerment of youth skills training programs.

#### c. Further Research

Other factors that influence adolescent pregnancy can be examined in further research, such as interpersonal, institutional, community, and policy factors. It needs serious implementation so that the root causes of adolescent pregnancy can be further identified.

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