

## Characteristics of Indonesian Adolescents who had Experienced Pregnancy Under the Age of 20 Years: Basic Health Research 2018

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### ABSTRACT

**Background:** As well as other countries, Basic Health Research 2018 (Riskesdas) reported that adolescent pregnancies (aged under 20 years) occurred in almost all provinces in Indonesia. More than 60,000 Indonesian females experienced pregnancy at a young age. **Objective:** This study aims to analyze the characteristics of Indonesian women who had been pregnant under the age of 20 years. **Methods:** This study used a quantitative study with a cross-sectional design, the data processed was from Indonesian Basic Health Research 2018. The subjects were 67,392 women who experienced their first pregnancy under the age of 20 years. The independent variables of the study included the respondent's domicile, age, education level, and occupation. The dependent variable was the age at first pregnancy. All variables were analyzed using univariate, bivariate, and multivariate analysis. **Results:** Almost all (95.4%) Indonesian women who had experienced adolescent pregnancy were in the age range of 14-19 years when they were first pregnant. Most of the respondents lived in rural areas (68.1%), were in late adulthood (32.9%) when the survey was conducted, had completed primary school education (38.7%), and were not working (47.9%). Domicile, age, education, and occupation were related significantly to the age at which they were first pregnant ( $P$ -Value = 0.0001). Education affected the age at first pregnancy in women with a history of adolescent pregnancy (OR = 2.215). **Conclusion:** Adolescent with low education level is 2.2 riskier to have early pregnancy than an adolescent with high-level education. The government needs to make it a priority and seriously provide provision of reproductive health education among children before they get into their adolescence phase.

**Keyword:** adolescent, adolescent pregnancy, reproductive health, Riskesdas (Basic Health Research).

### INTRODUCTION

Basic Health Research 2013 and 2018 recorded that women in Indonesia had a history of having their first pregnancy at a very young age (<15 years). Most of the reasons that caused adolescents to have premarital sex were curiosity (57.5%) and it happened unplanned (38%). These reflected the lack of understanding of the adolescents regarding the dangers of having premarital sex and low skills of making healthy decisions (Masni and Hamid, 2018).

Sexual behavior that poses health risks in adolescents is influenced by several factors. Adolescents' access to pornography describing the enjoyment of sex enables them to have sex at an early age (13 to 15 years). Adolescents with

low self-esteem have 3.3 times the opportunity to engage in premarital sexual behavior. Premarital sexual behavior is also influenced by the sexual behavior of close friends, religiosity, and attitudes (Wulandari, 2016). National Population and Family Planning Board (BKKBN) reported that 35% of young men felt no need to maintain their virginity, 10% of young women felt no need to maintain their virginity, and dating without having sex was considered by 95% of adolescents as an old courtship style. These results are in accordance with other studies which showed 12.1% of the respondents admitted to having experienced sexual intercourse (BKKBN, 2018a). Adolescents with low knowledge are 1.5 times more likely to engage in

risky premarital sexual behavior, namely performing sexual intercourse by changing partners and/or without using condoms (Wulandari, 2016). This indicates that in addition to the risk of contracting Sexually Transmitted Infections (STI), their sexual behavior is also at risk for adverse or unexpected events.

Another factor that influences adolescents to have risky sexual behavior is parental supervision. Lack of supervision from parents is caused by parents who work hence enabling children to freely watch television without filtering the programs. Children's behavior is strongly influenced by their own and other people's experiences that they imitate both directly and through the media (Astarini, Hamid and Rustini, 2016).

Premarital sexual behavior is significantly related to access to pornography. Access to magazines, books, pornographic films, and action porn describing the pleasures of sex causes adolescents in their early stage to start trying to do so (Wulandari, 2016). As many as 60.6% of adolescents access pornography at least once a day with the majority using personal cellphone media (59.2%) and doing it at home. In fact, 1.2% of adolescents began to be exposed to pornography since they were 5 to 8 years old (Gayatri, Shaluhiah and Indraswari, 2020).

According to data from the Global School-based Health Survey (GSHS) in 2015, 5.26% of junior and senior high school students in Indonesia have had sex with only 13% of them using condoms. In addition, 27.35% of students have actively engaged in sexual intercourse under the age of 14 years (Kemenkes RI, 2016). According to Indonesian Demographic and Health Survey (IDHS), the percentage of adolescents who first had sexual intercourse at the age of 15 to 19 years increased from 59% in 2012 to 74% in 2017. As many as 6% of adolescents reported starting their first sexual experience at the age of 11 to 14 years which is the average age of early puberty and transition from childhood to adolescence (Badan Kependudukan dan Keluarga Berencana Nasional, 2018). These figures prove that there are greater risks and challenges in adolescent reproductive health problems

if prevention is not immediately pursued before children get into their adolescence phase.

Every year approximately 16 million women aged 15 to 19 years and 2.5 million women aged under 16 years in developing countries experience labor (Ghose and John, 2017; Obare, Kabiru and Chandra-Mouli, 2018). According to the United Nations Development Economic and Social Affairs in 2010, Indonesia was the 37<sup>th</sup> country with a high percentage of young marriages and was the second-highest in ASEAN after Cambodia. In 2010, there were 158 countries whose minimum legal age for marriage for women was 18 years old and over, but in Indonesia, the minimum age limit for women was 16 years. According to the Indonesian Demographic and Health Survey (IDHS), from 1991 to 2012, the age of young marriage increased every year (Kementrian Kesehatan RI, 2013).

Law Number 16 of 2019 amended Law Number 1 of 1974 on Marriage in which the minimum age for marriage became 19 years for men and women (*UU RI no 16 Tahun 2019 tentang Perubahan atas UU no 1 Tahun 1974 tentang Perkawinan*, 2019). Nevertheless, there is always a request for a marriage dispensation every year in court from the woman's parents accompanied by supporting evidence that urges immediate marriage under the age determined by law (Pengadilan Agama Klas 1.A Semarang, 2019).

Adolescent pregnancy can occur both in marriage and out of wedlock. Adolescents who are pregnant out of wedlock are faced with the choice of whether to continue their pregnancy or not, as well as the choice of getting married to cover the family's disgrace or not. Unexpected events that have occurred are more frequent to cause women to bear the physical and social consequences than men. The younger the age of the pregnant woman, the higher the health risks experienced by the baby and the mother. The immaturity of female reproductive organs under the age of 20 years causes health problems such as abortion and even maternal and

child deaths due to pregnancy complications (Aprianti, Shaluhyah and Suryoputro, 2018).

Female adolescents who choose to continue their pregnancy will tend to become both a mother and a wife with limitations in making decisions. The wife is very dependent on the husband in making decisions. While the husband himself is strongly influenced by his family to choose the decisions that will be made. This is especially frequent to happen to adolescent mothers in rural areas. As many as 64% of adolescents mothers do not work and depend on their husbands as well as husband's family for their lives which causes them not to have the freedom to make decisions. The mother's low personal autonomy has been reported to be the cause of the failure of exclusive breastfeeding. The dominant patriarchal culture also causes health problems such as determining family planning and controlling the number of children. Men still have more power than women to make decisions regarding maternal health. Whereas according to United Nations Population Fund (UNFPA) data, 72.2% of husbands have low knowledge regarding maternal health. In fact, 80.9% of husbands never asked about the results of their wife's pregnancy examination (Sutinah, 2017).

Continuing the pregnancy has both short and long-term health risks. Marriage at a young age is at risk because there are insufficient readiness in terms of health, mental-emotional, educational, socio-economic, and reproductive aspects (Sari, Umami and Darmawansyah, 2020). This has resulted in higher divorce rates and increased fertility rates (Fadlyana and Larasaty, 2016).

Marriage age is also related to birth control because the length of a woman's fertile period is related to the number of children born (Fadlyana and Larasaty, 2016; Ahiyanasari and Nurmala, 2018). The ideal age for first marriage for women according to the majority of female adolescents (37%) aged 15 to 19 years is 24 to 25, while according to the majority of male adolescents (33%) is 20 to 21 years. The ideal age for first

marriage for men according to most male adolescents (49%) and female adolescents (41%) is 24 to 25 years. However, there are still those who consider that the ideal age for first marriage is under 20 years, especially for women (Kementrian Kesehatan RI, 2013).

To prepare the design of health promotion programs, it is necessary to have a target-oriented need assessment hence the interventions implemented will be effective and efficient. Therefore, this study aims to determine the characteristics of Indonesian adolescents who have experienced pregnancy under the age of 20 years, thus reproductive health education strategies for prepubertal children can be designed by considering and adopting the findings of this study.

## METHOD

This study used a cross-sectional design by processing the data from Basic Health Research 2018 of the Health Research and Development Agency of the Ministry of Health of the Republic of Indonesia. All respondents in this study were Indonesian women who had a history of pregnancy under the age of 20 years. There were 67,392 respondents who fit these criteria and all of them were used for further analysis in this study.

The independent variables of the study included the respondent's domicile, age, education level, and employment status. The dependent variable was age at first pregnancy. All variables were analyzed descriptively, bivariate relationship test with chi-square, and logistic regression test. This study used secondary data and was not carried out directly on humans, thus ethical clearance was not required in conducting the research.

## RESULTS AND DISCUSSION

According to the data in Table 1, it can be seen that most of the respondents live in rural areas (68.1%), only graduated

from primary school (38.7%) with an almost evenly distributed age range between late adolescence and early elderly. This is very worrying because it entails a history of pregnancy at a young age occurs in each generation in large numbers, even though reproductive health programs have been carried out by the government and have improved since the International Conference for Population and Development (ICPD) in Cairo in 1994 (Priyatni and Rahayu, 2016).

A total of 47.9% of women who had been pregnant at the age of <20 years did not work while 24.9% worked as farmers. This is common because pregnant adolescents will always be in the most disadvantaged position. Adolescent pregnancies deprive young women of opportunities to continue their education and find better jobs. Adolescents who decide to continue their pregnancy and marry also have the responsibility to take care of their children as well as the household (Fluellen, 2016; Franjic, 2018; Sick, Spaulding and Park, 2018; Agnafors *et al.*, 2019).

Almost all women in Indonesia (95.4%) who had been pregnant at the age of <20 years experienced their first pregnancy at the age of 14 to 19 years. Pregnancy at that age is a high-risk pregnancy for its potential to endanger the safety of the mother and the fetus. This is due to the reproductive organs of women aged <20 years being not ready yet to carry a fetus than women aged 20 to 35 years (Govender, Naidoo and Taylor, 2019; Kiani, Ghazanfarpour and Saeidi, 2019).

The most worrying condition is that 4.6% of women in Indonesia had been pregnant at the age of <14 years. The average age of women in Indonesia getting into the puberty phase is 12.5 years (Wahab *et al.*, 2018), which means 4.6% of women in Indonesia had been pregnant at the age of 12.5 to 14 years. At the latest, it only takes 1.5 years to get pregnant since the woman experiences menarche, which means sexual intercourse behavior has been carried out immediately after the woman gets her period or even before.

**Table 1.** Characteristics of Respondents

Category	n	%
<b>Domicile</b>		
Urban area	21,529	31.9
Rural area	45,863	68.1
<b>Age</b>		
Late adolescence	8,752	13.0
Early adulthood	18,262	27.1
Late adulthood	22,200	32.9
Early elderly	18,178	27.0
<b>Education Level</b>		
Did not go to school	4,189	6.2
Did not graduate from primary school	11,659	17.3
Graduated from primary school	26,091	38.7
Graduated from junior high school	15,844	23.5
Graduated from senior high school	8,686	12.9
Graduated from diploma	349	0.5
Graduated from university	574	0.9
<b>Occupation</b>		
Did not work	32,267	47.9
Student	288	0.4
PNS/TNI/POLRI/BUMN/BU MD	419	0.6
Private employees	1,577	2.3
Entrepreneur	7,328	10.9
Farmer	16,555	24.6
Fisherman	157	0.2
Labor/driver/household assistant	3,178	4.7
Other	5,623	8.3
<b>Age of Menarche</b>		
≤ 12 years old	73	0.1
> 13 years old	112	0.2
Unsuitable	67,207	99.7
<b>Obstetric History</b>		
<b>Age at first pregnancy</b>		
< 14 years old	3,102	4.6
14-19 years old	64,290	95.4
<b>Gravida</b>		
Primigravida	8,868	13.2
Multigravida	51,227	76.0
Grandemultigravida	7,297	10.8
<b>Paritas</b>		
Nullipara	441	0.7
Primipara	10,136	15
Multipara	51,439	76.3
Grandemultipara	5,376	8
<b>Abortion</b>		
Ever	12,764	18.9
Never	54,628	81.1
<b>Total</b>	<b>67,392</b>	<b>100</b>

Based on the data from Basic Health Research 2018, it is known that there were 4.6% of female respondents



who had been pregnant at the age of <14 years. This small percentage is very worrying and cannot be underestimated. If serious prevention efforts are not taken immediately, sexual intercourse is very likely to occur at a much younger age (Schoefield and Bierman, 2018). The low parental control over children and easy access to pornography make this prediction highly believed to occur (Ahanhanzo *et al.*, 2018).

All respondents were in the age range of 14 to 54 years. The question regarding age of menarche was not asked to respondents aged above 20 years at the time of the survey. Thus, data on the age of menarche were only answered by less than 1% of respondents. This caused the variable age of menarche could not be tested for the relationship and its effect on the incidence of pregnancy in adolescents under the age of 20 years. However, it can be seen that there were 73 respondents who experienced their first menstruation at the age of 12 years, with the youngest was 8 years.

In addition to the age at first pregnancy, other obstetric histories were

also known, namely the number of pregnancies (gravida), number of births (partum), and number of abortions (abortion). Most of the respondents (76%) had been pregnant 2 to 5 times in their lifetime (multigravida) and 10.8% had experienced pregnancy more than 5 times. A total of 76.3% of respondents had a history of giving birth 2 to 5 times (multipara). As many as 18.9% claimed to have had an abortion, but it was not explained whether the type of abortion was spontaneous or provocative. From these data, it can be seen that there are still many Indonesian women who experience obstetric health risks.

The number of gravidas, parturitions, and abortions occurred after the first pregnancy thus these three cannot be the risk factors of the incidence of first pregnancy in women aged under 20 years. Therefore, the three variables above were only described descriptively in this study to strengthen the picture of Indonesian women who had been pregnant under the age of 20 years.

**Table 2.** Bivariate Test Result of Respondents' Characteristics who have Experienced Adolescent Pregnancy

Variable	Age of First Pregnant				Total		P-Value
	<14 Years Old		14-19 Years Old		n	%	
	n	%	n	%			
<b>Domicile</b>							
Urban area	874	4.1	20,655	95.9	21,529	100	0.0001
Rural area	2,228	4.9	43,635	95.1	45,863	100	
<b>Age</b>							
Late adolescence	219	2.5	8,533	97.5	8,752	100	0.0001
Early adulthood	665	3.6	17,597	96.4	18,262	100	
Late adulthood	1,082	4.9	21,118	95.1	22,200	100	
Early elderly	1,136	6.2	17,042	93.8	18,178	100	
<b>Education Level</b>							
Did not go to school	338	8.1	3,851	91.9	4,189	100	0.0001
Did not graduate from primary school	861	7.4	10,798	92.6	11,659	100	
Graduated from primary school	1,354	5.2	24,737	94.8	26,091	100	
Graduated from junior high school	358	2.3	15,486	97.7	15,844	100	
Graduated from senior high school	155	1.8	8,531	98.2	8,686	100	
Graduated from diploma	10	2.9	339	97.1	349	100	
Graduated from university	26	4.5	548	95.5	574	100	
<b>Occupation</b>							
Did not work	1,357	4.2	30,910	95.8	32,267	100	0.0001
Student	11	3.8	277	96.2	288	100	
PNS/TNI/POLRI/BUMN/BUMD	17	4.1	402	95.9	419	100	
Private employees	53	3.4	1,524	96.6	1,577	100	
Entrepreneur	351	4.8	6,977	95.2	7,328	100	
Farmer	907	5.5	15,648	94.5	16,555	100	

Fisherman	11	7.0	146	93.0	157	100	
Labor/driver/household assistant	151	4.8	3,027	95.2	3,178	100	
Other	244	4.3	5,379	95.7	5,623	100	
<b>Gravida</b>							
Primigravida	279	3.1	8,589	96.9	8,868	100	
Multigravida	2,261	4.4	48,966	95.6	51,227	100	0.0001
Grandmultigravida	562	7.7	6,735	92.3	7,297	100	
<b>Paritas</b>							
Nullipara	28	6.3	413	93.7	441	100	
Primipara	339	3.3	9,797	96.7	10,136	100	
Multipara	2,300	4.5	49,139	95.5	51,439	100	0.0001
Grandmultipara	435	8.1	4,941	91.9	5,376	100	
<b>Abortion</b>							
Ever	2,387	4.4	52,241	95.6	54,628	100	
Never	715	5.6	12,049	94.4	12,764	100	0.0001

**Table 3.** Multivariate Test Result of Respondents' Characteristics who have Experienced Adolescent Pregnancy

Variable	B	SE	Wald	df	Sig	Exp (B)	95% CI for Exp (B)	
							Lower	Upper
Domicile	-0.146	0.041	12.377	1	0.000	0.864	0.797	0.937
Age	-0.262	0.020	170.923	1	0.000	0.769	0.740	0.800
Education Level	0.795	0.077	107.405	1	0.000	2.215	1.906	2.575
Occupation	-0.086	0.038	5.246	1	0.022	0.917	0.852	0.988

There was a relationship between the respondent's domicile, age, education level, and occupation with the age at first pregnancy in adolescents who had experienced pregnancy during adolescence. Education was a variable that affected the age at first pregnancy with an OR value of 2.215. This means that adolescents with low education will be 2.2 times more likely to experience adolescent pregnancy at a younger age. The problems of education and adolescent pregnancy are like a vicious circle that continues to relate and influence each other. Pregnant women often have low education. After the school finds out about the pregnancy, they will be expelled from school which causes them not able to continue their education as their peers (Nkhoma *et al.*, 2020; Tull, 2020). Continuing education can be done again later at an older age, but many women choose not to continue their education for reasons of taking care of their children and chose to work thus they can meet the needs of daily life rather than going to school. With low education, there is very small opportunity to get a job with a higher income (Shirin *et al.*, 2016; Masuda and Yamauchi, 2017).

Pregnancy at a young age not only has short-term effects, but also long-term effects that adolescents and their families may not think about. Previous research has shown that women with low education were also at risk of having children who will behave the same way, namely having sexual intercourse in their adolescence (Cueto and Leon, 2016). As well as the vicious cycle between education and adolescent pregnancy, if this matter is not treated seriously, the problem of adolescent pregnancy will continue to recur and may cause a worse impact.

Indonesian society in general still holds a strongly patriarchal culture in living their social life. This system practices the position of men who often dominate, oppress, and exploit women. Patriarchy gives men more control over woman's bodies, sexuality, work, roles, and their status in the family as well as in society. In a social system that is strongly influenced by religion, patriarchy gives a rise to various forms of belief or ideology that men have a higher degree than women. This belief then forms a socio-cultural norm that places the ruling group with the ability to suppress weaker groups, in this case, the majority of women (Fakih, 2016;

BKKBN, 2018). Reproductive health education needs to consider social and cultural norms that run in Indonesia hence may be accepted and receive support from the surrounding environment. So far, the government is still focusing on reproductive health education whose target is the young. This is because health risks will more likely appear in the adolescence phase. This study showed that sexual intercourse behavior has been carried out by women in Indonesia as soon as they get their period. If the younger generation is not provided with reproductive health education at pre-pubertal age, the reproductive health education they receive as an adolescent will be less than optimal.

## CONCLUSION

Adolescent pregnancy under the age of 20 years occurs in Indonesia every year. Most of the women who experienced pregnancy at a young age were pregnant at the age of 14 to 19 years, lived in rural areas, were in late adulthood at the time of the survey, had graduated from primary school, and did not work. There was a relationship between domicile, age, education level, and occupation on the first age of pregnancy of the adolescents. Education was a factor that affected the age of the first pregnancy.

The government needs to start to earnestly focus on addressing reproductive health problems in adolescents aged 9 to 11 years or before they get into their puberty phase. Providing provision of integrated reproductive health education with the school and family environment at an early age will be more promising to obtain optimal results than just trying to strive for prevention when they are already in their adolescence phase.

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