

## Hubungan antara Perilaku Seksual dan Menarche Dini pada Remaja Indonesia

### Relationship between Sexual Behavior and Early Menarche in Indonesian Adolescents

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#### ABSTRAK

**Latar Belakang:** Menstruasi menjadi salah satu tanda bahwa seorang perempuan memasuki masa remaja. Menarche merupakan peristiwa terjadinya menstruasi pertama pada perempuan yang umumnya terjadi pada usia 12 sampai 15 tahun. Peningkatan pada jumlah remaja yang mengalami menarche sebelum usia 12 tahun terjadi di beberapa negara. Perilaku seksual pada remaja yang dapat bersifat positif maupun negatif dapat menjadi alasan terjadinya peningkatan dan perkembangan hormon dalam tubuh manusia.

**Tujuan:** Penelitian dilakukan untuk mengetahui hubungan antara perilaku seksual dengan kejadian menarche dini pada remaja perempuan di Indonesia tahun 2017

**Metode:** Penelitian merupakan penelitian deskriptif kuantitatif dengan desain penelitian cross sectional menggunakan data sekunder yang diperoleh dari Survei Demografi dan Kesehatan Indonesia (SDKI) tahun 2017 yang dilakukan pada 34 provinsi di Indonesia dimulai pada 24 Juli dan berakhir pada 30 Desember 2017. Sampel dalam penelitian ini sebanyak 1.494 remaja perempuan di Indonesia dengan usia 15 tahun, belum menikah dan sudah mengalami menstruasi. Variabel yang dilibatkan dalam penelitian ini yaitu perilaku seksual dan kejadian menarche dini pada remaja perempuan di Indonesia pada tahun 2017. Analisis data dalam penelitian ini menggunakan analisis bivariat dengan menampilkan tabel distribusi frekuensi beserta tabel analisis dengan uji chi-square

**Hasil:** Mayoritas responden (71,2%) pada penelitian ini memiliki perilaku seksual dengan risiko tinggi, kejadian menarche dini pada remaja dengan usia  $\leq 13$  tahun sebanyak 77,4% dan hasil  $p$ -value  $< 0,05$  pada hubungan perilaku seksual dengan kejadian menarche pada remaja perempuan di Indonesia pada tahun 2017.

**Kesimpulan:** Penelitian ini menunjukkan bahwa terdapat hubungan antara perilaku seksual dengan kejadian menarche dini pada remaja perempuan di Indonesia. Edukasi dan pengawasan orang tua atas pergaulan dan perilaku seksual pada remaja perlu dilakukan untuk meminimalisir kejadian menarche dini pada remaja perempuan di Indonesia.

**Kata kunci:** , Menarche Dini, Perilaku Seksual, Remaja

#### ABSTRACT

**Background:** Menstruation is one of the signs that a woman is entering adolescence. Menarche is the first menstrual event in women which generally occurs at the age of 12 to 15 years. An increase in the number of adolescents who experience menarche before the age of 12 years occurs in several countries. Sexual behavior in adolescents that can be positive or negative can be the reason for the increase and development of hormones in the human body.

**Objectives:** The study was conducted to determine the relationship between sexual behavior and the incidence of early menarche in adolescent girls in Indonesia in 2017.

**Methods:** The study is a quantitative descriptive study with a cross sectional research design using secondary data obtained from the 2017 Indonesian Demographic and Health Survey (IDHS) conducted in 34 provinces in Indonesia starting on July 24 and ending on December 30, 2017. The sample in this study was 1,494 adolescent girls in Indonesia with the age of 15 years, unmarried, and already experiencing menstruation. The variables involved in this study were sexual behavior and the incidence of early menarche in adolescent girls in Indonesia in 2017. Data analysis in this study used bivariate analysis by displaying frequency distribution tables along with analysis tables with chi-square tests.

**Results:** The majority of respondents (71.2%) in this study had high-risk sexual behavior, the incidence of early menarche in adolescents aged  $\leq 13$  years was 77.4% and the p-value  $< 0.05$  on the relationship between sexual behavior and the incidence of menarche in adolescent girls in Indonesia in 2017.

**Conclusions:** This study shows that there is an association between sexual behavior and the incidence of early menarche in adolescent girls in Indonesia. Education and parental supervision of sexual relationships and behavior in adolescents need to be done to minimize the incidence of early menarche in adolescent girls in Indonesia.

**Keywords:** Adolescents, Early Menarche, Sexual Behavior

## INTRODUCTION

Adolescence is said to be a transition period from childhood to adulthood accompanied by biological, cognitive, socio-emotional changes (Santrock, 2013). High curiosity, love adventure and challenge, dare to take risks without considering the impact that will be obtained. This is a risky behavior that can cause short-term and long-term problems in terms of physical and psychosocial health (Pusdatin, 2017). Decision-making One of the signs that a woman has reached adolescence is the onset of menstruation. The first menstruation experienced by women is called menarche, characterized by the discharge of blood from the vagina due to the process of endometrial decay which contains many blood vessels. Generally, menarche in adolescent girls occurs at the age of 12 to 15 years (Prawirohardjo *et al.*, 2016). Based on research conducted by Pardede, the average age of menarche in Indonesian adolescents has decreased from 16 years to 13 years (Pratiwi, 2017).

An increase in the number of adolescents who experience menarche before the age of 12 years occurs in several countries, in Korea the percentage of adolescents in 2001 who experienced menarche under the age of 12 years was 21.4% and increased to 34.6% in 2010/2011 (Lee *et al.*, 2016). Early menarche can increase the chance of uterine cancer, breast cancer, endometrial hyperplasia due to hormonal imbalances dominated by estrogen (Lukasiewicz *et al.*, 2021). The incidence of early menarche in adolescent girls in Indonesia based on the Basic Health Research report (2013) as many as 20.9% of girls in Indonesia experienced menarche at the age of less than 12 years. Indonesia ranks 15th out of 67 countries with a decrease in the age of menarche reaching 0.145 years per 10 years (Susanti and Sunarto, 2013). The overall average age of

menarche based on the 2017 IDHS data is around 11.96 years. Early menarche can occur due to the ability to produce more estrogen hormones than other women in general, so early menarche can have a negative impact (Atmasari, 2016). Psychological changes in adolescent girls who are not ready to undergo menstruation can cause stress due to mental unpreparedness, physical problems can also arise in the form of lack of personal hygiene which can trigger urinary tract infections, and can increase the risk of ovarian cancer.

Sexual behavior is a form of behavior with the aim of attracting the attention of the opposite sex (Sebayang, Gultom and Sidabutar, 2018). Adolescent sexual behavior is still a debate that is assessed from a psychological, physical, and moral perspective which is dominated by premarital sexual behavior. According to the American Academy of Pediatrics in 1999, high-risk sexual behavior by adolescents during the premarital period is a serious problem because it is done at an earlier age (Yuni *et al.*, 2013). As many as 33.3% of adolescent girls aged 15-19 years started dating at the age of 15 years, which is considered a form of high-risk sexual behavior (Pusdatin, 2017). Dating behavior where as many as 76% of adolescents held hands, 39% had kissed, and 29.5% tried to stimulate their partners (Agustin 2014). Such stimulation can cause faster sexual maturity in adolescent girls so that the chance of early menarche is greater due to an inappropriate increase in hormones. Factors that cause changes in sexual behavior in adolescents due to lack of supervision and attention of parents and family, free association patterns, permissive environment, and things in providing sexual stimuli that are easily found (Halid, 2022). Based on this background, the purpose of this study is to determine the relationship between sexual behavior and the incidence of early menarche in Indonesian adolescent girls.

## METHOD

This research is quantitative descriptive research using the Secondary Data Analysis approach. Utilization of secondary data as the main data by analyzing and interpreting the results of the data obtained to determine and analyze the relationship between variables. The dependent variable in this study is the incidence of early menarche while the independent variable is sexual behavior in adolescent girls. This study uses a cross-sectional design conducted at one time. The secondary data source used in this study is the 2017 Indonesian Demographic and Health Survey (IDHS). The survey was conducted on July 24-December 30, 2017 in 34 provinces in Indonesia in both urban and rural areas.

Sample determination was based on predetermined criteria, namely adolescent girls aged 15 years who had experienced menstruation and were not married. Data cleaning was carried out on 11,302 adolescent population aged 15-25 years and obtained 1,494 adolescent girls who met the criteria and became samples in this study. The chi-square method was used to analyze the data in this study.

## RESULT AND DISCUSSION

Based on data obtained from the 2017 Indonesian Demographic and Health Survey (IDHS), the number of adolescents who have high-risk and low-risk sexual behavior is obtained with the following distribution..

**Table 1.** Distribution of Sexual Behavior among Indonesian Adolescent Girls in 2017

Sexual Behavior	Frequency (n)	Percentage (%)
High Risk	1063	71.2
Low Risk	431	28.8
Total	1494	100

The results in table 1 show that sexual behavior in 1063 adolescent girls aged 15 years had high-risk sexual behavior (71.2%) and low-risk sexual behavior occurred in 431 adolescent girls (28.8%). High-risk sexual behavior leads to promiscuous sexual behavior that is inseparable from negative consequences such as Human Immunodeficiency Virus-Acquired Immune Deficiency Syndrome (HIVAIDS), unmarried pregnancy, and unsafe abortion Free sexual behavior in adolescents is a form of social criticism that can worry many parties such as parents, educators, clerics, community leaders, and government officials.. In Irsyad research 2012, states that adolescents generally understand free sexual behavior leads to forms of intercourse, kissing, and making out (Irsyad, 2013). Emotional conditions that are still unstable affect hormonal conditions in a

person's body (Marwoko, 2019). According to Harlock in 2004, there are two factors driving sexual behavior in adolescent girls, namely internal and external factors. External factors come from outside the individual such as the influence of the friendship environment, invitations to have free sex, wrong sexual information and free access to watching pornographic videos on various social media. Internal factors come from within individuals who begin to develop and function vital organs such as breast growth, hair growth in the pubic area, and the occurrence of menstrual events (Hanifah, Nurwati and Santoso, 2022).

In 2019 the Indonesian government conducted a survey on 10,203 adolescents with the results of 7,787 adolescents engaging in sexual behavior (holding hands, hugging, kissing lips, stimulating partners) and another 2415 not engaging in sexual behavior (National Population and Family Planning Agency, 2020). Based on IDHS data in 2017 12% of adolescent girls in Indonesia have experienced unwanted pregnancies. Sexual behavior in adolescents can be influenced by the family environment. Guidance from parents is very important because adolescents are still looking for themselves, and if there is no supervision and education by parents, then they will fall into negative things (Muhibbuthabry *et al.*, 2023). Puberty education is an important form of education and skill to help parents and adolescents navigate adolescents' physical, emotional, and interpersonal changes with positive outcomes (Koirala, 2023).

Based on data obtained from the 2017 Indonesian Demographic and Health Survey (IDHS), the number of adolescents who experienced menarche at the age of  $\leq 13$  years and  $>13$  years was obtained with the following distribution.

Table 2 shows that 1157 adolescent girls experienced menarche at age  $\leq 13$  years (77.4%), and 337 adolescent girls (22.6%) experienced menarche at age  $> 13$  years. Based on the results of this study, it was found that the majority of adolescent girls in Indonesia experienced early menarche. Increased production of the hormone estrogen compared to young women in general due to early menarche can have a dangerous impact. The earlier menarche occurs in adolescent girls, the later menopause will occur (Munda, 2013). Research conducted by Sylvie Murg (2014) states that as many as 16% of adolescent girls belong to early puberty who experience menarche at an early age and are

**Table 2:** Age Distribution of Menarche in Adolescent Girls in Indonesia 2017

Age at Menarche	Frequency (n)	Percentage (%)
$\leq 13$ years	1157	77.4
$>13$ years	337	22.6
Total	1494	100

**Table 3.** Relationship between Sexual Behavior and Menarche Event in Indonesian Adolescent Girls 2017

Respondent's Sexual Behavior	Age at Menarche				Total		P-Value
	≤ 13 Years		≤ 13 Years				
	n	%	n	%	n	%	
High Risk	984	65.9	79	5.3	1063	71.2	0.00
Low Risk	258	17.3	173	11.6	431	28.8	
Total	1157	77.4	337	22.6	1494	100	

related to psychological changes in adolescent girls who are influenced by the environment.

Early menarche among adolescent girls is also associated with risky sexual behaviors such as inconsistent contraceptive use, having multiple sexual partners and high partner turnover, having older sexual partners, having casual sexual partners and having transactional sex (Whitworth *et al.*, 2023). In previous studies, the risk of women developing breast cancer was higher in women who experienced early menarche at the age of 12 years, compared to women who experienced menarche at the age of  $\geq 15$  years and there was an association of menarche at the age of  $\leq 11$  years significantly (p-value=0.003) associated with early breast cancer at the age of 40 years. Menarche at age  $\geq 16$  years was significantly associated with a reduced risk of early breast cancer at age 40 years (p-value=0.005) (Yang *et al.*, 2022). In other studies, early menarche can increase problems during menstruation (Marques, Madeira and Gama, 2022). Self-monitoring of the menstrual cycle is important. Understanding of the normal menstrual cycle needs to be improved, so that women can seek appropriate health services according to their needs.

In the table 3, based on the results of bivariate analysis at the age of menarche with two categories, namely  $\leq 13$  years and  $>13$  years, the results of sexual behavior in respondents were dominated by sexual behavior with high risk with a percentage of 65.9% of the 1494 respondents in this study. In this study, sexual behavior is divided into risky and non-risky sexual behavior. A sexual behavior is categorized as risky if it includes kissing, petting, and/or intercourse. Not risky if there is no kissing, petting and sexual intercourse (Nuraliah, 2022).

Pearson test results with an asymptotic significance (2-tailed) value of 0.00 ( $<0.05$ ) indicate that there is a relationship between sexual behavior and early menarche in adolescents. Based on this table, 984 (65.9) adolescent girls with high-risk sexual behavior experienced early menarche at the age of  $\leq 13$  years, while 79 (5.3%) adolescent girls with high-risk sexual behavior experienced menarche at the age of  $>13$  years. Salsabiela research (2020) states that sexual behavior affects the occurrence of early menarche due to the encouragement of desire from the opposite sex. Adolescents who experience menarche early have the potential to engage in premarital sexual behavior due to emotional immaturity to control themselves.

The role and good relationship between parents and children can reduce high-risk sexual behavior (Aisya and Wibowo, 2017).

The advantages of this study are the use of secondary data that can be accessed easily, anywhere, and the costs incurred in research are relatively cheap. The research is only limited to secondary data from IDHS results in 2017, which may have shortcomings during the preparation process.

## CONCLUSION

This research concludes that sexual behavior has an association with the incidence of menarche in adolescent girls in Indonesia in 2017 with a p-value of 0.00 ( $<0.05$ ). Sexual behavior that is dominated by high risk can be influenced by low knowledge about reproductive health and lack of supervision from parents. Socialization and education about early menarche along with the risks and dangers of free sexual behavior need to be done to prevent the emergence of negative impacts that harm adolescent girls.

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