ORIGINAL ARTICLE

# Sexual Education for Teens as Seen in the Parents' Characteristics

Lelly Aprilia Vidayati[1], Muji Sulistyowati[2], Aidalina Mahmud[3], Rachmah Indawati[4], Alis Nurdiana[5]

[1] Program Doktoral Fakultas Kesehatan Masyarakat Universitas Airlangga Surabaya Indonesia
[2] Fakultas Ilmu Kesehatan Masyarakat Universitas Airlangga Surabaya Indonesia
[3] Department of Community Health, Faculty of Medicine and Health Sciences,Universiti Putra Malaysia
[4] Fakultas Ilmu Kesehatan Masyarakat Universitas Airlangga Surabaya Indonesia
[5] Program Studi Kebidanan Universitas Noor Huda Mustofa Indonesia

## ABSTRACT

**Introduction:** Sexually transmitted diseases and teenage pregnancy are among the negative consequences of early sexual activity during adolescence. These issues can be mitigated through sexual education provided by parents. This study aims to analyze the relationship between parental characteristics and the provision of sexual education to adolescents. **Methods:** This quantitative study employs a cross-sectional approach. The study population consisted of parents with teenagers aged 13-15 years attending MTsN schools in the Madura region. A total of 200 parents were considered, and a proportional random sampling method was used to select 134 respondents from four cities across nine MTsN schools. Data collection was conducted between January and February 2024 using questionnaires. Bivariate analysis was performed using the Chi-square statistical test, while multivariate analysis was conducted using logistic regression. **Results:** The findings indicate a significant relationship between parental characteristics, specifically, maternal knowledge (p = 0.008 : OR = 50.734 : CI=2.765-931.043), perception (p = 0.021 : OR = 24.197 : CI = 1.631-358.941) and maternal education (p = 0.031: OR=21.408 : CI = 1.330-344.706), and the provision of sexual education to teenagers.This finding indicates that knowledge has the most dominant relationship with the provision of sexual education to adolescents. However, maternal age (p = 0.38) and employment status (p = 0.41) did not show a significant association. **Conclusion:** This study highlights the importance of parental characteristics, particularly knowledge. Parents are encouraged to improve their knowledge and understanding of adolescent sexual health so that they can effectively provide sexual education to teenagers.
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**Corresponding Author:**
Lelly Aprilia Vidayati, S.SiT., M.Kes
Email: lellyapriliavidayati@yahoo.co.id
Tel: +628113411591

## INTRODUCTION

Adolescence is a transitional period from childhood to adulthood, characterized by both physical and psychological changes. During this stage, teenagers often feel that they are no longer children but are not yet fully capable of taking responsibility for themselves and their social roles. This transition involves letting go of old values while acquiring new ones to achieve maturity (1). During this period, adolescents frequently encounter various challenges, including sexuality-related issues, where they may engage in premarital sexual relations or sexual activity before reaching a mature age for marriage (2).

Premarital sexual behavior among adolescent girls is a significant public health concern, as it contributes to rising cases of sexually transmitted diseases (STDs), teenage pregnancies, and abortions, particularly in developing countries (3-7). STDs remain a global health problem, with the World Health Organization (WHO) reporting that one million people are diagnosed with an STD every day. Additionally, data from the Indonesian Ministry of Health indicate that Indonesia ranks fifth among Asian countries with the highest risk of sexually transmitted infections (STIs). Adolescents are particularly vulnerable to STIs because they are increasingly becoming sexually active (9).

Beyond the risk of STIs, teenage pregnancy is another serious consequence of early sexual activity (10). Teenage pregnancy is a major public health issue worldwide, contributing to high maternal mortality and morbidity rates. According to WHO (2020), in developing countries, an estimated 12 million adolescent girls aged 15-19 years become pregnant each year, with at least 777,000 girls under 15 years old giving birth. Additionally, approximately 10 million unintended pregnancies occur among adolescent girls annually. Globally, complications during pregnancy and childbirth remain the leading cause of death among adolescents (11).

Data from the Central Statistics Agency (2021) reported that teenage pregnancies accounted for 48 per 1,000 pregnancies in Indonesia. The 2017 Indonesian Health Data Survey (SDKI) found that 7% of women aged 15-19 years had already become mothers, with first marriages occurring before the age of 18. A study conducted in nine major cities in Indonesia found that among 37,000 cases of unwanted pregnancies, 27% occurred in unmarried couples, while 12.5% involved junior high, high school, or college students (11). Indonesia has the fourth-highest teenage pregnancy rate in Southeast Asia, following Laos, the Philippines, and Cambodia. According to the National Statistical Bureau, the prevalence of girls giving birth between ages 10-19 was 48 per 1,000 pregnancies. Recent BKKBN (2024) data indicate that adolescent sexual activity in Indonesia has increased significantly. In 2018, 33.3% of female adolescents aged 15-19 years reported having engaged in sexual activity, rising to 59% in 2024. Among male adolescents, the figure increased from 34.5% in 2018 to 74% in 2024. Additionally, data from the Religious Court in the Madura region showed a surge in applications for marriage dispensations, rising from 159 applications in 2019 to 721 applications in 2020, primarily due to teenage pregnancies. These findings indicate that premarital sexual behavior among adolescents remains alarmingly high.

Previous studies have identified individual, parental, and institutional factors as key determinants of adolescent sexual behavior and its associated consequences, such as teenage pregnancy (12-13). Individual factors include age, gender, ethnicity, romantic relationships, and sexual knowledge (12). The primary source of sexual and reproductive health knowledge should be parents and family members. However, many adolescents lack adequate information about the consequences of premarital sex and are often not equipped with the self-efficacy needed to reject unsafe sexual practices. Parental sexual education plays a critical role in shaping adolescent attitudes toward sexuality, as the family serves as the foundation for moral and social development. However, in reality, many parents still perceive discussions about sexuality as taboo. A lack of parental supervision and guidance has been identified as a significant factor contributing to teenagers engaging in premarital sex, which, in turn, leads to unintended pregnancies and other adverse outcomes.

## Materials and Methods

This study employed a quantitative research design using a cross-sectional approach to examine the relationship between parental characteristics and the provision of sexual education to adolescents. The study population comprised parents of adolescents aged 13-15 years attending MTsN schools in the Madura region, with a total of 200 respondents. A proportional random sampling method was used to select a final sample of 134 respondents from four cities across nine MTsN schools.

Data collection took place between January and February 2024 using self-administered questionnaires. These questionnaires were distributed directly to respondents, with assistance from trained field officers who had received prior training on study guidelines, distribution procedures, and questionnaire completion. The questionnaire covered various aspects, including parental age, education, and occupation, as well as knowledge and perception of sexual education. The parental knowledge section consisted of 10 questions, assessed using a 3-point Likert scale, while the parental perception section comprised 10 questions, assessed using a 5-point Likert scale. The provision of sexual education to adolescents was measured as a binary variable ("provided" or "not provided").

The reliability of the questionnaire was tested using Cronbach's Alpha, yielding a score of 0.787 for the parental knowledge section and 0.989 for the parental perception section, indicating strong reliability. Data analysis was conducted using SPSS Version 20. Bivariate analysis was performed using the Chi-square statistical test to assess the relationship between parental characteristics (age, education, occupation, knowledge, and perception) and the provision of sexual education. Furthermore, multivariate analysis using logistic regression was conducted to identify the most influential parental characteristics associated with the provision of sexual education. A significance level of $\alpha = 0.05$ was used for all statistical tests.

This study was reviewed and approved by the Ethics Committee of the Ngudia Husada Madura Health Sciences College Number 2282/KEPK/STIKES-NHM/EC/IX/2024, ensuring compliance with ethical research standards.

### Statistical Analysis

After data processing, data analysis was conducted using SPSS Version 20. The Chi-square statistical test was used to examine the relationship between parental characteristics (age, education, occupation, knowledge, and perception) and the provision of sexual education to adolescents, with a significance level of $\alpha = 0.05$. Additionally, multivariate analysis was performed using logistic regression to identify the most influential parental characteristics associated with the provision of sexual education.

## Results

This study included 134 parents who met the inclusion and exclusion criteria. The distribution of subjects based on age, education, occupation, knowledge, perception, and the provision of sexual education is presented in Table 1. According to the findings, most parents were aged 30-40 years, making them the primary figures in their teenagers' lives. In terms of education, the majority had only basic education (junior high school graduates), while regarding occupation, most mothers were housewives and did not work outside the home.

**Table I: Frequency Distribution Of Respondent Characteristics**

| Variable | Frequency | Percentage |
|---|---|---|
| Age | | |
| 30 - 40 years old | 85 | 63,4 % |
| 41 - 50 years old | 44 | 32,8 % |
| >50 years | 5 | 3,7 % |
| Education | | |
| Based | 48 | 35,8 % |
| Intermediate | 40 | 29,9 % |
| Height | 46 | 34,3 % |
| Work or Employment status | | |
| Doesn't work | 71 | 53 % |
| Work | 63 | 47 % |
| Knowledge | | |
| Not enough | 84 | 62,7 % |
| Enough | 23 | 17,2 % |
| Good | 27 | 20,1 % |
| Perception | | |
| Negative | 82 | 61,2 % |
| Positive | 52 | 38,8 % |
| Providing sexual education to adolescent | | |
| Not given | 87 | 64,9 % |
| Given | 47 | 35,1 % |

The results indicate that most mothers had limited knowledge about sexuality, and a majority held negative perceptions regarding sexual education for teenagers. Consequently, most parents did not provide sexual education to their adolescents. The relationship between age, education, employment, knowledge, and perception and the provision of sexual education was analyzed using the Chi-square test, while multivariate analysis was conducted using logistic regression for further examination.

As presented in Table 2, the analysis revealed a significant relationship between parental education, knowledge, and perception and the provision of sexual education to adolescents. However, parental age and occupation were not significantly associated with the provision of reproductive health education. In table 3, the multivariate analysis of the relationship between parental characteristics and the provision of sexual education to adolescent shows that parental knowledge has the most dominant significant relationship compared to parental perceptions and education in providing sexual education to adolescents.

**Table II: The analysis of the relationship between parental characteristics and the provision of sexual education to adolescents**

| No | Independent Variable | Dependent Variable | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Providing sexual education to adolescent | | | | Total | | p value |
| | | Given | | Not given | | | | |
| | | F | % | F | % | F | % | |
| 1. | Age | | | | | | | |
| | 30 - 40 years old | 61 | 45,5 | 24 | 17,9 | 85 | 63,4 | 0,38* |
| | 41 - 50 years old | 22 | 16,4 | 22 | 16,4 | 44 | 32,8 | |
| | >50 years | 4 | 3 | 1 | 0,7 | 5 | 3,7 | |
| | Total | 87 | 64,9 | 47 | 35,1 | 134 | 100 | |
| 2. | Education | | | | | | | |
| | Based | 44 | 32,8 | 4 | 3 | 48 | 35,8 | 0,031* |
| | Intermediate | 19 | 14,2 | 21 | 15,7 | 40 | 29,9 | |
| | Height | 24 | 17,9 | 22 | 16,4 | 46 | 34,3 | |
| | Total | 87 | 64,9 | 47 | 35,1 | 134 | 100 | |
| 3. | Work or Employment status | | | | | | | |
| | Doesn't work | 45 | 33,6 | 26 | 19,4 | 71 | 53 | 0,41** |
| | Work | 42 | 31,3 | 21 | 15,7 | 63 | 47 | |
| | Total | 87 | 64,9 | 47 | 35,1 | 134 | 100 | |
| 4. | Knowledge | | | | | | | |
| | Not enough | 84 | 62,7 | 0 | 0 | 84 | 62,7 | 0,008* |
| | Enough | 3 | 2,2 | 20 | 14,9 | 23 | 17,2 | |
| | Good | 0 | 0 | 27 | 20,1 | 27 | 20,1 | |
| | Total | 87 | 64,9 | 47 | 35,1 | 134 | 100 | |
| 5. | Perseption | | | | | | | |
| | Negative | 67 | 50 | 15 | 11,2 | 82 | 61,2 | 0,021** |
| | Positive | 20 | 14,9 | 32 | 23,9 | 52 | 38,8 | |
| | Total | 87 | 64,9 | 47 | 35,1 | 134 | 100 | |

Information : α : 0,05 ; Statistical test : *Chi Square test and **Fisher's exact test

**Table III: Analisis Multivariate of the relationship between parental characteristics and the provision of sexual education to adolescents**

| Variable | p-value | OR | 95% CI for EXP (B) | |
|---|---|---|---|---|
| | | | Lower | Upper |
| Knowledge | 0,008 | 50,734 | 2,765 | 931,043 |
| Perseption | 0,021 | 24,197 | 1,631 | 358,941 |
| Education | 0,031 | 21,408 | 1,330 | 344,706 |

Information : α : 0,05 . Statistical Test: logistic regression

## Discussion

Based on the research results, it was found that parental characteristics play a significant role in the provision of sexual education to adolescents, particularly in terms of knowledge, perception of sexuality and education. There is a significant dominant relationship between parental knowledge of sexuality and the provision of sex education to adolescents. The findings indicate that parents with better knowledge of sexuality are more likely to provide sexual education to their children. In contrast, those with limited knowledge tend to avoid discussing the topic. A lack of knowledge often leads to the misconception that discussing sexuality will encourage adolescents to engage in sexual activity (15). As a result, many parents choose to ignore their children's need for sexual education, despite its importance in shaping their sexual health (16). Meanwhile, adolescents actively seek information about sexuality as early as possible.

According to the International Planned Parenthood Federation (IPPF), adolescents have the right and need to access comprehensive sexuality education starting from elementary school (17). However, many parents lack adequate knowledge about sex and sexuality. Even though they have experienced adolescence themselves, they often do not recall relevant information from their youth. Consequently, today's parents must educate their

children about sexuality, yet many remain confused and uncertain about how to approach the subject. To address this issue, parents must increase their knowledge and understanding of adolescent sexuality. This will enable them to provide early sexual education using effective methods, thereby enhancing adolescents' understanding and reducing the risk of premarital sexual behavior.

The study also found a significant relationship between parental perception of sexuality and the provision of sexual education to adolescents. Parents with negative perceptions about sexuality are less likely to educate their children on the topic. Many parents believe that discussing sexuality is unnecessary, as they assume that adolescents should focus on their studies rather than learning about sexual health. Some parents fear that if teenagers receive sexual education, they may engage in sexual activity, potentially jeopardizing their future. However, certain parents, particularly mothers, believe that sexual education is necessary as a form of guidance and control to help adolescents avoid risky behavior. Despite this, many parents still feel uncomfortable discussing sex or sexuality with their children. Additionally, adolescents rarely initiate conversations about these topics, especially with their mothers. Some parents assume that their children receive sufficient sexual education at school, and therefore, they only discuss the topic if their adolescent asks about it (14).

The relationship between parental education and the provision of sexual education is that most parents of teenagers attending MTsN schools had only basic education (junior high school graduates). The findings suggest that parents with lower educational levels tend not to provide sexual education to their teenagers, whereas those with higher education levels are more likely to do so (18). This indicates that educational attainment influences an individual's ability to receive and process information. Parents with higher education are more likely to absorb and understand information related to sexuality, which can impact their willingness to discuss the topic with their children.

Regarding parental age, the study found no significant relationship between age and the provision of sexual education to adolescents. Most parents in the study were aged 30-40 years, and those in this age group were more likely to discuss sexuality with their children. Younger parents tend to be more open to discussing sexuality, while older parents (>40 years) are more likely to hold traditional views, considering the topic taboo for adolescents who are not yet mature enough to understand sexual matters (18).

The study also found no significant relationship between parental occupation and the provision of sexual education to adolescents. Working parents often have less time to communicate with their children, reducing their ability to provide sexual education. Meanwhile, housewives are expected to have more time to discuss these topics. However, the study findings suggest that maternal occupation does not influence the provision of sexual education. This contrasts with previous research, which indicates that working parents tend to neglect sex education due to time constraints. Studies suggest that teenagers who experience sexual health problems often come from households where parents are too busy to educate them about sexuality. The growing availability of information on digital platforms has further accelerated teenagers' exposure to sexuality-related content. Given these changes, it is important to recognize that sex education is no longer taboo. Instead, it should be introduced early, ensuring that children and adolescents receive accurate and appropriate sexual health information from reliable sources rather than from unverified media or peer influence.

A limitation of this study is that it examined only five parental characteristics (age, education, knowledge, occupation, and perception), without considering parental income. Future research should explore whether income level influences the provision of sexual education to adolescents, particularly in relation to access to educational resources and supporting facilities.

## Conclusion

Based on the findings of this study, parental characteristics play a crucial role in the provision of sexual education to adolescents, particularly in terms of knowledge, perception and education. Parents with greater knowledge of sexuality, positive perceptions and and higher education were significantly more likely to provide sexual education to their children, whereas those with limited knowledge, negative perceptions and lower education,tended to avoid discussing the topic. In contrast, parental age and occupation were not significantly associated with the provision of sexual education, suggesting that factors beyond demographics, such as awareness and openness to communication, may be more influential. The reluctance of some parents to discuss sexuality stems from cultural taboos, misconceptions, and the belief that addressing the topic may encourage premarital sexual activity. However, adolescents actively seek information on sexuality, highlighting the need for parents to be well-informed and proactive in educating their children. Given the increasing accessibility of information through digital platforms and the growing exposure of teenagers to sexuality-related content, it is essential for parents to provide accurate and age-appropriate sexual education to prevent misinformation and risky behaviors. This study underscores the importance of empowering parents with the necessary knowledge and positive attitudes toward sexual education, ensuring that adolescents receive guidance from trusted sources rather than relying on peers or unreliable media. Future research should explore additional factors, such as parental income and

access to educational resources, to further understand their influence on sexual education provision. Strengthening parental involvement in adolescent sexual education can contribute to better sexual health outcomes, reducing the risks of sexually transmitted infections, unintended pregnancies, and other adverse consequences associated with early sexual activity.

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