Scientific Literature Analysis on Premarital Sexual in Indonesia: A Bibliometric Study

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Abstract.
Premarital sexual intercourse or having sex before marriage can be a complex issue. Unvirginity can have an impact on mental health, pregnancy, abortion, reproductive infections, HIV/AIDS, school dropout, unemployment, pregnancy proclamation, premature birth, stunting, causes of maternal and child mortality. Serious attention is needed because the health of adolescents determines the health of future human resources. Efforts to handle and prevent premarital sexual desire requires data. This study aims to determine the publication trend of premarital sexual research (co-occurrence) and authors (co-authorship) within 11 years (2013-2023). The method uses bibliometric analysis, data collection through Scopus journal articles that have international reputation and credibility. Premarital sexual keywords, articles, Indonesian and English with a total of 42 document publications. In 2013–2015 there were no publications, in 2016 there was 1 document, 2017 there were 2 documents, 2018 there was 1 document, 2019 there were 7 documents, 2020 there were 11 documents, 2021 there were 6 documents, and in 2022 and 2023 there were 4 documents each. Analysis continued using Vos viewer software and network visualization results found 71 items with a mapping of 5 clusters connected to premarital sexual keywords. It was found that new keywords associated in the last 3 years were high-risk behavior, risk factor, human immunodeficiency virus infection, human immunodeficiency virus, marriage, condom use, and attitude to health, this creates research opportunities related to premarital sex. Mapping the development of publications based on co-authorship shows authors with the best citations, namely Citra Ervina Ahiyanasari, Ira Nurmala, and Anggun Wulandari.

Keywords: bibliometrics, Indonesia, premarital sexual
1. INTRODUCTION

Premarital sexual is another term for sexual activity in adolescents before marriage [1], this can have an impact on global health problems [2]. Ten million unwanted pregnancies occur each year at the age of 15-19 years in developing countries [3]. According to UNICEF [4], 13% of adolescent girls who give birth to <18 years, are threatened with abortion and HIV/AIDS [5] and morbidity [6].

Physical and brain development causes adolescents to experience high curiosity [7], love challenges [8], and dare to try risky things [9], so adolescents with low self-ability to environmental adaptation can fall into premarital sexual [10]. Knowledge helps good decision-making (Murdiningsih et al. 2020), knowledge about sexual impact is a predictor of premarital sexual decline, unfortunately, adolescents state that they do not have clear information about HIV-AIDS [12]. Thus, support in various access to information about reproductive health education [11] and family support is needed [10].

Premarital sexual research has been widely conducted in various countries, such as the United States [13] Africa [14], China [15], Ethiopia [16] and Indonesia [17]. The study of sexual behavior in Indonesia at the age of 15-24 years is known to be the first age of sexual intercourse <16 years, 50.1% in women and 88.6% in men [9]. Indonesia is a country that facilitates every citizen to conduct worship. Observance in religion should produce beliefs that are integrated into daily behavior, including avoiding deviant behavior. Thus, it is necessary to map research related to premarital sex in Indonesia using VOS View from the Scopus database to determine the trend of publication of premarital sexual research (co-occurrence) and authors (co-authorship) within 11 years (2013-2023).

2. METHOD

This study is a bibliometric analysis. Data visualizations were obtained and analyzed using VOS Viewer. The search was conducted by reference on March 20, 2024. The step begins by identifying titles, keywords, and abstracts using the keyword “premarital sexual” in the Scopus database. Scopus was chosen because it is a robust, reliable, and abstract database with the largest citations from peer-reviewed literature. The scope is focused on publications in the time interval 2013 – 2023. Then the keyword search was limited to the “article” database so that 588 papers were found, followed by a keyword search in the country/territory “Indonesia” with a total of 43 documents, and
finally focused on articles in “English,” so that 42 papers were filtered. The bibliometric stage of this analysis refers to [18] as described in Figure 1.

Figure 1: Bibliometric stages of premarital sexual analysis.

3. RESULTS AND DISCUSSIONS

The development of the growth of publications indexed by Scopus with premarital sexual topics in the range of 2013 – 2023 amounted to 705 documents, documents were then limited based on articles, territories, and English language so that they became 42 documents.

Figure 2: Number of publications on premarital sex per year.

Figure 2 shows the development of publications in Indonesia on premarital sex. It is known that publication began in 2016 because from 2013 – 2015 there were no publications. Publications in 2016 – 2018 also show no significance, whereas in 2016 publications amounted to 1 document (2.38%), in 2017 amounted to 2 documents (4.76%), and in 2018 amounted to 1 document (2.38%). The development of publications on premarital sex in Indonesia began to develop in 2019 and fluctuated until 2022. The increase in publication development occurred in 2019, which was 7 documents, and increased in 2020 with 11 publications, and fell again in 2021 with 6 documents. The year 2022 and 2023 show the publication of the same number of 4 documents.

2020 is the year with the highest premarital sexual publications in the last 11 years in Indonesia. Research during this period was associated with adolescents who were
susceptible to contracting HIV-AIDS and had low self-esteem and lack of communication with parents. It is reported that the age of adolescents with HIV has increased drastically [19] adolescents with low self-esteem [20] and have a permissive nature are prone to premarital sex [19]. It is also stated that families can help adolescents have sexual protective attitudes [21], and parents can be the main actors in instilling values that are allowed and prohibited [10].

![Figure 3: Mapping of co-occurrences of keyword.](image)

The results of networking visualization of networks related to premarital sex (Figure 3) found 71 items with 5 clusters. Cluster I in red includes 26 items: adolescence, adolescent, adolescent sexual behavior, adolescents, article, bivariate analysis, child, communication, cross-sectional study, female, health education, high school, high school student, human, human experiment, human tissue, juvenile, major clinical study, male, media, nurse, parent, questionnaire, religiosity, reproductive health, dan sampling.

According to UNICEF, adolescents experience a period of biological, cognitive, and social-emotional growth and development [4] there is a process of reproductive and sexual maturity [7] along with deviant social development [22]. Teenagers are romantically [20], sexting, and sexually triggering while dating [23]. It is reported that 59.3% of Jakarta adolescents [24] and 37.3% of Garut adolescents aged 15-18 years have engaged in premarital sexual [25].
Green cluster 2 includes 14 items: adult, age, attitude to health, condom use, controlled study, data analysis, health survey, Indonesia, quantitative analysis, sexual intercourse, sexuality, single man, tertiary education, and young adult. Stated that premarital sexuality is also influenced by attitudes or self-confidence toward health; adolescents who have poor beliefs in sexual behavior have a 37% chance of engaging in sexual activity (27). Then, cluster 3 in blue includes 13 items: Adolescent pregnancy, cultural anthropology, exploratory research, HIV infections, humans, interview, pregnancy, psychology, quantitative analysis, quantitative research, religion, and unplanned pregnancy. The role of religiosity in life functions as educational, savior, conciliator, and social control [27] so adolescents have decision-making considerations and are wiser regarding social control.

Cluster 4 in yellow includes 11 items: acquired immune deficiency, education, personal health care, high-risk behavior, human immunodeficiency syndrome, human immunodeficiency virus, human immunodeficiency virus infection, knowledge, marriage, public health, risk factor, and sexual behavior. According to Shamu [5] premarital sexual makes adolescents vulnerable to contracting HIV/AIDS, but good knowledge helps adolescents carry out transmission awareness, on the other hand, adolescents who are less knowledgeable about reproductive health have an 89.7% risk of transmission [28].

Cluster 5 in purple includes 7 items: attitude, parenting, premarital sex, premarital sex behavior, premarital sexual behavior, self-esteem, and teenagers. The role of parents can help adolescents instill values, attitudes, and beliefs [29]. Adolescents who have poor communication with parents are stated to be two times more likely to have sexual premarital than adolescents who grow up in families with good communication [10].

While Overlay in Figure 4 and Figure 5 shows the study of premarital sexual research that has developed a lot since 2021, with keywords that began to be associated with high-risk behavior, risk factor, human immunodeficiency virus infection, human immunodeficiency virus, marriage, condom use, and attitude to health. The Community Observer Institute in Banjarmasin said that 65% of adolescent girls in Banjarmasin were not virgins, and other researchers said that the first sexual was carried out <16 years as much as 50.1% in women and 88.6% in men [9]. This situation can have an impact on adolescent vulnerability to sexually transmitted diseases [30] and HIV-AIDS [5].

The results of this study provide an evaluation direction related to the performance of the keywords studied. Dynamic publications have been carried out in the last 11 years, although the number has fluctuated. These results provide a form of research direction structure connected to risk factors, including risk factors that still have room for research, such as high-risk behavior, risk factors, human immunodeficiency virus infection, human
immunodeficiency virus, marriage, condom use, and attitude to health, which can be further developed. It was also seen that 3 (three) researchers with the best citations were concerned about examining premarital sex associated with attitude to health, which is included in risk factors that began to be in demand in the last 3 years. They are Citra Ervina Ahiyanasari, Ira Nurmala, and Anggun Wulandari.
4. CONCLUSION

Premarital sex is a familiar research discussion, the results of mapping in the period 2013-2023 using Scopus and Vos viewer obtained 42 documents with 5 clusters. There was no research from 2013-2015, and research began to develop in 2016 and fluctuated. 2020 is the highest publication year with influential researchers being Citra Ervina Ahiyanasari, Ira Nurmala, and Anggun Wulandari. Key words that have only emerged in the last 3 years are high risk behavior, risk factor, human immunodeficiency virus infection, human immunodeficiency virus, marriage, condom use, and attitude to health, so it becomes an opportunity for other researchers to develop research related to premarital sexual.

References


