



(RESEARCH ARTICLE)



The use of modern family planning among couples of reproductive ages in Indonesia from 2021-2023

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Abstract

Reproductive health is essential for individuals, couples, families, and societies, encompassing physical, mental, and social well-being related to the reproductive system. Contraceptive use plays a crucial role in addressing reproductive health issues, including unwanted pregnancies and sexually transmitted infections. Despite advancements, challenges persist in ensuring universal access to modern contraception, particularly in low-resource settings like Indonesia. This descriptive study analyzes the utilization of modern family planning methods among couples of reproductive ages in Indonesia, using secondary data from the Health Statistics Profile Volume 7 of 2023 published by the Badan Pusat Statistik (BPS) of Indonesia. The results show that Rural areas have a slightly higher percentage of modern contraceptive users compared to urban areas, while the highest percentage of modern contraceptive users is among couples with primary school education. The lowest percentage is among those with university education level. The age group with the highest percentage of modern contraceptive users is the 35-39 age group, while the lowest percentage is observed among the 45-49 age group. The highest percentage of modern contraceptive users is observed in quintile 1, while the lowest percentage is observed in quintile 5.

Keywords: Family Planning; Couples of Reproductive Ages; Contraceptive use; Reproductive health; Modern contraceptive

1. Introduction

Reproductive health is important to individuals, couples and families, and society. According to World Health Organization (WHO), reproductive health is a comprehensive physical, mental and social condition, not just free from disease or disability in all aspects related to the reproductive system, related to its functions and processes [1]. Reproductive health is related to the life cycle, each stage of which contains risks associated with morbidity and mortality [2].

Reproductive health issues are often closely associated with the use of contraceptives. Based on Indonesia Demographic and Health Survey (IDHS) 2017, the proportion of unwanted pregnancies among teenagers in Indonesia was 14.1% [3]. The incidence of abortion cases is 2.3 million cases per year and around 20% is carried out by teenagers in Indonesia [4]. The prevalence of sexually transmitted diseases in Indonesia in 2021, there are 2,976 cases of syphilis, 892 cases of advanced syphilis, 1,482 cases of gonorrhoea, 1,004 cases of gonorrhoeal urethritis, 143 cases of genital herpes, 342 cases of trichomoniasis, 7,650 cases of HIV, and 7,650 cases of AIDS [5].

Family planning has been linked to various advantages, including a reduction in maternal and infant mortality rates [6]. The results of the Long Form SP2020 recorded that Indonesia's MMR is 189 per 100,000 live births. The rate is still

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distant from the goal of achieving 140 per 100,000 live births although there was a 45% reduction in maternal mortality from the results of SP2010 and LF SP2020 [7], [8]. Meanwhile, the decline in IMR in Indonesia is almost 90 percent. It shows that the IMR is 16.85 per 1,000 live births in 2020 [8].

According to the National Population and Family Planning Board, the Total Fertility Rate (TFR) in Indonesia has declined from 2.4 children per woman in 2010 to 2.1 children per woman in 2020 [8]. This decline can be attributed to the increased use of modern contraception. However, despite the progress, access to and use of modern contraception in Indonesia still face several challenges. IDHS 2017 indicates that the prevalence of contraceptive use among married women of reproductive age (15-49 years) is 63,6% [3]. However, modern family planning methods have decreased (from 58% in the 2012 IDHS to 57% in the 2017 IDHS). This means that there is still a significant gap between the need for and the fulfillment of modern contraceptive use.

2. Material and methods

This research is a descriptive study to determine the use of modern family planning among couples of reproductive ages. This research uses secondary data originating from the Health Statistics Profile volume 7 of 2023. This data source is published by the Badan Pusat Statistik of Indonesia. The Publication was accessed on the website <https://www.bps.go.id>.

3. Results and discussion

Contraceptive methods are utilized to prevent pregnancy. Modern contraceptive methods encompass intrauterine device (IUD), implants, injections, pills, condoms, tubectomy, and vasectomy. The utilization of contraceptives in society is influenced by several factors. The following are characteristics that may affect contraceptive use among couples of reproductive ages.

3.1. Residential area

Based on Figure 1, it can be observed that the percentage of modern contraceptive users in the last three years shows a tendency to increase, albeit not significantly, in both urban and rural areas. Rural areas exhibit a slightly higher percentage compared to urban areas, although the percentage between rural and urban areas is not significantly different.

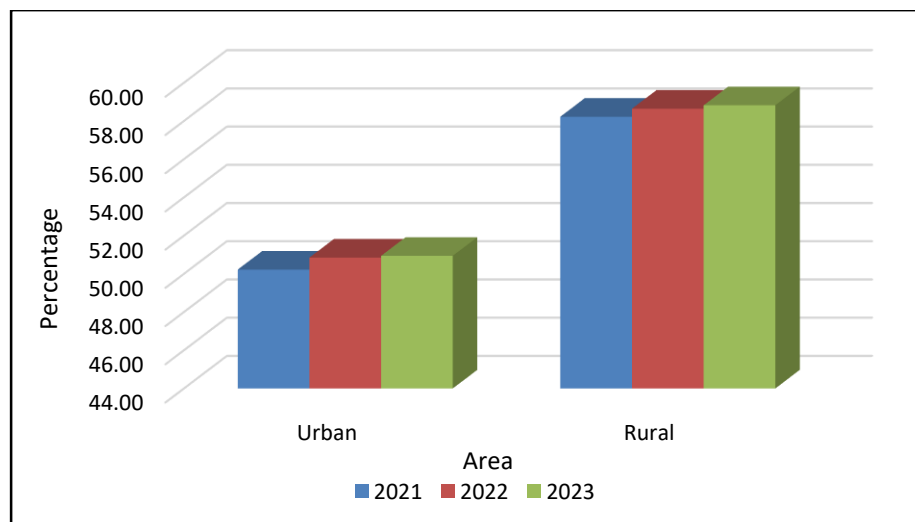


Figure 1 Percentage of Couples of Reproductive Age (15-49 Years) Who Are Using Modern Contraceptives by Area

Based on previous research, the level of unmet need for family planning in urban and rural areas is numerically different. However, statistically the level of unmet need for family planning in urban and rural areas is not different [9].

The factors influencing contraceptive use in urban areas include the age of women, parity, educational level, and visits to health facilities and discussions on family planning with healthcare providers. Meanwhile, the factors affecting contraceptive use in rural areas include the age of women, parity, educational level, and wealth status [10].

3.2. Education status

Based on Figure 2, it can be observed that the use of modern contraception varies across different levels of education. Overall, from 2021 to 2023, the highest percentage is among couples of reproductive ages with primary school education, while the lowest percentage is among those with university education level. There is a decrease in the percentage for individuals with no school and unfinished primary school education. Whereas there is an increase in the percentage for those with secondary school, high school, and university education.

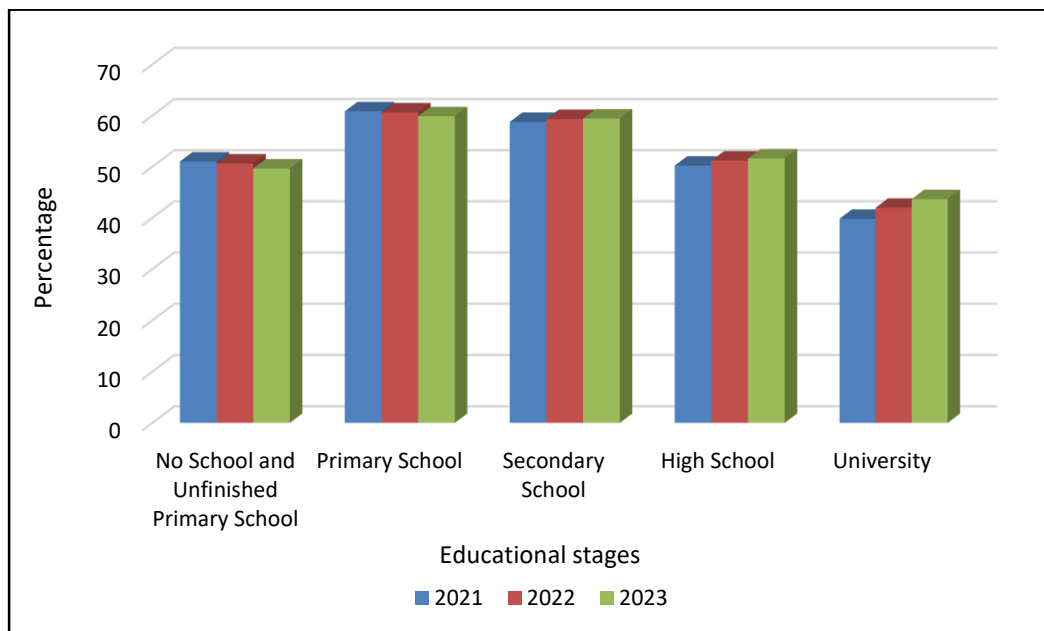


Figure 2 Percentage of Couples of Reproductive Age (15-49 Years) Who Are Using Modern Contraceptives by Education

Previous research shows that there is a relationship between the education level and the choice of contraception [11]. The higher a person's education level, the more likely they are to choose long-term reversible contraceptive methods. Meanwhile, respondents with low education tend to use injections and pills. This shows that lower education individuals tend to use short-term contraceptive methods [12].

Educational attainment might influence family planning goals. People with more education might be more likely to delay childbearing or prefer smaller families, leading them towards long-term contraception. Additionally, individuals with higher education might have more financial security, making long-term contraception a more viable option [13].

3.3. Age group

Figure 3 depicts the percentage within each age group. The age group with the highest percentage of modern contraceptive users is the 35-39 age group, while the lowest percentage is observed among the 45-49 age group. Over the three-year period from 2021 to 2023, modern contraceptive use among the 15-19 age group fluctuated, while a decrease was observed in the 45-49 age group. The 35-39 and 40-44 age groups experienced stagnation, whereas an increase was observed in the 20-24, 25-29, and 30-34 age groups.

The patterns observed may indicate varying family planning needs across different age groups. Individuals within the 15-34 age range may be initiating families and actively seeking dependable contraceptive methods. Meanwhile, those in the 35-39 age group might be utilizing contraception to space out pregnancies or attain their desired family size. The decrease in contraceptive usage among the 45-49 age group could be attributed to the onset of menopause, leading to a reduced necessity for contraception.

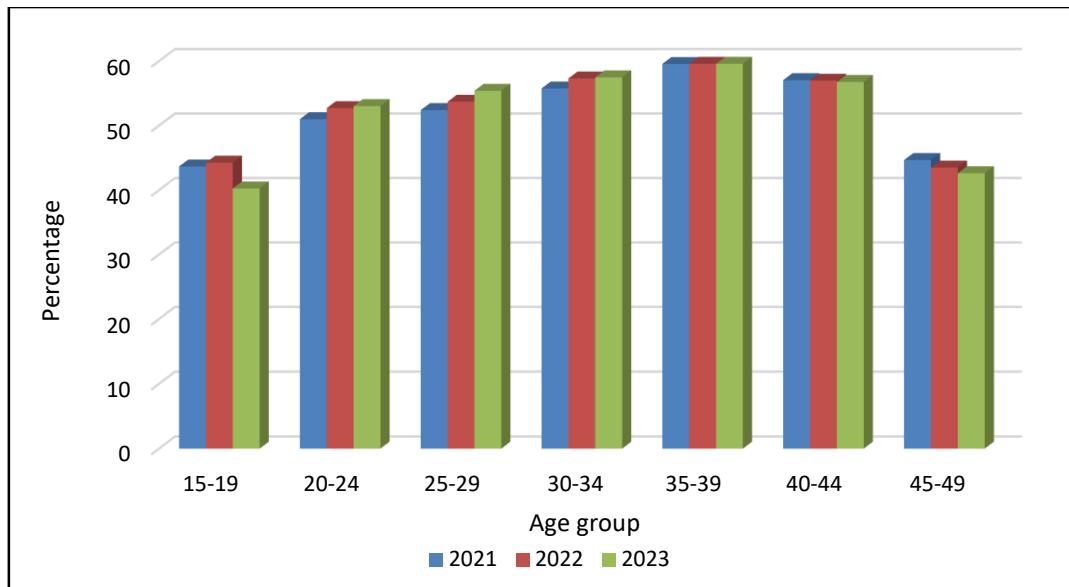


Figure 3 Percentage of Couples of Reproductive Age (15-49 Years) Who Are Using Modern Contraceptives by Age

When examining the fundamental pattern of sensible contraceptive utilization, it is recommended that during the period of preventing pregnancy (<20 years), individuals utilize contraception in the following order: birth control pills, intrauterine device (IUD), and condom. Meanwhile, during the period of spacing pregnancies (20-30 years), it is advised to use contraception including IUD, birth control pills, injections, implants, and condoms. During the period of ending fertility (>30 years), it is recommended to use contraception in the following order: sterilization, IUD, implants, injections, birth control pills, and condoms [11].

3.4. Wealth status

Quintiles 1 and 2 are categorized as low or poor economic status and quintiles 3,4, and 5 upper middle economic status or not poor [14]. Based on Figure 4, the highest percentage of modern contraceptive users is observed in quintile 1, while the lowest percentage is observed in quintile 5. When examining the period from 2021 to 2023, a decrease in the percentage of contraceptive users is observed in quintile 1 and quintile 4, while quintile 2 remains stable. Conversely, quintile 3 and quintile 5 experience an increase in contraceptive usage.



Figure 4 Percentage of Couples of Reproductive Age (15-49 Years) Who Are Using Modern Contraceptives by Wealth

The high percentage of modern contraceptive users among those with low economic status may be influenced by government programs. The utilization of BPJS (Indonesian national health insurance) enables them to access these

services. BPJS, as the administrator of National Health Insurance, ensures the provision of family planning services, including counseling, basic contraception, female sterilization, male sterilization, as well as the management of contraceptive complications. The financing of contraceptive services for BPJS participants, conducted at healthcare facilities affiliated with BPJS, is covered by the government [15].

4. Conclusion

This study shows that urban and rural areas exhibit similar contraceptive utilization trends, rural areas show slightly higher percentages, yet the level of unmet need for family planning remains consistent between urban and rural settings. Education status significantly impacts contraceptive choices, with higher education linked to long-term reversible methods and lower education levels favoring short-term options. Age group analysis reveals diverse contraceptive utilization patterns, with younger age groups prioritizing pregnancy prevention and older age groups focusing on spacing or ending fertility. Wealth status plays a pivotal role, with government programs like BPJS facilitating access for low-income groups.

Compliance with ethical standards

Acknowledgement

All data used in this study were obtained from publicly available sources and no personally identifiable information was used in the analysis. Also, this article did not receive assistance from the government, private companies, or non-profit organizations.

Disclosure of conflict of interest

No conflict of interest to be disclosed.

Statement of informed consent

Informed consent was obtained from all individual participants included in the study.

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