

Exploring Contraceptive Use Among Reproductive Woman at Pamekasan, Madura Island

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Article Information

Submitted: 31 January 2026

Accepted: 09 February 2026

Publish: 16 February 2026

Keyword: Contraceptive Use; Reproductive Woman; Rural Area; Community Health Service; Family Planning;

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Year: 2026

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Abstract

Introduction: Unintended pregnancy remains a major global and national concern, with 64 unintended pregnancies per 1,000 women worldwide and 15.5% of pregnancies in Indonesia reported as unwanted; the Indonesian government addresses this issue through the Family Planning program, where contraceptive use has reached 62.38% nationally. Even while long-term methods like IUDs and implants are very effective, their use is still inconsistent, whereas short-term like injectable contraception is most often used. **Objective:** this study aimed to exploring contraceptive use among reproductive woman at rural area. **Method:** A cross-sectional study using consecutive sampling involved 69 women of reproductive age completing structured questionnaires on contraceptive use, analyzed using descriptive statistics. **Result and Discussion:** Most respondent in 40-49 group age (42%), have secondary education level (57%), have no working (77%), and Married woman (91%). Most participants (54.4%) not used contraception although 74% ever used contraception, with the hormone injection were the preferred contraceptive methods. **Conclusions:** This study show a sociodemographic characteristic that can be analyzed in the future study.

How to Cite

Ratna Dwi Jayanti, Ivon Diah Wittiarika, Agnestia Naning Dian Lovita, Euvangelia Dwilda Ferdinandus, Nurul Azizah, Rafhani Rosyidah, Pionera Seconda Giyanti Putri/Exploring Contraceptive Use Among Reproductive Woman at Pamekasan, Madura Island, Vol. 5, No. 5, 2026

DOI
e-ISSN/p-ISSN

<https://doi.org/10.54543/kesans.v5i5.572>
2808-7178 / 2808-7380

Published by

CV Rifainstitut/KESANS: International Journal of Health and Science

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Introduction

Unintended pregnancies remain a global concern, with the most recent data suggesting a shocking rate of 64 from 1.000 woman worldwide (Bearak et al., 2022). In Indonesia, a 2023 study revealed an alarming 15.5% frequency of unwanted pregnancies (Laksono et al., 2023). In Indonesia, the National Population and Family Planning Board (BKKBN) oversees and manages unplanned pregnancies through the well-known Family Planning (KB) program (Feriani et al., 2024; Maharani et al., 2023). Aside from lowering unplanned pregnancies, the primary goal of Indonesia's Keluarga Berencana (KB) program is to develop prosperous families, prevent early marriages, and minimize maternal and newborn mortality due to pregnancies at both early and later ages. The use of contraceptives, whether via conventional or modern means, is a crucial part of the family planning program. One of the main elements of an all-encompassing family planning strategy is the use of contraceptives, including both contemporary and conventional techniques.

In Indonesia, the rate of contraceptive use stands at an impressive 62,38%, as revealed by the data from Ministry of Health in 2024 (Kementerian Kesehatan RI, 2024). Looking more closely at regional data, from East Java Provincial Health Office, East Java Province reports that the province's and Pamekasan district's rates of contraceptive use are 59,8% and 69,1%, respectively (Dinas Kesehatan Provinsi Jawa Timur, 2024).

Contraceptive methods are divided into 2 categories based on the duration of use, namely short-term contraceptive methods and long-term contraceptive methods. Types of long-term contraceptive methods include implants, Intrauterine Device (IUD), vasectomy, and tubectomy. One of the most efficient, durable, and practical forms of birth control is the IUD and implant (Ovsepyan et al., 2024). Injectable contraception, as a short-term contraceptive method, continues to be the most popular option for preventing conception based on type (94.2%). In contrast, only 0.3% of people utilize IUDs (Dinas Kesehatan Provinsi Jawa Timur, 2024).

One of the four regencies on Madura Island in Indonesia's East Java Province, Pamekasan is distinguished by its primarily rural setting, where small-scale trade, agriculture, and fishing constitute the primary economic pursuits. The majority of the population is Maduree, and their strong cultural and religious beliefs have a big impact on family dynamics, societal standards, and health-seeking habits. Regional hospitals, private midwifery practices, and community health centers offer health services; yet, there are still differences between urban and rural locations, especially when it comes to reproductive health education and service use. The population of Pamekasan was estimated to be 889,800 in 2024, with a significant percentage of children and roughly 63% of the population in the productive age range, suggesting a rather youthful demographic structure (Pamekasan, 2024). Because of these features, Pamekasan is a pertinent setting for family planning and public health studies. Based on the background above, this study is necessary to investigate the usage of contraceptives by women of reproductive age in Pamekasan.

Method

This cross-sectional study was conducted on July 2025 under a community service program held by Midwifery Study Program, Faculty of Medicine, Universitas Airlangga. The event was conducted in Galis Community Health Service, Pamekasan, Madura

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district, East Java Province. A consecutive sampling frame was applied to recruit women of reproductive age (15-49 years) participating in the community service event. A sample size of 69 respondents were required in this study.

Participants were asked to fill out a structured questionnaire about the use of contraception. Descriptive statistics were used to summarize participants' demographic characteristics.

Result and Discussion

1. Result

Baseline Characteristic

Table 1
Characteristic of Respondents

Variable	Category	Frequency, n = 69	Percentage (%)
Age (years)	<20	0	0
	20-29	11	16
	30-39	21	30
	40-49	29	42
	N/A	8	12
Educational Level	No School	0	0
	Elementary School	3	4
	Junior High School	15	22
	Senior High School	39	57
	University	11	16
	N/A	1	1
Occupation	Housewife	53	77
	Farmer/Fisherman	1	1
	Tradesman	2	3
	Office worker/Civil worker	3	4
	Entrepreneur	2	3
	Other	2	3
	N/A	6	9
	Not Married	2	3
Marital Status	Married	63	91
	Widow	3	4
	N/A	1	1
Number of Children	No Child	9	13
	1	7	10
	2 – 4	51	74
	>4	0	0
	N/A	2	3

A total of 69 female adults participated in this study (Table 1), of which the majority were aged 40-49 years (42%), have a senior school level of education (57%), work as a housewife (77%), have 2 until 4 children (74%), and are married (91%).

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Contraceptive Use

Table 2
Contraceptive Use

Variable	Category	Frequency, n = 69	Percentage (%)
History of Contraceptive Use	Yes	51	74
	No	16	23
	N/A	2	3
Current Contraceptive Use	Use	29	42
	Not Use	37	54
	N/A	3	4

Based on Table 2, majority of participant ever use contraception (74%) and no longer use contraception (54%). Meanwhile, based on type of contraception, the majority of respondents use the injectable contraceptive method, which is included in the short-term contraceptive method.

Table 3
Contraceptive Method

Variable	Category	Frequency	Percentage (%)
Short Term Contraception	Pill	9	31
	Injection	17	59
	Condom	0	0
Long Term Contraception	IUD	0	0
	Implan	2	7
	N/A	1	3

2. Discussion

Sociodemographic Characteristic

Regarding the findings, it can be found that majority of respondent was aged 40-49 years. This contrasts with other findings that found that 26.9% of reproductive women who used contraception were in the 20-24 age range (Mahfouz et al., 2023). Other findings also stated that 39.36% of contraception users were in the 15-24 and 25-34 age groups (Negash et al., 2022). The National Population and Family Planning Board (BKKBN) has set the appropriate age for pregnancy at 20-35 years. Women aged over 35 years may have experienced a decline in organ function, especially the reproductive organs. However, women aged 36-49 years still have the possibility of getting pregnant because ovulation still occurs. Therefore, contraception use is recommended until the reproductive age is complete or after reaching menopause. Therefore, knowledge about contraception use and reproductive health needs to be improved to encourage contraception use. Age plays a significant role in decision-making regarding contraception use. Age plays a role in the maturity of thinking and processing information. With increasing age, it has also been concluded that a person's mindset and comprehension become more mature, leading to wiser decision-making, particularly regarding family planning (Tenaw et al., 2023). Age can also influence the number of children and the desire to have more. This is demonstrated by the results of this study, which found that 74% of women had 2-4 children. Similarly, in Nigeria, 52.8% of reproductive women had 2-4 living children (Fadeyibi et al., 2022).

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Additionally, decisions about the usage of contraceptives are significantly influenced by education level. Higher educated people are thought to be highly informed about and concerned about their health, including reproductive health. This poll found that the majority of respondents had finished high school (57%). This result is in line with recent research showing that 64.9% of women who use contraception and are of reproductive age had finished higher education (Pakaya et al., 2022). The degree of education attained can help a person's growth and capacity for thought processes. Positive attitudes and knowledge about a topic will also typically lead to favorable trends in health-related behavior (Suryasa et al., 2022).

The majority of respondents in this study were found to be unemployed (77%). This is inconsistent with other studies that show that 67.8% of women of reproductive age are employed (Royani et al., 2025). The same thing also happened in research in Cameroon which showed that 86% of contraceptive users had jobs (Zegeye et al., 2022). A person's level of well-being is determined by their employment. A person who works automatically makes money. Because financial independence also impacts a woman's rights and power in decision-making, particularly with regard to healthcare, working women will have a greater position in the home than unemployed women. Due to their financial reliance, the majority of women do not have the same possibilities as their partners to participate in household decision-making. Low rates of contraceptive use are caused by this basic issue (Muluneh et al., 2023).

Furthermore, marital status is also an important factor to investigate in contraceptive use. Most women in this study were married (91%). Research in Ethiopia found that married women were 18 times more likely to use contraception (Tenaw et al., 2023). This research is also in line with research in Benin (Budu et al., 2023), Ghana (Lokko et al., 2025), and Nigeria (Anyatonwu et al., 2023). Married women engaging in regular sexual activities may perceive contraception as critical for planned child spacing, thus driving its use (Anyatonwu et al., 2023).

Contraceptive Use

The study discovered that just 42% of respondents used contraception. This represents a decrease, as seen by the fact that 74% of respondents reported having used contraception in the past. This indicates that some responders have decided to quit use. The study involved a majority of participants who used contraceptives, injection being the most popular methods. The injection method was most likely chosen due to its relative efficacy or reliability in comparison to pills, condoms, and etc.

Similarly, a study among female adults in Ghana found hormone injection contraceptives to be the most commonly utilized form, followed by implant and IUDs (Nketiah-Amponsah et al., 2022). Notably, all contraceptives used in Pamekasan were classified as modern contraceptives, which offer higher effectiveness and efficiency compared to the traditional contraceptives (periodic abstinence and withdrawal) when used in a limited-knowledge setting. This aligns with research findings in Sub-Saharan Africa, which found that only around 25.4% of women of reproductive age used contraception (Michael et al., 2024). Another study also found very low use of long-term contraceptive methods among women of childbearing age, reaching only 21.73% (Bolarinwa et al., 2022).

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So many factor that can effect a contraceptive uses, like as age, marital status, wealth, educational level, religion, and region (Nketiah-Amponsah et al., 2022). In an American study, it was found that side effects of contraceptive methods, sexual activity, access to use, safety reasons, and costs were factors associated with contraceptive use (Gomez et al., 2024). The usage of contraceptives by women of reproductive age has also decreased, according to this study. Divorce, the loss of a spouse (death), partner living out of town, and advanced age were the most often mentioned causes, which led to the conclusion that pregnancy was no longer feasible. A combination of interpersonal, health system, and method-specific factors frequently lead to the discontinuation of contraceptive uses. The most often reasons why women discontinue using contraception, especially hormonal methods like injectables and pills, are side effects and health concerns, including menstrual changes, irregular bleeding, and perceived consequences on fertility (Chin-Quee et al., 2022; Martell et al., 2023; Rothschild et al., 2022). Long travel distances, stock-outs, irregular availability of qualified clinicians, and restricted access to healthcare services all contribute to early termination, particularly in rural areas, by limiting opportunities for method counselling and follow-up (Hall et al., 2024). Women who stop without using other strategies are influenced by sociocultural factors like the desire for more children, unfavorable views from their spouses, and a lack of support from their partners (Kungu, 2023; Zaneva et al., 2025).

Conclusion

This study explored the contraceptive use and sociodemographic among reproductive woman in Pamekasan, Madura Island. Looking ahead, a longitudinal study tracking the evolving patterns of contraceptive use and its underlying determinants within the Indonesian rural community could provide deeper insights into the sustainability of attitudes and practices over time. Factors associated with the contraceptive use require further analysis in future research. Additionally, investigating the effectiveness of targeted educational interventions to enhance contraceptive knowledge and dispel misconceptions could contribute to informed family planning decisions and improved reproductive health outcomes in similar settings.

Reference

- Anyatonwu, O. P., Nwoku, K. A., Jonsson, H., & Namatovu, F. (2023). [The determinants of postpartum contraceptive use in Nigeria. *Frontiers in Global Women's Health*, 4.](https://doi.org/10.3389/fgwh.2023.1284614) <https://doi.org/10.3389/fgwh.2023.1284614>
- Bearak, J. M., Popinchalk, A., Beavin, C., Ganatra, B., Moller, A.-B., Tunçalp, Ö., & Alkema, L. (2022). [Country-specific estimates of unintended pregnancy and abortion incidence: A global comparative analysis of levels in 2015–2019. *BMJ Global Health*, 7\(3\).](https://doi.org/10.1136/bmjgh-2021-007151) <https://doi.org/10.1136/bmjgh-2021-007151>
- Bolarinwa, O. A., Nwagbara, U. I., Okyere, J., Ahinkorah, B. O., Seidu, A.-A., Ameyaw, E. K., & Igharo, V. (2022). [Prevalence and predictors of long-acting reversible contraceptive use among sexually active women in 26 sub-Saharan African countries. *International Health*, 14\(5\), 492–500.](https://doi.org/10.1093/inthealth/ihab053) <https://doi.org/10.1093/inthealth/ihab053>
- Budu, E., Dadzie, L. K., Salihu, T., Ahinkorah, B. O., Ameyaw, E. K., Aboagye, R. G., Seidu, A.-A., & Yaya, S. (2023). [Socioeconomic inequalities in modern contraceptive use among women in Benin: A decomposition analysis. *BMC Women's Health*, 23\(1\), 444.](https://doi.org/10.1186/s12905-023-02601-y) <https://doi.org/10.1186/s12905-023-02601-y>
- Chin-Quee, D., Diadiou, M., Eichleay, M., Youssef, A., Chen, M., Bernholc, A., & Stanback, J. (2022). [How Much Do Side Effects Contribute to Discontinuation? A Longitudinal Study of IUD and Implant Users in Senegal. *Frontiers in Global Women's Health*, 2.](https://doi.org/10.3389/fgwh.2021.804135) <https://doi.org/10.3389/fgwh.2021.804135>
- Dinas Kesehatan Provinsi Jawa Timur. (2024). *Profil Kesehatan Jawa Timur 2024*.
- Fadeyibi, O., Alade, M., Adebayo, S., Erinfoami, T., Mustapha, F., & Yaradua, S. (2022). [Household Structure and Contraceptive Use in Nigeria. *Frontiers in Global Women's Health*, 3.](https://doi.org/10.3389/fgwh.2022.821178) <https://doi.org/10.3389/fgwh.2022.821178>
- Feriani, P., Yunitasari, E., Efendi, F., Krisnana, I., Ernawati, R., Tianingrum, N. A., & Safaah, N. (2024). [A Systematic Review of Determinants Influencing Family Planning and Contraceptive Use. *Iranian Journal of Nursing and Midwifery Research*, 29\(5\), 596.](https://doi.org/10.4103/ijnmr.ijnmr_321_23) https://doi.org/10.4103/ijnmr.ijnmr_321_23
- Gomez, A. M., Bennett, A. H., Arcara, J., Stern, L., Bardwell, J., Cadena, D., Chaudhri, A., Davis, L., Dehlendorf, C., Frederiksen, B., Labiran, C., McDonald-Mosley, R., Rice, W. S., Stein, T. B., Valladares, E. S., Kavanaugh, M. L., & Marshall, C. (2024). [Estimates of use of preferred contraceptive method in the United States: A population-based study. *The Lancet Regional Health – Americas*, 30.](https://doi.org/10.1016/j.lana.2023.100662) <https://doi.org/10.1016/j.lana.2023.100662>
- Hall, B., Evans, T. A., Atrio, J. M., & Danvers, A. A. (2024). [Social Determinants of Health and Patient-Reported Difficult Discontinuation of Long-Acting Reversible Contraception. *Journal of Women's Health*, 33\(12\), 1635–1644.](https://doi.org/10.1089/jwh.2023.0857) <https://doi.org/10.1089/jwh.2023.0857>
- Kementerian Kesehatan RI. (2024). *Profil Kesehatan Indonesia 2024*.
- Kungu, W. (2023). [Contraceptive use and discontinuation among women aged 15–24 years in Kenya. *Frontiers in Reproductive Health*, 5.](https://doi.org/10.3389/frph.2023.1192193) <https://doi.org/10.3389/frph.2023.1192193>

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- Laksono, A. D., Wulandari, R. D., Rohmah, N., & Matahari, R. (2023). [Unmarried Women and Unintended Pregnancy: An Indonesian Cross-Sectional Study](#). *Indian Journal of Community Medicine*, 48(2), 361. https://doi.org/10.4103/ijcm.ijcm_325_22
- Lokko, C., Sackey, J., & Lokko, F. (2025). [Factors influencing type of contraceptive use among Ghanaian males: Insights from the 2022 Ghana demographic and health survey](#). *Public Health in Practice*, 9, 100623. <https://doi.org/10.1016/j.puhip.2025.100623>
- Maharani, A., Sujarwoto, S., & Ekoriano, M. (2023). [Health insurance and contraceptive use, Indonesian Family Planning Census 2021](#). *Bulletin of the World Health Organization*, 101(8), 513–521. <https://doi.org/10.2471/BLT.22.289438>
- Mahfouz, M. S., Elmahdy, M., Ryani, M. A., Abdelmola, A. O., Kariri, S. A. A., Alhazmi, H. Y. A., Almalki, S. H. M., Adhabi, O. M., Ali Hindi, S. M., Muqri, N. M., & Towhary, B. A. (2023). [Contraceptive Use and the Associated Factors among Women of Reproductive Age in Jazan City, Saudi Arabia: A Cross-Sectional Survey](#). *International Journal of Environmental Research and Public Health*, 20(1), 843. <https://doi.org/10.3390/ijerph20010843>
- Martell, S., Marini, C., Kondas, C. A., & Deutch, A. B. (2023). [Psychological side effects of hormonal contraception: A disconnect between patients and providers](#). *Contraception and Reproductive Medicine*, 8(1), 9. <https://doi.org/10.1186/s40834-022-00204-w>
- Michael, T. O., Ojo, T. F., Ijabadeniyi, O. A., Ibikunle, M. A., Oni, J. O., & Agboola, A. A. (2024). [Prevalence and factors associated with contraceptive use among sexually active adolescent girls in 25 sub-Saharan African countries](#). *PLOS ONE*, 19(2), e0297411. <https://doi.org/10.1371/journal.pone.0297411>
- Muluneh, M. D., Francis, L., Agho, K., & Stulz, V. (2023). [The association of intimate partner violence and contraceptive use: A multi-country analysis of demographic and health surveys](#). *International Journal for Equity in Health*, 22(1), 75. <https://doi.org/10.1186/s12939-023-01884-9>
- Negash, W. D., Eshetu, H. B., & Asmamaw, D. B. (2022). [Predictors of modern contraceptive use among reproductive age women in high fertility countries in sub-Saharan Africa: Evidence from demographic and health surveys](#). *BMC Women's Health*, 22(1), 520. <https://doi.org/10.1186/s12905-022-02121-1>
- Nketiah-Amponsah, E., Ampaw, S., & Twumasi Baffour, P. (2022). [Socioeconomic determinants of use and choice of modern contraceptive methods in Ghana](#). *Tropical Medicine and Health*, 50(1), 33. <https://doi.org/10.1186/s41182-022-00424-5>
- Ovsepyan, V., Kelsey, P., & Evensen, A. E. (2024). [Practical Recommendations for Minimizing Pain and Anxiety with IUD Insertion](#). *The Journal of the American Board of Family Medicine*, 37(6), 1150–1155. <https://doi.org/10.3122/jabfm.2024.240079R1>
- Pakaya, N., Laksono, A. D., Masruroh, M., Sujoso, A. D. P., Ibrahim, I., Marasabessy, N. B., Rohmah, N., Seran, A. A., & Wulansari, I. (2022). [Are education level of women related to contraceptive use?: Analysis of the 2017 Indonesia demographic and health survey](#). *International Journal of Health Sciences*, 5561–5570. <https://doi.org/10.53730/ijhs.v6nS2.6440>

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- Pamekasan, B. P. S. K. (2024). *Jumlah Penduduk Menurut Kelompok Umur dan Jenis Kelamin di Kabupaten Pamekasan, 2024—Tabel Statistik*. <https://pamekasankab.bps.go.id/id/statistics-table/3/WVc0MGEyMXBkVFUxY25KeE9HdDZkbTQzWkVkb1p6MDkjMyMzNTI4/jumlah-penduduk-menurut-kelompok-umur-dan-jenis-kelamin--ribu-jiwa--di-kabupaten-pamekasan.html?year=2024>
- Rothschild, C., Richardson, B., Guthrie, B., Kithao, P., Omurwa, T., Mukabi, J., Callegari, L., Lokken, E., John-Stewart, G., Unger, J., Kinuthia, J., & Drake, A. (2022). [Contributions of side effects to contraceptive discontinuation and method switch among Kenyan women: A prospective cohort study](https://doi.org/10.1111/1471-0528.17032). *BJOG: An International Journal of Obstetrics & Gynaecology*, 129(6), 926–937. <https://doi.org/10.1111/1471-0528.17032>
- Royani, T., Umami, D. A., & Putri, Y. (2025). [A Correlation Between Education, Occupation And Socio-Economic Levels With Selection Of Contraceptive Methods In Fertile Age Couples At Bangun Jaya Helath Center In 2024](https://doi.org/10.37676/ssj.v3i1.7147). *Student Scientific Journal*, 3(1), 9–16. <https://doi.org/10.37676/ssj.v3i1.7147>
- Suryasa, I. W., Rodríguez-Gámez, M., & Koldoris, T. (2022). [Post-pandemic health and its sustainability: Educational situation](https://doi.org/10.53730/ijhs.v6n1.5949). *International Journal of Health Sciences*, 6(1), i–v. <https://doi.org/10.53730/ijhs.v6n1.5949>
- Tenaw, Z., Gari, T., & Gebretsadik, A. (2023). [Contraceptive use among reproductive-age females with disabilities in central Sidama National Regional State, Ethiopia: A multilevel analysis](https://doi.org/10.7717/peerj.15354). *PeerJ*, 11, e15354. <https://doi.org/10.7717/peerj.15354>
- Zaneva, M., Thatte, N., Philpott, A., Maliwa, C., Mills, R., & Gonsalves, L. (2025). [The Sex Effect: The prevalence of sex life reasons for contraceptive discontinuation. A systematic review and meta-analysis](https://doi.org/10.1080/26410397.2025.2552589). *Sexual and Reproductive Health Matters*, 1–66. <https://doi.org/10.1080/26410397.2025.2552589>
- Zegeye, B., Idriss-Wheeler, D., Ahinkorah, B. O., Ameyaw, E. K., Seidu, A.-A., Keetile, M., & Yaya, S. (2022). [Individual, household, and community-level predictors of modern contraceptive use among married women in Cameroon: A multilevel analysis](https://doi.org/10.1093/inthealth/ihab092). *International Health*, 14(6), 648–659. <https://doi.org/10.1093/inthealth/ihab092>