The Association Between Reproductive Health Knowledge and Marital Readiness in Adolescents

Dinni Randayani[1], Veronica Veronica[1], Legina Anggraeni[1], Moudy Emma Unaria Djami[1]
[1] Universitas Binawan, East Jakarta, Indonesia

dinnirandayani@gmail.com

Abstract. Statistics reveal that 8.16% of Indonesian adolescents marry between ages 10–15, while 25.08% marry between 16–18 years. Marriage at these early ages poses significant reproductive health risks. According to the National Population and Family Planning Agency (BKKBN), Indonesian adolescents' limited understanding of reproductive health is evident in the high prevalence of early marriage and teenage pregnancy, both of which adversely affect reproductive health outcomes. Unpreparedness for marriage can lead to detrimental consequences for physical health, psychological well-being, and financial stability. Data from the Central Statistics Agency (2020) further indicate that 8.3% of male adolescents and 1% of female adolescents engaged in premarital sexual intercourse, underscoring their lack of physical and psychological readiness for marriage. This unpreparedness elevates risks such as preterm births and mental health challenges, which may contribute to early divorce. Insufficient preparation in communication, family planning, and marital role management further increases divorce likelihood. This study employed a cross-sectional design to analyze the association between reproductive health knowledge and marital readiness among 33 final-semester midwifery students, selected via total sampling. Spearman's rho test analysis revealed a statistically significant relationship (p value = 0.000; r value = 0.684), indicating a strong positive correlation. Adequate reproductive health knowledge supports preparedness in child spacing, maternal and child health maintenance, and mitigation of unplanned pregnancy risks. The findings emphasize the need for educational programs addressing mental preparedness, family planning, and the benefits of delaying marriage to enhance adolescents' readiness for marital life.

Keywords: Knowledge, Readiness for Marriage, Reproductive Health

A. Suraya et al. (eds.), *Proceedings of the 2nd World Conference on Health and Social Sciences (WCHSS 2024)*,
Advances in Health Sciences Research 86,
https://doi.org/10.2991/978-94-6463-774-8_13

1 Introduction

Adolescence is a transitional period characterized by physical, psychological, and social changes. During this phase, adolescents develop self-identity and independence while navigating critical aspects of reproductive health. Comprehensive reproductive health knowledge is essential for adolescents, as it shapes their attitudes and behaviors toward preparing for a healthy and responsible marital life. However, data from the National Population and Family Planning Agency (BKKBN) highlight persistent gaps in Indonesian adolescents' understanding of reproductive health, evidenced by high rates of early marriage and teenage pregnancy. In 2023, 6.92% of women aged 20–24 were married or cohabitating before age 18, a decline from 8.06% in 2022 [1]. Despite this progress, early marriage and insufficient reproductive health literacy continue to jeopardize long-term reproductive health outcomes and family well-being.

Reproductive health is a critical aspect of human development, particularly during adolescence. Adolescent girls encounter multifaceted challenges linked to reproductive health, such as managing sexual urges, addressing risks of premarital pregnancy, and preventing sexually transmitted diseases. Their knowledge and attitudes toward reproductive health significantly shape decisions about marital readiness. Insufficient understanding often leads to behaviors detrimental to reproductive well-being, including disregard for premarital health screenings or gaps in comprehending reproductive health risks. Comprehensive knowledge in this domain is vital for fostering informed attitudes and behaviors that mitigate early marriage risks. A study by Isnaini and Sari underscores this disparity, while 53.8% of adolescent girls demonstrated adequate knowledge of early marriage's reproductive health consequences, 46.2% exhibited poor understanding, highlighting the urgent need for targeted educational interventions to bridge this gap [2]. Early marriage among Indonesian adolescents remains prevalent, with 8.16% marrying at ages 10–15 and 25.08% at 16–18. Such premature unions adversely impact reproductive health outcomes. The frequency of underage marriages further exacerbates gaps in reproductive health preparedness. Marital readiness among adolescent girls is closely tied to their knowledge of reproductive health, as demonstrated by Pu-

tri's 2023 study at SMK Negeri 2 Kintamani. The research identified a statistically significant association between reproductive health literacy and attitudes toward early marriage ($p = 0.010$), underscoring the critical role of education in shaping informed decisions about marital timing [2]. Insufficient reproductive health knowledge contributes to young women's unpreparedness for marital responsibilities, including the roles of wife and mother. Such gaps adversely affect the quality of life and stability of future families, thus underscoring the necessity of enhancing reproductive health literacy among adolescents as a foundational step toward healthy, sustainable marriages. Supporting this, research [3] demonstrates that structured sexual education fosters positive sexual behavior in adolescents and strengthens psychological resilience, further reinforcing the value of targeted educational initiatives.

A comprehensive understanding of reproductive health serves as a protective factor against early marriage, which constitutes a violation of fundamental human rights and entails significant adverse consequences for adolescent girls. Early marriage frequently leads to detrimental outcomes, such as premature pregnancy, social marginalization, disruption of educational attainment, limitations on career advancement, and heightened vulnerability to domestic violence [4]. Marital readiness offers critical advantages, including the prevention of early pregnancy and mitigation of associated health risks. Adolescents who are well-prepared for marriage demonstrate greater awareness of optimal pregnancy timing and strategies to safeguard maternal health during gestation. Furthermore, marital readiness directly influences pregnancy planning decisions, as evidenced by Rahma's 2021 study, which identified a significant correlation between preparedness for marriage and intentional pregnancy planning [5]. Pregnancy planning encompasses decisions regarding the timing of childbirth, desired family size, and child spacing intervals. Berk's research further reinforces the close linkage between marital readiness and adolescent reproductive health literacy. Adolescents with comprehensive reproductive health education exhibit reduced risks of pregnancy-related complications, such as preterm birth and maternal health disorders. This stems from heightened awareness of attending routine prenatal screenings and adhering to medical guidance, which collectively promote safer pregnancy outcomes [6].

Marital readiness encompasses emotional, social, moral, and spiritual maturity, all of which require deliberate preparation due to their substantial long-term impacts on physical and psychological well-being. Psychological preparedness is critical in determining optimal marital timing, as marriage represents a sacred commitment demanding mental fortitude to address future challenges. According to a 2022 survey by the Indonesian Family Advocacy Institute evaluating marriage readiness among youth, 47% of participants perceived themselves as unready for marriage, 23.4% felt prepared, and 29.6% were uncertain about their readiness [7]. Research [8] indicates that Generation Z prioritizes mental and psychological preparedness as essential criteria before committing to marriage. Cultivating mental resilience is critical for assuming future roles as partners or parents, as psychological unpreparedness often precipitates marital discord. Marital readiness is intrinsically tied to emotional maturity, cognitive flexibility, role adaptability, and problem-solving capacity—factors that mitigate household conflicts and foster relational stability [9]. Psychological unpreparedness heightens the risk of early divorce. Empirical evidence from Putri (2022) underscores that young couples lacking mental preparedness frequently struggle to sustain marital stability, particularly in communication and conflict resolution [10]. Furthermore, insufficient reproductive health preparedness exacerbates risks such as preterm births. Central Statistics Agency (BPS) 2020 data revealed that 8.3% of male adolescents and 1% of female adolescents engaged in premarital sexual activity, reflecting gaps in readiness that compound reproductive health vulnerabilities [11]. These statistics indicate that a significant proportion of adolescents lack the physical and psychological readiness for marriage, thereby elevating the risk of preterm pregnancy. Psychological unpreparedness further heightens the likelihood of early divorce, compounding long-term socioeconomic and health challenges.

2 Method

This study employed a quantitative cross-sectional design. A total sampling technique was utilized, selecting 33 final-semester midwifery students meeting the inclusion criteria from Binawan University. Data collection occurred between December 2021 and

April 2022. The independent variable, reproductive health knowledge, and the dependent variable, marital readiness, were assessed using a questionnaire adapted from the National Population and Family Planning Agency [15]. This instrument comprised 50 items evaluating dimensions of marital preparedness. Statistical analysis was conducted using Spearman's rho test to determine correlations between variables.

3 Result

3.1 Profile of Knowledge Levels

Table 1 displays the frequency distribution of participants' reproductive health knowledge levels

Table 1. Frequency distribution of participants' reproductive health knowledge levels

Knowledge	n	Percentage (%)
Good	29	87.9
Sufficient	4	12.1
Total	33	100

Table 1.1 indicates that 87.9% of respondents demonstrated good reproductive health knowledge, while 12.1% exhibited sufficient understanding.

3.2 Profile of Marital Readiness

Research findings on respondents' marital readiness are summarized in Table 2:

Table 2. Frequency Distribution of Marital Readiness

Attitude	n	Percentage (%)
Ready	29	87.9
Not Ready	4	12.1
Total	33	100

Table 2 reveals that 87.9% of respondents reported readiness for marriage, while 12.1% perceived themselves as unready.

3.3 Association Between Reproductive Health Knowledge and Marital Readiness

This study conducted bivariate analysis to examine the correlation between reproductive health knowledge and marital readiness. The results are summarized in Table 3:

Table 3. Association Between Reproductive Health Knowledge and Marital Readiness

Knowledge	Marital Readiness				Total		P-value	r
	Ready		Not Ready		n	%		
	n	%	n	%				
Good	29	100	0	0	29	100	0,000	0.684
Sufficient	2	50	2	50	4	100		
Total	**31**	**93.9**	**2**	**6.1**	**33**	**100**		

Table 3 indicates a statistically significant association between reproductive health knowledge and marital readiness ($p = 0.000 < 0.05$), with a strong positive correlation ($r = 0.684$). These findings underscore that higher reproductive health knowledge corresponds to greater preparedness for marriage.

4 Discussion

The study revealed that 87.9% of respondents possessed good reproductive health knowledge, while 12.1% demonstrated sufficient understanding. Reproductive rights, grounded in national legislation, international human rights frameworks, and consensus agreements, encompass fundamental entitlements enabling individuals and couples to freely and responsibly determine the number, spacing, and timing of childbirths. These rights further guarantee access to comprehensive information, resources for family planning, and the attainment of the highest standards of sexual and reproductive healthcare [12]. This study found that respondents recognized the ideal age for marriage and understood the risks of early marriage, particularly its detrimental effects on women's reproductive health, such as physiological unpreparedness of the reproductive system. These findings align with Sari's research, which emphasizes that early marriage adversely impacts women's reproductive health outcomes [13]. The established age threshold for marriage reflects readiness to navigate family life in terms of health and

emotional maturity. Comprehensive knowledge among adolescents regarding the ideal marital age, coupled with awareness of reproductive health, equips them to make informed decisions about marriage timing, particularly for adolescent girls. Targeted education is essential to deter early marriage, which heightens risks of reproductive health complications, including physiological strain on underdeveloped reproductive systems [14]. Pregnancy in women under 20 years of age elevates the risk of delivering infants with low birth weight (LBW), a condition linked to stunting in approximately 20% of cases. Preventive strategies to mitigate stunting incidence include premarital education programs that equip adolescents with knowledge on physical health preparation, family planning, and optimal marital timing. Such initiatives ensure prospective couples marry under ideal health conditions, thereby reducing risks to maternal and child well-being [15].

Yanti's 2018 research highlights that comprehensive reproductive health education enhances adolescents' adoption of safe and effective contraceptive methods [16]. Knowledge of family readiness, including reproductive health literacy, serves as a critical strategy to reduce maternal mortality rates. This is achieved through informed pregnancy planning, access to skilled birth attendants, and appropriate contraceptive use [17]. To bolster adolescent understanding, targeted educational interventions—such as counseling—are essential. Salma's 2023 study demonstrated that counseling significantly improves adolescents' knowledge of marital preparedness and reproductive health, thereby reducing underage marriage rates [14]. Rosyida and Desta (2019) emphasize that comprehensive reproductive health education motivates adolescents to prioritize regular health screenings, enabling early disease detection and intervention [18]. Adolescents with robust reproductive health knowledge demonstrate proactive health maintenance by understanding physiological and psychological changes, such as menstrual cycles, ovulation patterns, and fertility windows. This awareness extends to daily practices, including adherence to reproductive organ hygiene. Furthermore, reproductive health literacy directly influences pregnancy outcomes, as the physiological well-being of prospective spouses significantly impacts gestational health [15]. The significant relationship between reproductive health knowledge and marital readiness highlights that such knowledge extends beyond basic information, actively shaping practical

preparedness for family life. Reproductive health literacy equips adolescents to foster healthy communication with partners concerning spousal and parental responsibilities. When combined with psychological readiness, a thorough understanding of reproductive health enables strategic planning for childbearing, including optimal birth spacing and family size, to protect maternal and child health and reduce unplanned pregnancies. Fahira's research (2019) supports this connection, showing that greater reproductive health knowledge enhances preparedness for intentional pregnancy spacing [19]. Optimal birth intervals are crucial, as excessively short or prolonged gaps between pregnancies risk maternal and neonatal health. Ideally, spacing between children should allow adequate time for physical recovery, including uterine health, and psychological adjustment, ensuring readiness for subsequent pregnancies.

The bivariate analysis revealed a statistically significant association between reproductive health knowledge and family readiness, with a p value of 0.000 (less than 0.05), confirming the hypothesis of a relationship between these variables. The correlation coefficient ($r = 0.684$) indicates a strong positive relationship, suggesting that higher reproductive health knowledge corresponds to greater preparedness for family life. These findings align with prior studies, including Huda et al. (2020), which demonstrated that individuals with comprehensive reproductive health literacy exhibit enhanced readiness for marital and familial responsibilities [20]. The findings underscore that individuals with comprehensive reproductive health knowledge demonstrate greater preparedness for marriage and family life, encompassing awareness of physical, mental, and psychological health as well as skills for fostering healthy relationships. Conversely, adolescents and women lacking adequate knowledge and psychological preparation face heightened risks of marital and familial challenges. Contributing factors include disregard for reproductive health, unsupportive social environments, and insufficient access to accurate family planning information, which collectively exacerbate unmet healthcare needs. Such knowledge gaps may lead to serious health issues, such as unplanned pregnancies, exacerbating psychological and emotional burdens on couples unprepared physically or mentally. Inadequate emotional and mental readiness further elevates risks of marital conflict, including divergent expectations about family roles, financial management disputes, or childcare disagreements. Poor communication

and unclear role division in marriage may also trigger interpersonal tension and emotional distress.

Economic instability represents a critical consequence of inadequate marital preparedness. Insufficient economic preparation contributes to financial instability within households, exacerbated by inadequate financial planning skills, ineffective household budget management, and poor long-term fiscal strategizing. Such economic challenges strain marital relationships and perpetuate cycles of poverty. Families lacking economic and family planning preparedness risk entrenchment in poverty, with intergenerational repercussions that constrain opportunities for subsequent generations. Poor family planning knowledge further increases the likelihood of unplanned childbirth in suboptimal conditions, limiting children's future access to education and economic mobility.

Unpreparedness for marriage and family life poses significant prolonged risks to mental health, including heightened susceptibility to depression, anxiety disorders, and chronic stress. These challenges extend beyond individuals, adversely affecting couples and children through disrupted familial dynamics and stunted child development. Parental readiness, encompassing reproductive health literacy, emotional stability, and effective caregiving skills, is critical for fostering children's physical and psychological wellbeing. Children raised in unstable environments face elevated risks of developmental delays, academic underachievement, and socioemotional difficulties. Furthermore, insufficient preparation in communication, family planning, and role management elevates divorce likelihood, perpetuating relational discord and psychological distress. Aiman's 2023 research [21] corroborates these concerns, revealing that a majority of couples who married young reported diminished autonomy and regret following marriage, citing unmet biological, psychological, social, and economic needs.

The profound impact of personal readiness in transitioning to family life underscores the necessity of deliberate preparation. This study aligns with Rahayu's (2017)

findings, which posit that robust reproductive health knowledge enhances family readiness, thereby mitigating risks of mental and physical health challenges in marriage [22]. Ismail and Puspitasari's (2016) research further corroborates this, demonstrating that adolescents with strong reproductive health literacy exhibit greater preparedness for marriage and establishing healthy family dynamics [23]. Conversely, Wijayanti and Dewi (2015) caution that inadequate reproductive health awareness and familial preparedness contribute to marital discord, escalating risks of divorce and familial stress [24]. Karunia's (2018) study identifies social, cultural, religious, and emotional maturity as foundational criteria for assessing marital readiness [25]. Providing adolescents with reproductive health education fulfills their fundamental rights, as outlined in the International Conference on Population and Development [26], ensuring informed decision-making and equitable health outcomes

5 Conclusion and Suggestion

This study concludes a statistically significant association between reproductive health knowledge and family readiness among adolescents, as evidenced by a p-value of 0.000 ($p < 0.05$). The findings affirm that reproductive health literacy directly influences adolescents' preparedness for familial responsibilities. Notably, 87.9% of participants demonstrated proficient reproductive health knowledge, reflecting a strong foundational understanding that correlates with marital readiness. To sustain and amplify these outcomes, reproductive health education programs should be prioritized in secondary and tertiary education curricula, with a focus on empowering adolescent girls. Holistic educational initiatives must integrate mental preparedness, family planning strategies, and the benefits of delaying marriage until physical, emotional, and socioeconomic maturity are achieved.

References

1. BP Statistics. Proportion of Women Aged 20-24 Who Were Married or Living Together Before Age 18 by Province (Percent), 2021-2023 [Internet]. Jakarta;

Available from: https://www.bps.go.id/id/statistics-table/2/MTM2MCMy/proporsi-perempuan-umur-20-24-tahun-yang-berstatus-kawin-atau-berstatus-hidup-bersama-sebelum-umur-18-tahun-menurut-provinsi.html (2023)
2. Isnaini, N., Sari, R. Knowledge of Adolescent Girls About the Impact of Early Marriage on Reproductive Health at Sma Budaya Bandar Lampung. J Midwifery Malahayati. 5(1):77–80 (2019).
3. Rinta, L. Sex Education in Forming Positive Sexual Behavior in Adolescents and Its Implications for Adolescent Psychological Resilience. J Resilience Nas. 21(1):163–74 (2015).
4. Unicef. Child Marrige [Internet]. Available from: https://data.unicef.org/topic/child-protection/child-marriage/ (2024).
5. Rahmah, N., Kurniawati, W. Relationship between marriage readiness and pregnancy planning among prospective brides. J Public Health Res. 10:88–93 (2021).
6. Berk. Development Through the Lifespan). Pearson; (2018).
7. Fachrunisa, R, A., Ramadhina, R., Dewi, S. C. Survey of the Readiness of Marriage of the Young Generation of Indonesia [Internet]. Jakarta. Available from: https://gerakanindonesiaberadab.org/generasi-muda-indonesia-darurat-kesiapan-menikah-benarkah/ (2022).
8. Herawati, I, Hoesni, S.M., Manap, J., Khatib, N, A, M. A Qualitative Study: Exploring Marital Readiness among Generation Z. Int J Acad Res Bus Soc Sci. 13(12):2562–8 (2023).
9. Pratiwi, W, H., Syafiq, M. Strategies to Overcome Psychological Impacts on Women Who Marry Early. J Penelit Psikol [Internet]. 09:61–72. Available from: https://ejournal.unesa.ac.id/index.php/character/article/view/47863/39951 (2022).
10. Putri, D. The Relationship Between Knowledge About Reproductive Health And Attitudes Of Adolescent Females Related To Early Marriage In State Vocational High School 2 Kintamani. Dempasar; (2022).
11. BP Statistics. Statistics Indonesia 2020 [Internet]. Statistics SP and K, editor. Jakarta. Available from: https://web-api.bps.go.id/download.php?f=Q5oAdbLeuEy9EQaARiy/CHZVcHQ0NjYrT2hwUEtsckI1V25qZnI5cVAyT3pSVURzb05sa1UwbHhaV2M0WlY2ZHVqNHR1bUxiNitaRFNHL3poV-UxtM2JJL2FqMytKZzZ4a3RBMy9GYU4xOTMvZlI4Y1I2M2QwYUd5TXJHSS9DZk1Yb0IyN0J5OCtsTHN5NmFXOEdUaUhidFAzOVJtT3p4bl (2020).
12. Asiva, N, R. Selected Practice Recommendations for Contraceptive Users. 3rd ed. WHO, Geneva, Switzerland. 74 p (2016).
13. Sari, L, Y., Umami, D, A., Darmawansyah, D. The Impact of Early Marriage on Women's Reproductive and Mental Health (Case Study in Ilir Talo District, Seluma Regency, Bengkulu Province). J Bid Health Sciences. 10(1):54–65 (2020).
14. Salma, C. Education counseling to prevent early marriage in adolescents in Sukamakmur Village, Jember. World J Adv Res Rev. 18(3):1380–4 (2023).
15. BKKBN 2021. Family Assistance for Prospective Brides and Grooms. Population and Family Planning Agency [Internet]. 1–35. Available from:

http://www.elsevier.com/locate/scp (2021).
16. Yanti, S. The Influence of Reproductive Health Education on Marriage Readiness in Adolescent Girls in Indonesia. J Kesehat Masy. 123-135 (2018).
17. Geneva WHO. World Health Statistics 2015 [Internet]. Vol. 151, NhkThe first. World Health Organization. 0–164 p. Available from: https://www.who.int/docs/default-source/gho-documents/world-health-statistic-reports/world-health-statistics-2015.pdf (2015).
18. Rosyida, D, C., & Desta, A, C. Textbook of Adolescent and Women's Reproductive Health. Yogyakarta: PT Pustaka Baru (2019).
19. Fahira, T, R. The Relationship between Reproductive Health Knowledge and Family Preparation of Public Health Students of Airlangga University in 2021. Media Gizi Kesmas. 11(1):182–90 (2022).
20. Huda, S., Kurniawati, A., & Santoso B. No Title. Influ Reprod Heal Knowl Fam Readiness Among Young Adults Indonesia. 22(2):89–95 (2020).
21. Aiman , U., Sri, W. L., Muthi, A., Ghofur, I., Ushuluddin and Adab, F., Syekh N. Analysis of the Impact of Early Marriage on the Mental State of Married Couples. Gunung Djati Conf Ser. 21:121–31 (2023).
22. Rahayu, L., & Widyastuti A. Reproductive Health Knowledge and Marriage Readiness in Adolescents. J Health Educator. 11(4):209–15 (2017).
23. Ismail, H., & Puspitasari, N. The Role of Reproductive Health Knowledge in Preparing Healthy Families. J Public Health. 10(2):78–85 (2016).
24. Wijayanti, S., & Dewi M. The Relationship between Reproductive Knowledge and Family Readiness Attitudes in College Students. J Health Sciences. 13(3):102–8. (2015).
25. Karunia, N, E., Salsabilah, S., Wahyuningsih, S. Readiness for Marriage of Emerging Adulthood Arab Ethnic Women. J Psychol Islam dan Budaya. 1(2):75–84 (2018).
26. Sumiari, N, M, K., Lutfiana, I., Dewi. Midwife, Counseling And Adolescent Reproductive Health Rights In The Covid-19 Pandemic. J Appl Nurs Heal. 3(2):126–35 (2021).