

Reproductive Health Education Based on Positive Youth Development through Youth Posyandu

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ABSTRACT

Background: Adolescence is a critical transition period marked by physical, emotional, and social changes, including sexual development, which can lead to risky dating behaviors. The 2017 Indonesia Demographic and Health Survey (IDHS) reported that most adolescents aged 15-17 years have been involved in romantic relationships involving physical intimacy, ranging from holding hands to genital touching. A lack of knowledge and positive attitudes toward reproductive health increases adolescents' vulnerability to premarital sexual behavior and its consequences, such as unintended pregnancy, early marriage, sexually transmitted infections, and HIV/AIDS. **Objective:** This study aims to evaluate the effectiveness of the Ruang Kespro education program, which is based on the positive youth development framework and implemented through youth health posts, in improving adolescents' knowledge and attitudes toward reproductive health. **Methods:** A quantitative descriptive research design with an educational intervention approach was employed, involving 30 members of the Red Cross Youth at SMA N 3 Semarang, selected purposively. The intervention was conducted in three sessions during October and November 2024. **Results:** The intervention significantly increased knowledge scores from 87.00 to 98.33 ($p < 0.0001$) and attitude scores from 86.17 to 99.67 ($p < 0.0001$). These findings indicate that positive youth development-based educational interventions delivered through youth health posts are effective in enhancing adolescents' knowledge and attitudes toward reproductive health. **Conclusion:** The Ruang Kespro program successfully strengthened adolescents' understanding and positive attitudes toward reproductive health. It is recommended that schools and extracurricular organizations, such as the Red Cross Youth, continue and expand similar educational programs and adolescent health services. Future research should involve a larger sample size to improve population representation and statistical power for broader generalization.

Keywords: Adolescents, Reproductive Health, Youth Posyandu, Positive Youth Development, Knowledge

INTRODUCTION

Adolescence is a critical transitional period in life, during which young people experience significant physical, emotional, and social changes. During this time, they also undergo puberty, which can often lead to various problems. Many adolescents feel unprepared to adapt to and balance these changes (Masnuna, Kusuma Wardani and Kadiasti, 2020). Mid-adolescence (ages 15-18) is a stage when they become interested in the opposite sex, experience love, and begin to fantasize sexually. The dating behaviors of today's adolescents are often associated with engaging in sexual

activities that are inappropriate for their age.

Based on the 2017 Indonesia Demographic and Health Survey (IDHS), 81% of teenage girls and 84% of teenage boys have been involved in romantic relationships. Out of 59,100 respondents, 80% of female adolescents and 84% of male adolescents reported that they started dating between the ages of 15 and 17 years. Activities during this period included holding hands (64% of females and 75% of males), hugging (17% of females and 33% of males), kissing (30% of females and 50% of males), and touching/being touched

(5% of females and 22% of males) (Wakhid, Solehah and Fatah, 2023).

Research by (Jayanti *et al.*, 2024), indicates that knowledge of reproductive health, exposure to social media, family influence, social environment, and visits to Posyandu have no significant relationship with adolescent dating behavior. Conversely, (Yudanagara, Buwana and Wiguna, 2022) found that an educational program based on a positive youth development framework, conducted at adolescent Posyandu in Tosari, Pasuruan, effectively increased knowledge and attitudes related to reproductive health. Positive developments in adolescents can help prevent risky sexual behaviors that often occur during this stage. Similarly, (Anggraeni and Sutarno, 2023) state that adolescent health posts have proven effective in improving reproductive health knowledge. Data shows that 76% of students lacking adequate reproductive health knowledge are more vulnerable to risky dating behavior, whereas only 24% of students with good reproductive health knowledge are less likely to engage in such behaviors (Handayani, Legina and Irwanti Gustina, 2023).

Unaddressed risky dating behaviors can have serious consequences, such as unprotected sex, unwanted pregnancy, early marriage, sexually transmitted infections, and HIV/AIDS (Jayanti *et al.*, 2024). (Mukminun, 2022) explains that dating behavior can increase the risk of premarital sex because activities with the opposite sex and physical contact are considered normal. Initially, adolescents may engage in casual dating, flirting, and seduction, which can escalate to kissing, touching, genital stimulation, and even coercion into sexual intercourse.

The above description indicates that adolescents' knowledge and attitudes toward reproductive health remain quite low. Therefore, the Ruang Kespro education program, which aims to increase adolescent knowledge and positive attitudes toward reproductive health, is essential in preventing risky dating behaviors.

METHODS

This study employed a descriptive quantitative design with an educational

intervention approach based on positive youth development through youth Posyandu. The research subjects consisted of 30 Palang Merah Remaja members from SMA N 3 Semarang, aged 15-17 years, selected purposively. The intervention activities were conducted in three sessions on October 22, November 5, and November 12, 2024. This study received ethical approval from the Health Research Ethics Committee (KEPK) of UNNES, No. 930/KEPK/FK/KLE/2025.

The data sources in this study included both primary and secondary data. Primary data were obtained through direct observation, activity documentation, and feedback from participants and mentors. Secondary data were gathered from literature reviews related to adolescent reproductive health, the positive youth development approach, and peer leader training.

Data collection involved observation, documentation, pre-tests, and post-tests. The data were analyzed using a paired t-test to compare pre-test and post-test scores. Before conducting the t-test, the normality of the data was verified using the Shapiro-Wilk test, which indicated that the data were normally distributed ($p > 0.05$). Consequently, the use of parametric tests was deemed appropriate.

RESULTS AND DISCUSSION

Table 1. Target Gender

Gender	Frequency	Percentage
Male	1	4%
Female	29	96%

Table 1 indicates that the respondents involved in the SRH activity consisted of 30 Palang Merah Remaja members at SMA N 3 Semarang. Of these, 29 students (96%) were female, and 1 student (4%) was male. This demonstrates that the majority of respondents in this study were female.

Table 2. Comparison of Percentage of Correct Answers Pretest and Posttest on Knowledge Variables

Question Item	Pretest		Posttest		Changes		Material
	n	%	n	%	n	%	
1	30	100%	30	100%	0		Right to Bodily Privacy
2	30	100%	30	100%	0		No Touching
3	23	76,6%	27	90%	4	13,4%	A Comforting Touch
4	30	100%	30	100%	0		Social Limits to Avoid Risky Dating
5	30	100%	30	100%	0		Sexual Harasement
6	30	100%	30	100%	0		Pregnancy
7	23	76,6%	29	96,6%	6	20%	Pregnancy
8	20	66,6%	26	86,6%	6	20%	Pregnancy
9	29	96,6%	30	100%	1	3,4%	Unwanted Pregnancies
10	25	83,3%	30	100%	5	16,7%	NKIP
11	2	6,6%	30	100%	28	93,4%	Sexual Drive
12	26	86,6%	28	93,3%	2	6,7%	Masturbation
13	30	100%	30	100%	0		Factors Affecting Sexual Drive
14	28	93,3%	30	100%	2	6,7%	Sexual Drive
15	15	50%	30	100%	15	50%	Sexual Drive

Based on Table 2, there was an increase in target understanding, particularly in question items number 11 and 15. The number of correct answers for

question 11 increased from 2 to 28, corresponding to a percentage of 93.4%, while for question 15, correct answers increased from 15 to 30, representing 50%.

Table 3. Comparison of Pre-Test and Post-Test Percentage of Correct Answers on Attitude Variables.

Item Question	Pre Test		Post Test		Changes		Material
	n	%	n	%	n	%	
1	24	80%	30	100%	6	20%	Statement When Receiving a Hug from the Opposite Sex
2	29	96,6%	30	100%	1	3,4%	Statement of Respect for Others' Boundaries
3	29	96, 6%	30	100%	1	3,4%	Attitude Statement When Someone Violates Your Boundaries
4	9	30%	30	100%	1 1	70%	Attitude Statement When Holding Hands with Someone of the Opposite Sex
5	30	100%	30	100%	0	0	Statement Forcing the Opposite Sex to Kiss
6	30	100%	30	100%	0	0	KTD Impact Statement for the Future
7	30	100%	30	100%	0	0	Love Definition Statement
8	4	13,3%	30	100%	2 6	86,7%	Necking Statements That Can Cause Arousal
9	30	100%	30	100%	0	0	Statement About First Kiss

Item Question	Pre Test		Post Test		Changes		Material
	n	%	n	%	n	%	
10	13	43,3%	28	93,3%	15	50%	Statement That KTD Victims Are Bad People
11	30	100%	30	100%	0	0	Liking A Friend Is Normal
12	29	96,6%	30	100%	1	3,4%	No Touch Statement
13	24	80%	30	100%	6	20%	Statement About Masturbation
14	30	100%	30	100%	0	0%	Self Limitation Statement
15	23	76,6%	30	100%	7	23,4%	Love Expression Statement

Based on Table 3, there was an increase in adolescents' attitudes, particularly in items number 4 and 8. The number of correct answers increased from 9 to 30 for item 4 and from 4 to 30 for item 8, with percentage changes of 70% and 86.7%, respectively.

Table 4. Comparison of Pre-Test and Post-Test Scores

Variables	N	Mean (SD)		P-value
		Before	After	
Knowledge	30	87,00 6,513	98,33 3,032	0,0001*
Attitude	30	86,17 5,032	99,67 1,269	0,0001*

Based on Table 4, it is evident that for the knowledge variable, the average score of respondents before the intervention was 87.00 with a standard deviation of 6.513. After the intervention, the average knowledge score increased to 98.33 with a standard deviation of 3.032. Meanwhile, the average score of respondents on the attitude variable before the intervention was 86.17 with a standard deviation of 5.032, and after the intervention, it rose to 99.67 with a standard deviation of 1.269. The p-value for each variable was 0.0001, indicating a significant difference in the mean scores before and after the intervention.

This finding aligns with research by (Anggraeni and Sutarno, 2023), which showed differences between pretest and posttest scores regarding adolescents' knowledge levels. They observed an

increase in the average posttest score of 0.029 after an educational intervention on reproductive health. Additionally, another study by (Mawardika, Indriani and Liyanovitasari, 2019) demonstrated a significant difference in adolescents' attitudes toward reproductive health before and after providing reproductive health education (Lawan Roma), with a p-value of 0.001.

Improvements in adolescents' knowledge and attitudes can positively impact health behaviors, thereby reducing reproductive health issues and enhancing quality of life (Ernawati *et al.*, 2022). Furthermore, involving adolescents in health education events can boost positive self-esteem, such as confidence, willingness to try new things, decision-making abilities, and the capacity to accept criticism, all within a trusting environment (Simon *et al.*, 2023).

The rapid advancement of science and technology often influences adolescents' decision-making processes. Their tendency to act impulsively and follow trends, combined with peer pressure and influence, can lead to unrestrained actions (Ginau, 2019). However, every adolescent has the potential for positive development.

Ruang Kespro is a program developed by utilizing the potential within adolescents, aiming to create a healthy and empowered school environment. The focus of this program is to make Palang Merah Remaja (PMR) members at SMA N 3 Semarang serve as cadres in providing reproductive health information to their peers. This program was based on the principles of youth posyandu in Indonesia and peer education.

The Ruang Kespro program aligns with research by (Putri *et al.*, 2025),

particularly regarding school-based interventions. The study indicates that school-based programs are effective in improving knowledge and attitudes toward reproductive health, especially when using interactive approaches such as discussions, demonstrations, and visual materials. Both studies emphasize schools as strategic platforms in efforts to enhance adolescents' understanding and perceptions of reproductive health.

However, Ruang Kespro adds value by implementing a positive youth development approach and engaging peer educators through active participation of Palang Merah Remaja and youth posyandu, making the program more communicative and empowering. This approach not only improves knowledge and attitudes but also empowers adolescents as agents of change, fostering a sense of responsibility, empathy, and social engagement with long-term impacts on healthy lifestyles. Thus, Ruang Kespro can create a contextual, participatory, and sustainable school-based intervention model. It also has the potential to be replicated in other schools, particularly those with health-related organizations. By integrating youth posyandu into the Palang Merah Remaja extracurricular program, schools can serve as strategic entry points to promote and prevent adolescent reproductive health issues. Moreover, this program can help bridge the gap in access to information and reproductive health services, which are often difficult to obtain outside formal health facilities.

Community-based initiatives like Ruang Kespro serve as platforms for accessing health information, participating in peer support, and developing skills (Baska, Savitri and Nispi, 2023). Training peer cadres can improve their ability to conduct health checks and increase overall health literacy (Husnah, Andolina and Adienda, 2024). However, adolescents' interest in participating in community activities is related to their level of knowledge. Adolescents with better knowledge tend to be more active at adolescent health posts because they better understand the importance of utilizing available health services (Indaman, Andoko and Trismiyana, 2025).

Programs based on positive youth development not only have short-term impacts on adolescents' knowledge and attitudes but also contribute to long-term

well-being, including aspects of health, education, and personal financial conditions in adulthood. This suggests that implementing such programs is an important investment in creating a healthier and more productive younger generation in the future (Sheehan *et al.*, 2022).

Adolescents' ability to accept new knowledge and attitudes is crucial for developing adaptive and critical thinking skills. However, not all students demonstrate the same level of acceptance. Factors influencing this include environmental factors, individual differences, and the implementation of the program itself. This is a challenge within the reproductive health (SRH) space, including the independent implementation of adolescent posyandu programs in schools, fostering motivation for ongoing development, and increasing self-actualization (Odii, 2024).

Although the Ruang Kespro program is a strategic effort to improve adolescents' understanding and positive attitudes toward reproductive health, its implementation faces several challenges. Limited time and space for activities result in materials being presented superficially or inconsistently. Additionally, stigma and taboos surrounding reproductive topics in school and community settings make some adolescents reluctant to participate actively and openly in discussions. Despite appropriate methods, the program's effectiveness has yet to fully address the complexity of adolescents' reproductive health needs.

CONCLUSION

The implementation of the Ruang Kespro program, which includes educational sessions and adolescent health clinics, has demonstrated promising results in enhancing adolescent reproductive health awareness. The majority of participants in this program are female (96%), while males comprise only 4%. After a three-week intervention, the average knowledge scores increased from 87.00 to 98.33 ($p < 0.0001$). Similarly, adolescents' attitudes toward reproductive health improved, with average scores rising from 86.17 to 99.67 ($p < 0.0001$).

These findings suggest that sustained educational engagement and structured health interventions can

effectively improve adolescents' understanding and attitudes regarding reproductive health. It is recommended that schools and extracurricular programs, such as the Red Cross Youth, continue these educational initiatives and health services to sustain and expand their impact.

For future interventions, increasing the sample size is advised to improve population representation and statistical power, thereby enhancing the generalizability of the findings.

REFERENCES

- Anggraeni, I. D. and Sutarno, M. (2023) 'Efektivitas Posyandu Remaja Dalam Peningkatan Pengetahuan Kesehatan Reproduksi Remaja di Posrem Genius Desa Sindangman Kabupaten Serang Provinsi Banten Tahun 2023', *Jurnal Ners*, 7(2), pp. 1270-1302. doi: 10.31004/jn.v7i2.16978.
- Baska, D. Y., Savitri, W. and Nispi, Y. (2023) 'The Establishment of Youth Posyandu to Increase Adolescent's Productivity', *Jurnal Pengabdian Kepada Masyarakat*, 2 (1), pp. 135-140. doi: <http://dx.doi.org/10.58723/dikdimas.v2i1.129>.
- Ernawati, D. et al. (2022) 'Pendidikan Kesehatan dalam Meningkatkan Pengetahuan Siswa Kelas 10 Tentang Kesehatan Reproduksi Remaja di SMA Hang Tuah 1 Surabaya', *Seminar Nasional Pengabdian Kepada Masyarakat 2021*, 1(1), pp. 400-407. doi: 10.33086/snpm.v1i1.827.
- Ginau, M. B. (2019) *Pengembangan potensi diri anak dan remaja*. Yogyakarta: Kanisius.
- Handayani, L., Legina, L. A. S. and Irwanti Gustina (2023) 'Hubungan Pengetahuan Tentang Kesehatan Reproduksi Dengan Perilaku Pacaran Berisiko', *Journal of Nursing and Midwifery Sciences*, 2(1), pp. 56-62. doi: 10.54771/jnms.v2i1.833.
- Husnah, R., Andolina, N. and Adianda, S. (2024) 'Empowerment of Adolescent Cadres Through the Improvement of Basic Health Check-Up Facilities at Youth Posyandu', *J. Abdimas*, 5(2), pp. 72-79.
- Indaman, P., Andoko and Trismiyana, E. (2025) 'Hubungan Pengetahuan Remaja Tentang Kesehatan Reproduksi Dengan Minat Keikutsertaan Posyandu Remaja Di Wilayah Kerja Puskesmas Kalirejo Kecamatan Negri Katon Kabupaten Pesawaran', *Manuju: Malahayati Nursing Journal*, 7(1), pp. 209-221.
- Jayanti, T. N. et al. (2024) 'Analisis Faktor Perilaku Pacaran Pada Remaja', *Jurnal Keperawatan 'Aisyiyah'*, 11(1), pp. 51-60. doi: 10.33867/ed7mgh58.
- Masnuna, M., Kusuma Wardani, N. I. and Kadiasti, R. (2020) 'Desain Aplikasi SALIM sebagai Media Pembelajaran untuk Menanggulangi Tindakan Kenakalan Remaja', *ANDHARUPA: Jurnal Desain Komunikasi Visual & Multimedia*, 6(1), pp. 100-114. doi: 10.33633/andharupa.v6i1.3327.
- Mawardika, T., Indriani, D. and Liyanovitasari, L. (2019) 'Peningkatan Pengetahuan Dan Sikap Remaja Tentang Kesehatan Reproduksi Melalui Pendidikan Kesehatan Berupa Aplikasi Layanan Keperawatan Kesehatan Reproduksi Remaja (Lawan Roma) Di Smp Wilayah Kerja Puskesmas Bawen Kabupaten Semarang', *Jurnal Keperawatan dan Kesehatan Masyarakat Cendekia Utama*, 8(2), p. 99. doi: 10.31596/jcu.v8i2.408.
- Mukminun, A. (2022) 'Pengaruh Perilaku Berpacaran Terhadap Perilaku Seksual Pranikah Pada Remaja Perempuan Indonesia Annur Mukminun', 13, pp. 36-46.
- Sheehan, K. et al. (2022) 'Long-term effects of a community-based positive youth development program for Black youth: health, education, and financial well-being in adulthood', *BMC Public Health*, 22(1), pp. 1-17. doi: 10.1186/s12889-022-13016-z.
- Simon, N. et al. (2023) 'Examining the impact of a health promotion peer education programme on adolescents' self-esteem, peer relationship culture and motivation', *Multidisciplinária Tudományok*, 13(3), pp. 81-88. doi: 10.35925/j.multi.2023.3.9.
- Wakhid, E. R. A. N., Solehah, I. and Fatah, M. Z. (2023) 'Faktor yang Berhubungan dengan Perilaku Pacaran Berisiko pada Remaja', *Jurnal Penelitian Kesehatan Suara Forikes*, 14(5), pp. 16-21.
- Yudanagara, B. B. H., Buwana, A. C. and Wiguna, P. V. (2022) 'Program Edukasi Kesehatan Reproduksi berbasis Positive Youth Development pada Posyandu Remaja Tosari, Pasuruan', *Prosiding Semnaskom-Unram*, 4(1), pp. 341-349.