

Fishbone Analysis of the Implementation of Adolescent Reproductive Health Programs at Nagrak Public Health Center

Willyana Syafriyanti, Mira Widiasmara, Nanda Berliana Tania Fidzikri

Public Health, Sekolah Tinggi Kesehatan Indonesia Wirautama, Indonesia

Willyanasyaf@gmail.com

Article Information

Submitted: 12 June 2025

Accepted: 21 June 2025

Publish: 30 June 2025

Keyword: Reproductive Health; Adolescent; Public Health Center;

Copyright holder: Willyana Syafriyanti, Mira Widiasmara, Nanda Berliana Tania Fidzikri

Year: 2025

This is an open access article under the [CC BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.



Abstract

Introduction: Adolescent pregnancy has become an increasing concern in the working area of Nagrak Public Health Center, Bandung Regency, over the past three years. In response, a reproductive health program targeting adolescents has been implemented; however, its effectiveness remains suboptimal. **Objective:** This study aims to analyze the root causes of the less-than-optimal implementation of adolescent reproductive health programs at the Nagrak Public Health Center and propose actionable solutions. **Method:** A qualitative research method with a case study design was employed, conducted between April and May 2025. Data were analyzed using a fishbone diagram to identify contributing factors. **Result and Discussion:** The findings reveal several challenges: under the "man" factor, adolescents lack sufficient knowledge, parental involvement is limited, and there is a shortage of trained healthcare workers. The "material" factor points to the absence of standard operating procedures (SOPs) for adolescent reproductive health services. Under the "method" factor, activities such as youth Posyandu and counseling sessions are not routinely conducted, and existing educational media are unengaging. Lastly, the "environment" factor highlights minimal support from schools and communities. **Conclusion:** To optimize the program, efforts must focus on enhancing adolescent access to information and services, strengthening parental and environmental roles, and improving the quality and availability of reproductive health resources at the public health center

Introduction

Sustainable Development Goals (SDGs) are a global development agreement that contains an action plan to end poverty, reduce inequality and protect the environment in the next 15 years, valid from 2016 to 2030. SDGs contain 17 Goals and 169 Targets that are expected to be achieved by 2030 (United Nation, 2016). There are 38 SDGs targets in the health sector, one of which is ensuring universal access to sexual and reproductive health services, including family planning, information & education, and integration of reproductive health into national strategies by 2030 (WHO, 2020).

WHO (*World Health Organization*) has also formed a strategy to ensure everyone has access to standard of Sexual And Reproductive Health And Rights (SRHR), through strategy improving antenatal, perinatal, postpartum and newborn care, providing family planning services, eliminating unsafe abortion, combatting sexually transmitted infections (STIs), promoting sexual health (WHO, 2024). In addition, the Health Reproductive Program (HRP) initiated by WHO aims to strengthen the provision of effective Sexual and Reproductive Health (SRH) Services as part of primary health care plans and policies and includes health universal. Community health workers have an important role in providing various preventive, promotive, and curative health services (WHO et al., 2024).

The Indonesian government itself has issued several policies to ensure access to reproductive health services in Indonesia, one of which is through Peraturan Menteri Kesehatan Nomor 21 Tahun 2021 Tentang Penyelenggaraan Pelayanan Kesehatan Masa Sebelum Hamil, Masa Hamil, Persalinan, dan Masa Sesudah Melahirkan, Pelayanan Kontrasepsi, dan Pelayanan Kesehatan Seksual (Regulation of the Indonesian Health Ministry) which aims to ensure good quality reproductive health services for the community, including reproductive health for adolescents.

Adolescence is a transition period between childhood and adulthood that often confronts individuals with confusing situations in behavior, so that it can cause conflict within adolescents that often causes a lot of strange, awkward behavior, and if not controlled will cause delinquency in adolescents, one of which is the risk of risky sexual behavior. Sexual behavior is a form of human behavior that is closely related to a person's reproductive health (Kementerian Kesehatan RI, 2022).

Reproductive health according to Undang-Undang Nomor 36 Tahun 2009 Tentang Kesehatan (Indonesian Health Law) is a state of complete physical, mental and social health, not merely the absence of disease or disability related to the reproductive system, functions and processes in men and women. Reproductive health services for adolescents aim to prepare adolescents to become healthy and productive adults, so that they are free from various health disorders that can hinder the ability to live a healthy reproductive life. (Kementerian Kesehatan RI, 2021).

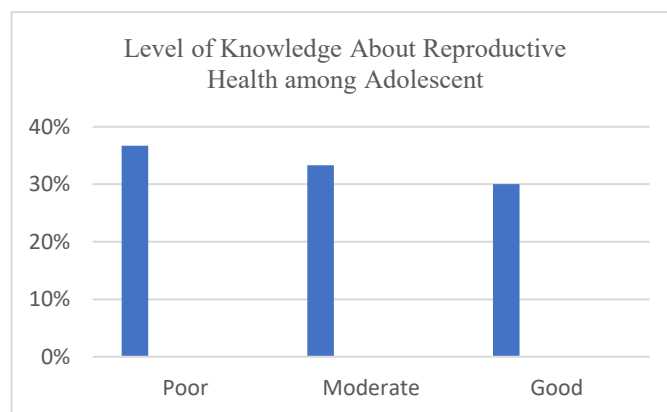
Adolescent reproductive health services also aim to prevent and protect adolescents from risky sexual behavior, one of which is to prevent pregnancy in adolescents. The WHO report states that there are around 21 million adolescent girls aged 15–19 years in low- and middle-income countries who experience pregnancy each year and 50% of them are unintended pregnancies. In 2021, it is estimated that around 12.1 million girls aged 15–19 years and 499,000 girls aged 10–14 years gave birth worldwide (WHO, 2025b).

Adolescent pregnancy carries a higher risk of maternal and infant death, a greater chance of experiencing mental health problems and will impact on educational and economic prospects, contributing to a cycle of poverty and inequality that can persist across generations. (WHO, 2025a). WHO reports state that 55% of unintended

pregnancies in adolescents aged 15-19 years end in unsafe abortion, are at higher risk of eclampsia, puerperal endometritis and systemic infections compared to women aged 20-24 years and babies from adolescent mothers face a higher risk of low birth weight, premature birth and severe neonatal conditions (WHO, 2024a).

Indonesia is one of the countries with a high burden of adolescent pregnancy. Reports show that adolescent childbirth in Indonesia reaches 26.6 per 1,000 girls aged 15-19 years. (WHO, 2025). Badan Pusat Statistik (Indonesian Statistics Agency) report states that in 2023 the proportion of women aged 20-24 years who are married or living together before the age of 18 in West Java Province will be 5.78%. (Badan Pusat Statistik RI, 2023). Nagrak Public Health Center is one of the Public Health Center in Bandung Regency, becoming one of the Public Health Center with an increasing trend of adolescent pregnancies in the last three years, in 2022 there were 65 pregnant adolescent under the age of 20, this number increased to 101 cases in 2023, until December 2024 there were 86 cases of pregnancy recorded. The increase in the number of pregnancies under the age of 20 requires serious attention (Nagrak Public Health Center, 2024).

Nagrak Public Health Center has made efforts to prevent pregnancy in adolescents, one of which is through the adolescent reproductive health program. Based on the results of a preliminary survey conducted by researchers, it was found that adolescent knowledge at the Nagrak Public Health Center about reproductive health is still low. The following is a description of the level of adolescent knowledge about reproductive health in the Nagrak Public Health Center Center Work Area.



Source: Primary Data 2025

Picture 1. Level of Knowledge about Reproductive Health among Adolescent

Based on the picture above, it shows that out of 30 respondents, 11 adolescent (37%) have a low level of knowledge, 10 (33%) adolescent have a sufficient level of knowledge and 9 (30%) adolescent have a good level of knowledge about reproductive health. Based on initial observations made by the researcher, it was also found that the reproductive health program for adolescent at the Nagrak Public Health Center has not been optimally implemented, this can be seen from the absence of counseling visits about reproductive health carried out by adolescents at the Nagrak Public Health Center. Based on the explanation above, the researcher wants to analyze the implementation of the Reproductive Health program at the Nagrak Public Health Center using the fishbone method.

Method

The method in this study was qualitative with case study design. This study was conducted at the Nagrak Public Health Center Kabupaten Bandung on April-May 2025. The informants were selected using the purposive sampling method based on the informant's involvement in the implementation of reproductive health services for adolescents, namely the Head of the Nagrak Public Health Center, Coordinating Midwives, Village Midwives adolescent parents and adolescents. Data collection was carried out through in-depth interviews, observation and document review. In-depth interviews were conducted with research informants to dig deeper to find the root of the problem. Observations are carried out on resources that can be seen physically, while document reviews are carried out by reviewing regulatory documents, journals, articles and other guidelines that are relevant to the research topic.

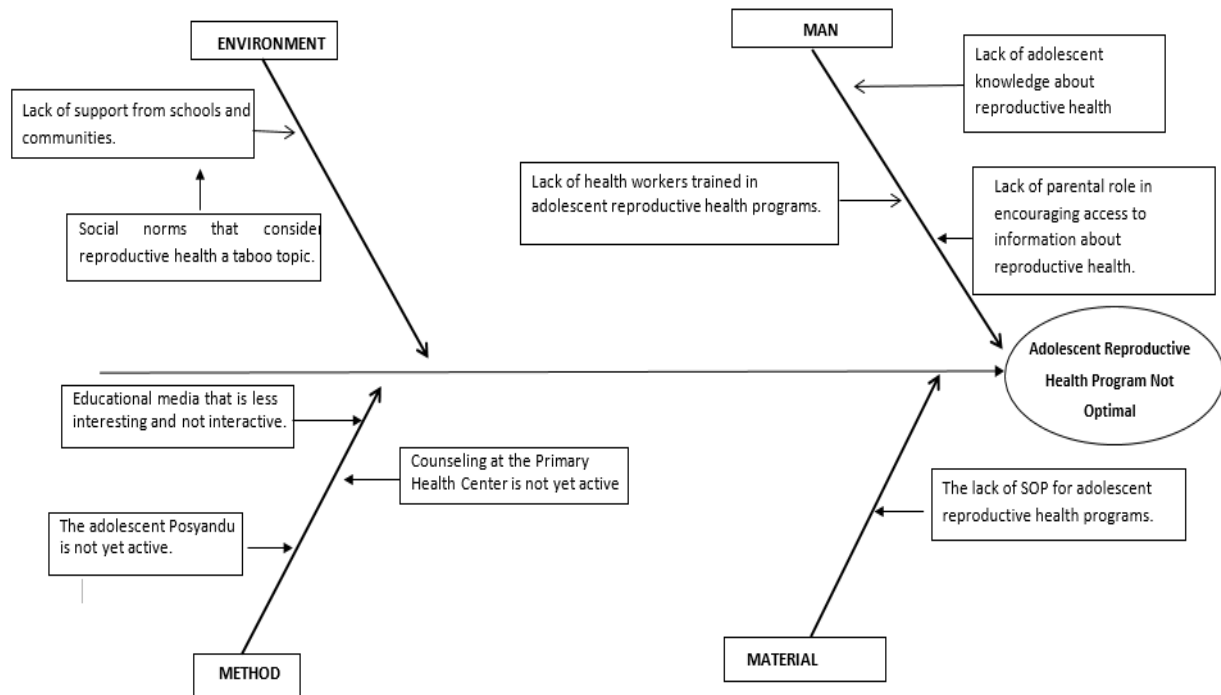
This study using fishbone diagram analysis, which is one of the effective techniques in analyzing existing data to identify problems by analyzing the causes of the problems. Before identifying the problems, the researcher conducted a preliminary survey on the reproductive health program for adolescents at the Nagrak Public Health Center, then the researcher conducted interviews, observations and document reviews to analyze the causes of the problems that occurred, by focusing on problems based on predetermined categories (man, material, method and environment). Then the researcher identified solutions to the problems found and these solutions became input for the Public Health Center in optimizing the implementation of the adolescent reproductive health program at the Nagrak Public Health Center. This study aims to find the causes of the problem of less than optimal implementation of the adolescent reproductive health program at the Nagrak Public Health Center and provide solutions to the problems found.

Research and Discussions

Willyana Syafriyanti, Mira Widiasmara, Nanda Berliana Tania Fidzikri/KESANS
Fishbone Analysis of the Implementation of Adolescent Reproductive Health Programs at Nagrak Public Health Center

1. Result

The results of the study using the fishbone method found that there were several factors causing the suboptimal implementation of the adolescent reproductive health program at the Nagrak Public Health Center. The following are the results of the fishbone analysis of the implementation of the adolescent reproductive health program at the Nagrak Public Health Center:



Picture 2. Fishbone Analysis

Based on the fishbone analysis above, the causal factors found are:

1. Man, namely the lack of knowledge of adolescents about reproductive health. In addition, families or parents play a role in encouraging adolescents' access to information about reproductive health, based on the results of interviews with parents, it was found that parents feel taboo to discuss reproductive health with their children. Health workers are also a factor causing the less than optimal implementation of the adolescent reproductive health program at the Nagrak Public Health Center, based on the results of the interview, it was found that there had been no training for health workers on adolescent reproductive health services, so that health workers trained in adolescent reproductive health programs are still lacking.
2. Material, based on the results of interviews and observations conducted by the researcher, it was found that the Nagrak Public Health Center does not yet have an SOP (Standard Operating Procedure) document for providing adolescent reproductive health services.
3. Method, the results of the study showed that adolescent posyandu activities in the Nagrak Public Health Center work area have not been actively carried out, this is

because Posyandu Remaja activities have not been socialized properly. In addition, based on the results of observations, it was found that the educational media used by health workers were less interesting and not interactive, the Public Health Center only provided material using the lecture method to students at school. On the other hand, counseling activities on reproductive health have not been actively carried out by the Public Health Center, even though the counseling room is already available.

4. Environment, the results of the study showed a lack of support from schools, not all schools have active reproductive health programs. Schools only rely on education from the Public Health Center. In addition, the community environment is also less supportive, this is due to social norms in society that consider the topic of reproductive health as taboo and consider the topic of reproductive health as something that is not appropriate to discuss.

2. Discussion

Lack of adolescent knowledge about adolescent reproductive health can affect the utilization of reproductive health programs. This is in line with research Kusumastuti & Lismidiati (2018) which states that there is a relationship between knowledge about reproductive health and the use of Pusat Informasi dan Konseling Kesehatan Reproduksi Remaja (PIK-KRR). Based on a preliminary survey, it was found that adolescents' knowledge about adolescent reproductive health is still low. Mulyati dan Lestari (2021) study which shows the same thing, namely 69.2% of teenagers have a low level of knowledge about reproductive health. The low level of knowledge of adolescent about reproductive health will have an impact on the ignorance of adolescent regarding what they should do if they experience reproductive health problems. Thus, with good knowledge, it is hoped that adolescent will have responsible attitudes and behavior regarding their reproductive health (Redayanti *et al.*, 2023). Thus, increasing adolescent knowledge about reproductive health is expected to encourage adolescents to utilize reproductive health service programs, especially health counseling about reproductive health at Public Health Center.

The lack of parental role in encouraging access to information about reproductive health is also a challenge in the implementation of adolescent reproductive health programs at Nagrak Public Health Center. Based on the results of the interview, it was found that parents felt taboo to talk about reproductive health with their children. In line with the research Wulandari *et al.*, (2022) which states that parents feel taboo to talk about dating, premarital sex, abortion or sexually transmitted diseases including cancer, whereas the role of parents in accessing reproductive health is very important to prevent risky behavior in adolescents and also support access to adolescent reproductive health programs. Education about adolescent reproductive health also needs to be given to parents. So, not only adolescents have knowledge, but parents also have the provisions to carry out their role as providers of information about reproductive health to their children.

The role of health workers in providing reproductive health education is also very important in supporting reproductive health programs. The results of this study indicate that health workers trained in adolescent reproductive health programs are still lacking and health workers have never been trained. Lack of resources, such as trained educators or educational materials that are appropriate to the age and understanding of adolescents, is often an obstacle in the implementation of adolescent reproductive health programs. (Mahmudah, 2022). Therefore, ensuring that health workers have good skills in providing

education, especially to adolescents, is very necessary. Health workers who serve adolescents must be friendly, easy to talk to, and have a good understanding of the needs and language of adolescents.

The results of the study on material factors found that the Public Health Center did not yet have a Standard Operating Procedure (SOP) related to reproductive health programs for adolescents at the Public Health Center. SOP is an important component, because it aims to provide clear, consistent, and safe guidelines for health workers. SOP helps ensure that all procedures carried out are in accordance with standards, improve the quality of service, reduce the risk of errors, and guarantee the rights of adolescents to receive appropriate services.

The results of the study on the method factor found that Posyandu Remaja activities in the Nagrak Public Health Center work area have not been actively carried out, even though these Posyandu Remaja activities can be a means of increasing access to reproductive health for adolescents. Posyandu Remaja itself has been proven to play a role in increasing adolescent knowledge about reproductive health (Mulyati, 2021). Research conducted at the Public Health Center Trangkil in Pati City, Central Java, showed that there is a relationship between adolescent integrated health posts and adolescent reproductive health behavior. Adolescents who attend integrated health posts are 25 times better in terms of reproductive health behavior than adolescents who do not attend integrated health posts. (Rustiani & Sutarno, 2024). Thus, the existence of adolescent integrated health posts is a solution that can be implemented, with the existence of adolescent integrated health posts it can improve the welfare and reproductive health of adolescents (Yuliani *et al.*, 2021). Posyandu Remaja become a means that not only provides health services but also encourages active community participation in decision-making related to adolescent reproductive health. In this context, the creation of a sense of ownership and shared responsibility for the problem of adolescent pregnancy, so it is necessary to develop a model of community empowerment, especially adolescents, in utilizing Posyandu Remaja as an effort to reduce the high rate of adolescent pregnancy in the Nagrak Public Health Center Health work area.

The method of providing reproductive health education to adolescents is also an important thing to note. The results of this study indicate that the media used by health workers are less interesting and not interactive, the Public Health Center only provides material with a lecture method to students at school. Study Gultom *et al.*, (2022) stated that the implementation of counseling with interactive media in the form of videos and jingles has been proven to help accelerate the interest and enthusiasm and understanding of adolescents about reproductive health. Other studies state that the use of interactive media by peer tutors (peer educators) has an effect on increasing knowledge of adolescent reproductive health education (Kristianti *et al.*, 2022). Thus, it is necessary for schools and health workers to provide education with varied and more interesting media, in order to increase students' interest in participating in the education provided and increase students' access to information about adolescent reproductive health.

Reproductive health counseling services also play an important role in the success of adolescent reproductive health programs at the Public Health Center. The results of this study indicate that reproductive health counseling services at the Nagrak Public Health Center have not been actively implemented, even though in Peraturan Menteri Kesehatan Nomor 21 Tahun 2021 Tentang Penyelenggaraan Pelayanan Kesehatan Masa Sebelum Hamil, Masa Hamil, Persalinan, dan Masa Sesudah Melahirkan, Pelayanan Kontrasepsi, dan Pelayanan Kesehatan Seksual (Regulation of the Indonesian Health

Ministry) stated that one of the activities in pre-pregnancy health services (adolescents) is to organize reproductive health counseling services. Counseling services themselves aim to detect reproductive health and development disorders and risky behavior in adolescents. Thus, it is necessary for the Public Health Center to organize adolescent counseling services to help adolescents understand their reproductive health problems and ensure that adolescents have good behavior and can make the right decisions related to their reproductive health.

The environment also has a great influence in supporting adolescent reproductive health programs. The results of this study indicate that the school environment is less supportive, not all schools have active reproductive health programs, so schools only rely on reproductive health education from the Public Health Center. Study Wulandari *et al.*, (2022) stated that adolescents have very minimal access to comprehensive reproductive health information both at school, home and in health services. This situation encourages adolescents to access reproductive health information from the mass media or other sources whose truth is not yet clear. Thus, the active role of schools through the Usaha Kesehatan Sekolah (UKS) can be carried out to increase students' access to information on reproductive health. The community environment also plays a role in the implementation of adolescent reproductive health programs.

The results of this study indicate that the community considers the topic of reproductive health as taboo and considers the topic of reproductive health as something that is not appropriate to discuss. Study Selviana *et al.*, (2022) also mentioned that reproductive health is a taboo issue to talk about in the teenage environment, so that it is the cause of the absence of activities to provide information about reproductive health to teenagers. Thus, education is also needed to change public perception regarding the importance of adolescent reproductive health. Based on the results of the analysis of the causes of the problem, solutions were formulated to overcome the problems found, namely:

1. Improving Access to Information and Education for Adolescents
 - a. Through strengthening reproductive health education in schools by encouraging interactive learning approaches, group discussions and providing counseling services for students.
 - b. Holding regular seminars in schools by presenting skilled health workers to provide education on reproductive health.
 - c. Holding discussions in the form of peer-to-peer education, adolescents are given training as reproductive health ambassadors.
 - d. Building adolescent health information centers in schools in collaboration with medical personnel.
2. Strengthening the Role of Parents and the Environment
 - a. Training for parents on effective communication in reproductive health by teaching comfortable and open speaking techniques with children about reproductive health issues.
 - b. Encouraging parents to be role models in providing healthy education to their children.
 - c. Involving youth organizations and communities in reproductive health education.
 - d. Developing mentoring programs between youth and health communities to share information about reproductive health.

- e. Involving religious organizations and youth communities in reproductive health campaigns that are in accordance with cultural values.
- 3. Improving Access to Reproductive Health Services at Public Health Center
 - a. Providing training to health workers so that they can provide good education about reproductive health to adolescents.
 - b. Providing reproductive health counseling services at Public Health Center that are youth-friendly.
 - c. Preparing SOPs on reproductive health services at Public Health Center.
 - d. Development of digital services by Public Health Center for reproductive health education using social media platforms such as Instagram and TikTok by creating more interesting content.

Conclusion

The implementation of reproductive health programs at the Nagrak Public Health Center is still not optimal, based on the results of the fishbone analysis, several problems were still found. Man factor, namely the lack of knowledge of adolescents about reproductive health, the lack of role of families or parents in accessing information for adolescents about reproductive health and the lack of health workers trained in adolescent reproductive health programs. Material factor, the unavailability of SOP documents for adolescent reproductive health services. Method factor, Posyandu Remaja and counseling activities on reproductive health have not been actively carried out and the educational media used by health workers are less interesting and not interactive. Environmental factor, namely the lack of support from schools and the environment.

Efforts need to be made to optimize the adolescent reproductive health program at the Nagrak Public Health Center, namely by increasing access to information and education for adolescents, strengthening the role of parents and the environment, and by increasing access to reproductive health services at the Public Health Center.

Reference

- Badan Pusat Statistik RI. (2023). *Proporsi Perempuan Usia 20-24 Tahun Yang Berstatus Kawin Atau Berstatus Hidup Bersama Sebelum Umur 18 Tahun*.
- Gultom, L., Saragih, H. S., & Bangun, S. (2022). [Penyuluhan Tentang Kespro Dan KTD Dengan Media Interaktif Pada Remaja Putri Di Sekolah Talitakum](#). *Dikmas: Jurnal Pendidikan Masyarakat Dan Pengabdian*, 2(1), 65. <https://doi.org/10.37905/dikmas.2.1.65-70.2022>
- Kementerian Kesehatan Republik Indonesia. (2021). *Peraturan Menteri Kesehatan Republik Indonesia Nomor 21 Tahun 2021 Tentang Pelayanan Masa Sebelum Hamil, Masa Hamil, Persalinan dan Masa Sesudah Melahirkan, Pelayanan Kontrasepsi serta Pelayanan Kesehatan Seksual*.
- Kementerian Kesehatan Republik Indonesia. (2022). *Kesehatan Reproduksi Remaja: Permasalahan dan Upaya Pencegahan*. https://keslan.kemkes.go.id/view_artikel/29/kesehatan-reproduksi-remaja-permasalahan-dan-upaya-pencegahan
- Kementrian Kesehatan Republik Indonesia. (2009). *Undang-Undang Nomor 36 Tahun 2009 Tentang Kesehatan*.
- Kristianti, Y. D., Metere, S., & Widjayanti, T. B. (2022). [Pengaruh Media Interaktif oleh Tutor Sebaya terhadap Pengetahuan Kesehatan Reproduksi Remaja di SMA](#). *Jurnal Inovasi Pendidikan MH Thamrin*, 6(2), 25–36.
- Kusumastuti, D. P., & Lismidiati, W. (2018). [Hubungan Pengetahuan dan Sikap Tentang Kesehatan Reproduksi dengan Pemanfaatan PIK-KRR](#). *Jurnal Keperawatan Klinis Dan Komunitas*, 2(3), 135–144.
- Mahmudah, N. (2022). [Edukasi Kesehatan Reproduksi Pada Remaja](#). *Jurnal Abdimas: Pengabdian Dan Pengembangan Masyarakat*, 4(2), 24–28. <https://doi.org/10.30630/jppm.v4i2.909>
- Mulyati, I. (2021). [Pengaruh Posyandu Remaja Terhadap Status Kesehatan Reproduksi Di Salah Satu Wilayah Puskesmas Di Kabupaten Bandung Tahun 2021](#). *Jurnal Kesehatan Indra Husada*, 9(2), 134–141. <https://doi.org/10.36973/jkih.v9i2.320>
- Puskesmas Nagrak. (2024). *Data Kehamilan Remaja di Puskesmas Nagrak Nagrak*.
- Redayanti Redayanti, Sri Muharni, & Rachmawaty M.Noer. (2023). [Faktor-Faktor Yang Mempengaruhi Kesehatan Reproduksi Pada Remaja SMP Di Wilayah Kerja Puskesmas Tanjung Unggat Kota Tanjungpinang Kepulauan Riau](#). *Journal Clinical Pharmacy and Pharmaceutical Science*, 2(2), 112–122. <https://doi.org/10.61740/jcp2s.v2i2.47>
- Rustiani, D., & Sutarno, M. (2024). [Peran Posyandu Remaja Terhadap Perilaku Kesehatan Reproduksi Remaja di Posyandu Wilayah Puskesmas Trangkil Kota Pati Jawa Tengah](#). *Jurnal Keperawatan Muhammadiyah*, 9(2), 152–156.
- Selviana, S., Suwarni, L., & Mawarni, H. G. B. (2022). [Peningkatan Pengetahuan Tentang Kesehatan Reproduksi Melalui Penyuluhan Kesehatan Pada Kelompok Remaja Masjid](#). *SELAPARANG: Jurnal Pengabdian Masyarakat Berkemajuan*, 6(4), 1687. <https://doi.org/10.31764/jpmb.v6i4.10670>
- United Nation. (2016). *Transforming Our World: The 2030 Agenda For Sustainable Development*. <https://doi.org/10.1201/b20466-7>

Willyana Syafriyanti, Mira Widiasmara, Nanda Berliana Tania Fidzikri/KESANS
Fishbone Analysis of the Implementation of Adolescent Reproductive Health Programs at Nagrak Public Health Center

- WHO, UNICEF, UNFPA, Bank, W., & Nations, U. (2024). UNDP-UNFPA-UNICEF-WHO- World Bank Special Programme of Research, Development and Research Training in Human Reproduction (HRP): Annual Report 2024. In *Fresenius.Com* (Issue September).
- World Health Organisation (WHO). (2025). *New year, new opportunities: How Indonesia aims to rapidly improve reproductive, maternal, newborn, child and adolescent health*. <https://www.who.int/indonesia/news/detail/16-01-2025-new-year--new-opportunities--how-indonesia-aims-to-rapidly-improve-reproductive--maternal--newborn--child-and-adolescent-health>
- World Health Organization. (2020). *Maternal mortality Evidence brief. 1*, 1–4.
- World Health Organization (WHO). (2024a). *Adolescent Pregnancy*. <https://www.who.int/news-room/fact-sheets/detail/adolescent-pregnancy>
- World Health Organization (WHO). (2024b). *Sexual and Reproductive Health For All: 20 Years Of The Global Strategy*. <https://www.who.int/news/item/16-05-2024-sexual-and-reproductive-health-for-all-20-years-of-the-global-strategy>
- World Health Organization (WHO). (2025a). *Policy and Education: Ways To End Child Marriage and Prevent Adolescent Pregnancy*. <https://www.who.int/news-room/feature-stories/detail/policy-and-education--ways-to-end-child-marriage-and-prevent-adolescent-pregnancy>
- World Health Organization (WHO). (2025b). *WHO Guideline on Preventing Early Pregnancy and Poor Reproductive Outcomes Among Adolescents in Developing Countries: What the Evidence Says*. https://www.who.int/immunization/hpv/target/preventing_early_pregnancy_and_poor_reproductive_outcomes_who_2006.pdf
- Wulandari, L. P., Kebidanan, J., Kemenkes, P., & Timur, J. (2022). *Peran orang tua dalam pemberian informasi kesehatan reproduksi remaja di kabupaten malang*. *Jurnal Poltekes Jayapura*, 14(2), 128–134.
- Yuliani, M., Yufina, Y., & Maesaroh, M. (2021). *Gambaran Pembentukan Kader Dan Pelaksanaan Posyandu Remaja Dalam Upaya Peningkatan Kesehatan Reproduksi Remaja*. *SELAPARANG Jurnal Pengabdian Masyarakat Berkemajuan*, 4(2), 266. <https://doi.org/10.31764/jpmb.v4i2.4157>