



Optimizing Reproductive Health Capacity: A P-Process and CBR Approach in Karang Taruna Tambak Sumur Sidoarjo

Eko Teguh Pribadi, Sri Hidayati L

UIN Sunan Ampel Surabaya

ekoteguh1980@gmail.com, sri_hidayati@uinsby.ac.id

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Abstract: Adolescent Reproductive Health (ARH) remains a behaviorally-based health issue prioritized by government interventions, with the principal determinants being a lack of information and education on reproductive health, shifts in adolescent behavior, inadequate health services, and unsupportive regulations. The community service conducted in Tambaksumur Village, Sidoarjo District in 2023, was structured around the integration of the P-Process model and Community Based Research (CBR) aimed at enhancing adolescents' knowledge and attitudes related to ARH, and at formulating approaches for internalizing the functions of health promotion and education within the Karang Taruna organization. The service outcomes indicated that through peer-education activities, there were significant differences in the knowledge and attitudes of the targeted adolescent group before and after the intervention, with 2-tailed significance values of 0.010 (knowledge) and 0.020 (attitude). The sustainability of Karang Taruna's ARH-focused programs can be maintained through the integration of the Adolescent Posyandu program with Karang Taruna, coupled with continuous support and guidance from health academics.

Keywords: *p-process, CBR, peer-education, Adolescent Reproductive Health (ARH)*

Introduction

Addressing behavior-based health problems by promoting a preventative and promotive paradigm cannot solely rely on the roles of the government or health service providers; it also demands direct community involvement, particularly in the process of raising awareness for healthy living habits. A pressing health issue currently prioritized by the government is Adolescent Reproductive Health (ARH). Reproductive health is comprehensively understood as a state of complete physical, mental, and social well-

being related to the reproductive system, functions, and processes.¹

The determinants of adolescent reproductive health issues include a lack of information and education about reproductive health, changes in adolescent sexual behaviors, poor health services, and unsupportive regulations. The National Mid-Term Development Plan (RPJMN) of East Java for 2016 states that one of the problems among adolescents is the low level of knowledge about ARH, with the Adolescent Knowledge Index on ARH being around 53%—a figure that contrasts with the Adolescent Knowledge Index on HIV/AIDS and Drugs at 82.1% and 93.4%, respectively.² Furthermore, the 2017 Demographic Health Survey (SDKI) reports that 59% of unmarried female adolescents aged 15-19 have engaged in sexual relations. Studies indicate that premarital sexual relations among adolescents, typically with multiple partners, pose a four to five times higher risk for Sexually Transmitted Infections (STIs) as well as HIV and Acquired Immune Deficiency Syndrome (AIDS).³

Adolescence is a transitional period from childhood to adulthood where sexual functions mature, making it imperative for adolescents to receive accurate information and adequate knowledge regarding reproductive health. They must prepare themselves physically, psychologically, and socially to lead healthy reproductive lives⁴. Due to the taboo nature of discussing reproductive health issues with parents or educators, there is a tendency for adolescents to seek information independently, which often leads to negative influences. One way to address adolescent health education based on their characteristics of seeking reproductive health information through peer environments is through health information provided by youth organizations, in this case, Karang Taruna.

According to the Indonesian Ministry of Social Affairs Regulation No. 25 of 2019, Karang Taruna is an organization formed by the community as a potential and source of social welfare based in villages or urban communities. Its goal is to foster social awareness and responsibility among the youth in anticipating, preventing, and countering various social issues while developing the capabilities of young generations in the provision of social welfare through social rehabilitation, social security, social empowerment, and social protection⁵. This function of fostering social awareness and responsibility certainly includes responsibilities towards reproductive health issues.

¹ UNICEF, *Profil Remaja*, <https://www.unicef.org/indonesia/id/laporan/profil-remaja> (accessed June 15, 2022).

² BAPPENAS, *Rencana Pemerintah Jangka Menengah Nasional 2015-2019*. <https://www.bappenas.go.id/id/data-dan-informasi-utama/dokumen-perencanaan-dan-pelaksanaan/dokumen-rencana-pembangunan-nasional/rpjp-2005-2025/rpjm-2015-2019> (accessed June 20, 2022).

³ BPS - BKKBN, *Survei Demografi dan Kesehatan Indonesia 2017*, Jakarta: Badan Pusat Statistik, 2018.

⁴ Sholicha M, Gambaran Karakteristik dan Tingkat Pengetahuan tentang Menarche pada Siswi kelas VII SMP Negeri 1 Depok, *Journal of Chemical Information and Modeling*, vol.53, no.9 (2020): 1689-1699, <https://eprints.poltekkesjogja.ac.id/2344> (accessed June 20, 2023).

⁵ Permensos RI Nomor 25 Tahun 2019, *Tentang Karang Taruna*, Jakarta: Menteri Sosial RI, 2019.

Meanwhile, the function of developing the capabilities of young generations undoubtedly encompasses empowerment related to improving adolescent health knowledge for optimal quality of life. Due to the flexible, adaptable, and community welfare-oriented nature of Karang Taruna, it becomes the prime choice for spearheading community health promotion and education programs, in this case, ARH.

The trend of child marriage in Indonesia reached 14.67% in 2008, with only a 3.5 point decrease to 11.21% by 2018. About 1 in 9 Indonesian women aged 20-24 married before the age of 18, indicating that over one million women aged 20-24 married underage, placing Indonesia among the top ten countries with the highest incidence of early marriage globally.⁶

In East Java, the rate of child marriage is quite high; in 2020, about 4.97% out of 197,068 marriages occurred underage. East Java has the highest rate of child marriage in the province, at 10.44%, above the national average. Additionally, the number of child marriage dispensation applications in this province is the highest in Indonesia, with 15,337 cases or 29.4% of the national total.⁷ In Sidoarjo Regency, 8.72% of women married before the age of 17 in 2013, decreasing to 8.23% in 2014, dropping by 2.55% in 2015, and then rising again to 6.75% in 2016.⁸ Sementara itu pada bulan Januari tahun 2022 saja, terdapat peningkatan pernikahan usia dini pada remaja. Moreover, in January 2022 alone, there was an increase in early marriage among adolescents, with at least 60 teenagers applying for marriage dispensation, marking a 100% increase compared to the previous January.⁹

Tambaksumur, as a community service area, is one of the 13 villages in Waru Subdistrict, Sidoarjo Regency - East Java. Administratively, this village has 2 hamlets inhabited by 3,150 families spread across 8 community groups and 35 neighborhood associations¹⁰. This village was selected as the community service area because initial studies indicated that one of the issues in Tambaksumur is juvenile delinquency leading to reproductive health problems. Additionally, this community service program also serves as a social response from the academic community of the Faculty of Psychology and Health at Sunan Ampel State Islamic University in Surabaya to the needs, challenges, and issues faced by the surrounding community near the UINSA Gunung Anyar campus,

⁶ BPS - UNICEF, *Pencegahan Perkawinan Anak: Percepatan yang Tidak Bisa Ditunda (Laporan 2018)*, Jakarta: Badan Pusat Statistik, 2020.

⁷ Kemenko PMK, *Mendesak! Jawa Timur Darurat Perkawinan*, <https://www.kemenkopmk.go.id/mendesak-jawa-timur-darurat-perkawinan-anak> (accessed June 15, 2023).

⁸ Diskominfo, *Indikator Kesejahteraan Rakyat Kabupaten Sidoarjo Tahun 2017*, Sidoarjo: Dinas Komunikasi dan Informatika, 2017.

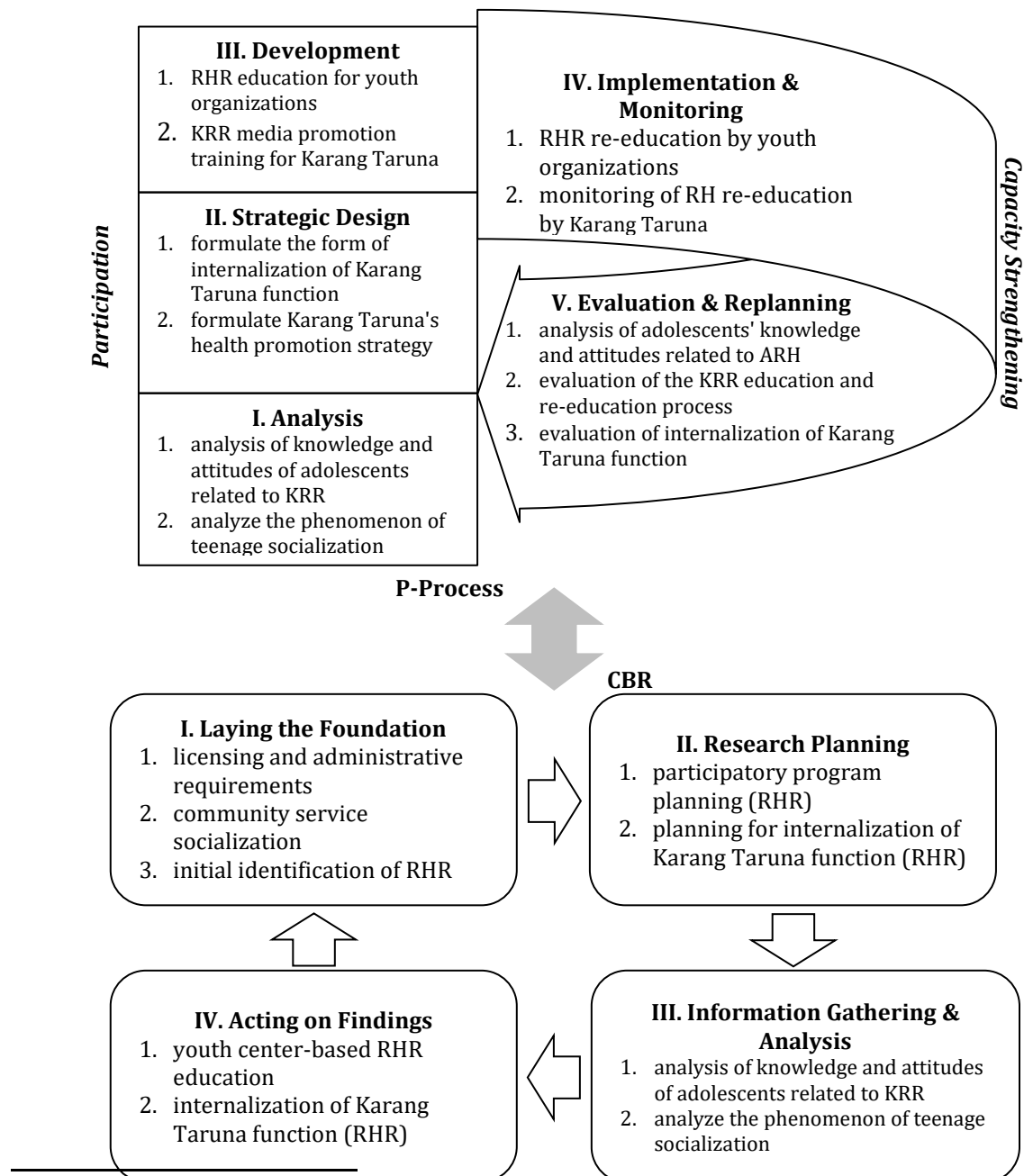
⁹ JawaPos.com, *Awal Tahun, Pernikahan Dini di Sidoarjo Naik 100 Persen*, <https://www.jawapos.com/sura-baya/15/01/2022/awal-tahun-pernikahan-dini-di-sidoarjo-naik-100-persen> (accessed June 27, 2022).

¹⁰ BPS, *Kecamatan Waru dalam Angka 2021*, Sidoarjo: Badan Pusat Statistik Kabupaten Sidoarjo, 2021.

as well as being part of a continuous mentoring program titled "FPK Menyapa".

Method

Method The community service program in Tambaksumur Village, Sidoarjo Regency, which started at the beginning of 2023, is structured based on the integration of the P-Process¹¹ model and Community Based Research (CBR)¹²



¹¹ Health Communication Partnership, *The New P-Process Steps in Strategic Communication*, Baltimore: Johns Hopkins Bloomberg School of Public Health Center for Communication Programs, 2003.

¹² Janzen R & Ochocka J, Breathing Life into Theory: Illustrations of Community-Based Research Hallmarks, Functions, and Phases, *Gateways International Journal of Community Research and Engagement*, vol.7 (2014): 18-33, <https://www.researchgate.net/publication/285579277> (accessed June 15, 2023).

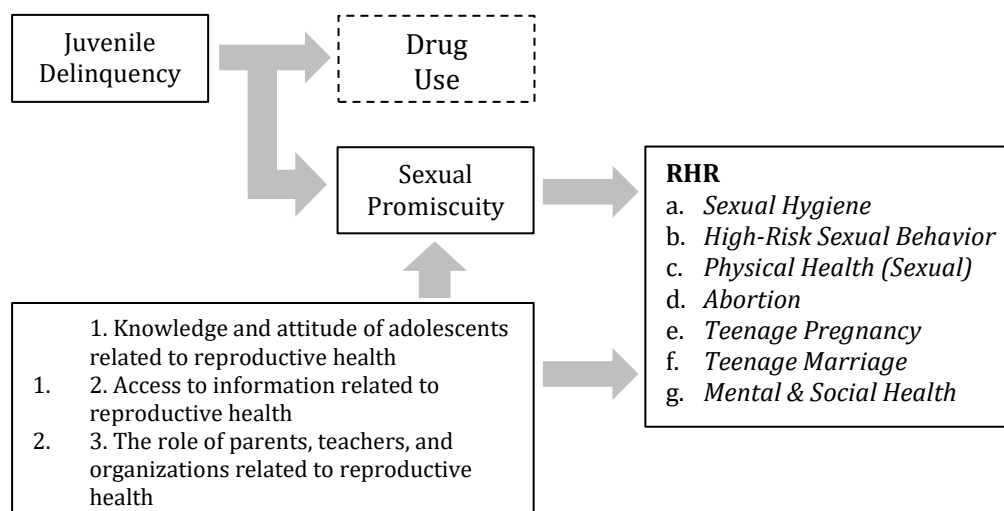
Figure 1. Community Service Model based on P-Process & CBR

The P-Process model involves 5 stages: analysis, strategic design, development, implementation & monitoring, and evaluation & replanning, serving as a strategic planning tool based on participation and community capacity building. In its implementation, it works dynamically rather than statically due to continuous improvement¹³. Besides using the P-Process as a theoretical reference, the strategy also integrally adapts the Community Based Research (CBR) approach, which is oriented towards community needs and demands active involvement from various community elements to address challenges within the community itself¹⁴. The CBR approach with 4 stages—laying the foundation, research planning, information gathering & analysis, and acting on findings—is well integrated and works complementarily with the stages in the P-Process.

Result

Laying the Foundation (CBR)

The initial assessment as the first step of CBR in Tambaksumur Village, involving community leaders and village officials, showed that the highest problem in this village is the prevalence of free social interaction among adolescents leading to drug use and unhealthy sexual behaviors, implicating ARH issues. Identification of ARH using the FGD instrument revealed that the root of reproductive health problems among adolescents in Tambaksumur stems from juvenile delinquency.



¹³ Health Communication Capacity Collaborative, *The P Process: Five Steps to Strategic Communication*, Baltimore: Johns Hopkins Bloomberg School of Public Health Center for Communication Programs, 2013.

¹⁴ Susilawaty A, Tasruddin. R, Ahmad D, dan Salenda K, *Panduan Riset Berbasis Komunitas (Community Based Research)*, Makassar: Penerbit Nur Khairunnisa, 2016.

Figure 2. Assessment of ARH Problems in Tambaksumur Village

Analysis (P-Process)

Analysis (P-Process) An initial questionnaire revealed that the majority of Tambaksumur Village adolescents have a high school education or equivalent, with some attending college. Adolescents typically spend their time at school, and some have started working or helping with their parents' jobs. A total of 72 adolescents (43 males & 29 females; 34 smokers & 38 non-smokers; 2 alcohol consumers & 70 non-alcohol consumers) were assessed for their knowledge and attitudes related to reproductive health.

Table 1. Adolescent Knowledge and Attitudes Related to ARH

Category		RHR Knowledge		RHR Attitude	
		Good	Bad	Positive	Negative
Gender	Male	24	19	26	17
	Female	22	7	26	3
Smoker	Yes	19	15	22	12
	No	27	11	28	10
Alcohol	Yes	0	2	0	2
	No	46	24	52	18

The majority of adolescents have a fair knowledge of ARH. Similarly, attitudes towards ARH behavior also show the same trend, with most holding a positive attitude. Field observations of adolescent interactions in Tambaksumur Village revealed that teenagers typically spend their mornings to afternoons occupied with their respective activities, with little time to gather with peers from their village. However, the evening until night is the prime time for them to gather and socialize. Observations during two days (23:00-01:00 local time) indicated that some village adolescents, including a few girls, were still seen congregating. Although there is no evidence yet that this habit of gathering late into the night is a determinant in cases of juvenile delinquency leading to ARH, this behavior is a risk factor that triggers reproductive health problems.

Research Planning (CBR) & Strategic Design (P-Process)

The program planning with Tambaksumur Village community involvement concluded that ARH issue interventions require active and creative participation from the target group, namely adolescents, through the strategic role of Karang Taruna. The actualization of Karang Taruna's role is the internalization of education and health promotion through education and re-education programs as an inherent function of Karang Taruna in Tambaksumur Village. The education and re-education ARH programs are based on the principles of "from, by, and for" adolescents, oriented not only towards Karang Taruna as the target (education) but also continues to other adolescent groups

actively by Karang Taruna (re-education).

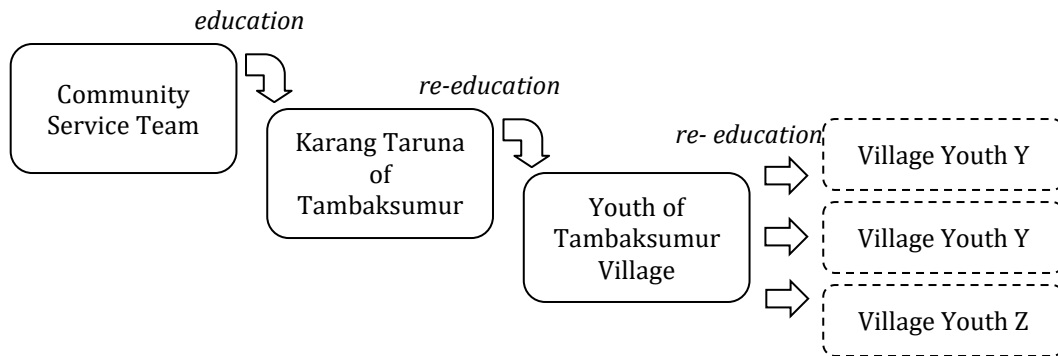


Figure 3. Education and Re-Education of ARH as a Function of Karang Taruna

Information Gathering and Analysis (CBR) & Development (P-Process)

This phase commenced with an assessment of the knowledge and attitudes of the adolescent members of Karang Taruna in Tambaksumur Village regarding Adolescent Reproductive Health (ARH), followed by training aimed at enhancing their knowledge and developing skills among selected Karang Taruna members to independently conduct adolescent reproductive health promotion activities. Preliminary data for training participants were collected from 20 young men and 20 young women aged 12-22 years (post-screening) who are members of Karang Taruna in Tambak Sumur Village.

Table 2. Data of Training Participants for ARH Health Education Category ARH

Category	ARH Information Source		Smoker	Alcohol
	Media	Person		
Male	20	20	16	0
Female	20	20	0	0
Total	40	40	16	0

ARH training was provided by expert speakers to the adolescent members of Karang Taruna in Tambaksumur Village, measuring the change in adolescent knowledge and attitudes using pretest-posttest instruments. A Paired T-Test analysis (error rate 5%) on 40 Karang Taruna adolescents revealed significant differences between the knowledge scores before and after the training, with a significance value (2-tailed) of 0.001 ($p < 0.05$). There was also a significant difference between attitude scores before and after the training, with a significance value (2-tailed) of 0.001 ($p < 0.05$). Subsequently, 20 selected Karang Taruna adolescents were divided into four groups, each accompanied by the community service team, to actively conduct training in both the selection of ARH material and techniques and design of health promotion media. The training results showed that the selected Karang Taruna adolescent groups were able to enhance their knowledge and develop skills in designing effective health promotion media and independently conduct educational activities related to ARH issues before an

audience as part of the skills in public health promotion activities.

Acting on Findings (CBR) & Implementation and Monitoring (P-Process)

The follow-up to the educational and training activities for Karang Taruna adolescents (ARH Education) was peer-education (ARH Re-Education). This peer education-based ARH education and re-education program (by, for, and from adolescents) became part of the internalization of the function of Karang Taruna as a youth organization concerned with adolescent reproductive health in Tambaksumur Village. The results of the peer-education activities were quite satisfactory, with initial data on adolescents (peers) consisting of 27 males and 21 females as the target adolescent group in the peer-education activities shown in the following table.

Table 3. Data of Peer-Education Participants for ARH

Category	ARH Information Source		Smoker	Alcohol
	Media	Person		
Male	27	27	20	0
Female	21	21	0	0
Total	48	48	20	0

The measurement of the results of peer-education activities was carried out using pretest-posttest instruments on knowledge and attitude variables before and after the activities were conducted. Peer-education activities as a form of re-education involved 20 selected Karang Taruna members (4 teams) as educators and 48 adolescents from Tambak Sumur Village as the target group. A Paired T-Test analysis (error rate 5%) on 48 adolescents showed significant differences in knowledge scores before and after peer-education, with a significance (2-tailed) of 0.010 ($p < 0.05$). There was also a significant difference between attitude scores before and after the training, with a significance value (2-tailed) of 0.020 ($p < 0.05$).

Evaluation and Replanning (P-Process)

The evaluation of ARH education and promotion based on Karang Taruna adolescents in Tambaksumur Village was conducted as the final stage of service involving village officials, health cadres, Karang Taruna, and other community members using a SWOT analysis focused on the strengths, weaknesses, opportunities, and threats of the program.

Table 4. Strategy Priorities for the Internalization of Karang Taruna Function

Internal Factors	Strengths	Weaknesses
Faktor Eksternal	<ol style="list-style-type: none"> 1. Implemented by, for, and from adolescents 2. Engaging and easy-to-understand delivery 3. Flexible timing and format of activities 	<ol style="list-style-type: none"> 1. Lack of depth in the material 2. Inadequate counseling techniques 3. Not all Karang Taruna adolescents can be involved in activities
Opportunities	Strategi (SO)	Strategi (WO)
<ol style="list-style-type: none"> 1. Existence of adolescent health posts 2. Support from village officials and the community 	<ol style="list-style-type: none"> 1. Integrate the adolescent health post program with Karang Taruna (14) 2. Optimize assets and village support for Karang Taruna (10) 	<ol style="list-style-type: none"> 1. Regular health education training by health center cadres (9) 2. Village intervention to strengthen adolescent involvement in activities (10)
Threats	Strategi (ST)	Strategi (WT)
<ol style="list-style-type: none"> 1. Lack of intensive guidance from external parties 2. Other activities that can distract Karang Taruna's focus 	<ol style="list-style-type: none"> 1. Bridge Karang Taruna with other parties related to the program (10) 2. Increase the number of regular Karang Taruna health-themed agendas (10) 	<ol style="list-style-type: none"> 1. Sustainable health-based guidance for Karang Taruna (12) 2. Strengthen the culture of togetherness among Karang Taruna adolescents (11)

SWOT analysis focuses on the strengths, weaknesses, opportunities, and threats of the program. The aim is to reveal positive strengths and potential problems that need to be identified, and then follow-up through the design of alternative strategies¹⁵.

From 8 alternative strategies obtained as SWOT evaluation inputs, strategy priorities were selected through scoring by all community members participating in the evaluation activity. The chosen strategy priorities, "integration of the adolescent health post program with Karang Taruna" and "sustainable health-based guidance for Karang Taruna," were used as input for replanning health-based program activities as a form of internalization of Karang Taruna function in Tambaksumur Village.

Discussion

The issues of Adolescent Reproductive Health (ARH) in Tambaksumur Village, Sidoarjo Regency, stem from adolescent delinquency that can lead to free socializing and premarital sex. Sexual behavior outside of marriage can result in unwanted pregnancies, sexually transmitted diseases, abortions, and early marriage. All these issues pose risks

¹⁵ Renault Val, *Section 14: SWOT Analysis: Strengths, Weaknesses, Opportunities, and Threats*, <https://ctb.ku.edu/en/table-of-contents/assessment/assessing-community-needs-and-resources/swot-analysis/main> (accessed June 20, 2023).

to the futures of both male and female adolescents. If an unwanted pregnancy occurs and the adolescent opts for abortion, it could risk their health and lead to maternal and fetal death. Additionally, pregnancies in adolescence can lead to serious issues such as premature births, low birth weight, hemorrhage, congenital anomalies, pre-eclampsia, postpartum blues, and maternal and fetal death.¹⁶

The use of the P-Process model and Community-Based Research (CBR) as the grand design for community service programs in Tambaksumur Village is deemed effective, as these two models complement each other in the process. The P-Process serves as a strategic planning tool for participation-based ARH programs and community capacity building, in this case, strengthening the function of the youth organization Karang Taruna in Tambaksumur Village. Meanwhile, CBR operates as an assessment tool based on the priority needs and health issues of the Tambaksumur Village community related to ARH rooted in adolescent delinquency, as well as active involvement from all community elements, especially the active role of Karang Taruna adolescents in addressing and resolving the health challenges (ARH) that arise within the community itself. Unlike some previous Karang Taruna-based community service activities, which focused only on enhancing the individual capabilities of Karang Taruna members, or in other words, emphasized personal empowerment over organizational function¹⁷. The integration of the two models, P-Process and Community-Based Research (CBR), as the foundational framework for community service in Tambaksumur Village, represents a comprehensive process that strives not only to improve the knowledge and attitudes of Karang Taruna adolescents on an individual level but also as an effort to strengthen the function of Karang Taruna in terms of health promotion and education (ARH) internalized as part of the role and responsibility of Karang Taruna within an organizational context.

Peer education is a learning process centered around a group with similar ages and maturity levels (peer group). The peer-education learning model can remove awkwardness, miscommunication, reluctance, low self-esteem, shame, and the like, making the learning process and information transfer more effective¹⁸. The same is true in Tambaksumur Village, where peer-education activities (by, for, and from) Karang Taruna adolescents have significantly contributed to positive changes in knowledge and attitudes among peers related to ARH issues. In the context of health education and promotion, peer education is often used as an effective method to address various community health

¹⁶ Saptarini, Ika & Suparmi, Determinan Kehamilan Tidak Diinginkan di Indonesia (Analisis Data Sekunder Riskesdas 2013), *Jurnal Kesehatan Reproduksi*, vol.7, no.1 (Juli 1, 2016): 15-24.

¹⁷ Arina Q, Laily H, dan Abu Bakar, Pemberdayaan Karang Taruna dalam Mendukung Gerakan PSN 3M Plus: Upaya Pengendalian Demam Berdarah Dengue di Desa Barurejo Kecamatan Sambeng Kabupaten Lamongan, *Jurnal Pengabdian Masyarakat dalam Kesehatan*, vol. 1 no. 1 (Oktober 2019): 4-7.

¹⁸ Susanti S & Cholik HR, Pemberdayaan Siswa Sebagai Peer Educator Kesehatan Reproduksi Remaja, *ADIMAS: Jurnal Pengabdian Masyarakat*, vol. 3 no. 2 (2019): 43-50, <https://journal.umpo.ac.id/index.php/adimas/article/view/1867> (accessed July 10, 2023).

issues based on prevention. In the case of ARH, adolescents are psychologically more open to giving or receiving information provided by their peers as part of the self-actualization process. This is particularly true for taboo information that is difficult to communicate with people outside the peer group. In line with this, Tirsa et al., through their research, state that 54% of male respondents prefer to talk to peers when experiencing their first wet dream, and 59% of female respondents talk to their mothers when they first menstruate.¹⁹

Adolescent behavior is characterized by a curiosity and a propensity to experiment with new activities without mature consideration, leading to a heightened risk of engaging in negative behaviors, including those of a sexual nature. The paucity of comprehensive reproductive health information and education for adolescents, whether from parents, teachers, peers, or healthcare providers, results in reproductive health issues with a range of consequences, such as promiscuity, sexually transmitted diseases, unintended pregnancies, abortion, early marriage, and even death. The low level of adolescent understanding of reproductive health, partly due to the cultural taboo surrounding sexual issues, particularly among parents and teachers, often drives adolescents to seek information from less reliable sources, notably peers.²⁰

On the other hand, efforts to increase adolescents' understanding of RHR are also influenced by the active role of health providers. Through research conducted by Winie, et al in 2019 in Jatinagor-Sumedang, it was found that the Adolescent Reproductive Health Information and Counseling Center (PIK-KRR) program initiated by BKKBN for adolescents in high schools could not run as expected, because Puskesmas health workers were less active in socializing this program, so that adolescents (students) targeted by the program did not participate and did not even know about the existence of the program in their school.²¹ Another study by Trisnadewi, et al (2022) also showed that RHR problems, especially in adolescent girls, are strongly influenced by the role of the media (internet) with inappropriate sources of information. According to the researchers, there is a strong relationship between media exposure and early menarche age in adolescent girls. The influence of sexual content or information in the media can accelerate the maturation of sexual hormones, causing menarche to occur earlier than normal age.²²

¹⁹ Sirupa, Tirsa A, Wantania, John, dan Suparman, Eddy, Angka Remaja Pengetahuan Rendah tentang Mimpi Basah, *Jurnal e-Clinic (eCli)*, vol.4 no.2 (July 2016), <https://ejournal.unsrat.ac.id/index.php/eclinic/article/view/14370> (accessed Juni 22, 2022).

²⁰ Sarlito, W Sarwono, *Psikologi Remaja, Edisi Revisi 13*, Jakarta: Rajagrafindo Persada Pers, 2010.

²¹ Putri WS, Martini N, Wijaya M, Astuti S, dan Gumilang L, Pengetahuan Remaja Mengenai Kesehatan Reproduksi di SMA Negeri Jatinagor, *JKM (Jurnal Kebidanan Malahayati)*, vol.5, no.3 (Juli 2019): 257-263, <https://ejournalmalahayati.ac.id/index.php/kebidanan/article/view/1358> (accessed July 16, 2023).

²² Trisnadewi E, Irlah R, Putri GE, Dasri O, dan Fernando F, Faktor yang Berhubungan dengan

For the village of Tambaksumur, enhancing adolescent knowledge and attitudes toward reproductive health through interventions by the Karang Taruna youth organization can stimulate the desired behavioral change. This includes healthy reproductive behaviors and a reduction in juvenile delinquency and its impacts. Behavior is an expression of an individual's understanding of a concept actualized through actions. These behaviors may be perceived as positive or negative depending on the prevailing moral standards. In Tambaksumur, adolescent behaviors concerning reproductive health are greatly influenced by their level of knowledge and attitudes. Behavioral change occurs through a three-step process, starting with cognitive (knowledge), followed by affective (attitude), and finally psychomotor (actual behavior) alterations, known as the KAP-B (Knowledge, Attitude, Practice - Behavior) behavioral domain.²³ The function of the KAP-B domain is in line with the results of research conducted by Nugraha CTH, et al (2022) regarding the relationship between knowledge and attitudes related to RHR in adolescents. In his research, it was stated that there was a significant relationship between the knowledge variable and the attitude variable related to the prevention of TRIAD KRR (Sexuality, HIV/AIDS, and Drugs) in street singer community (KPJ) adolescents in Serang Regency.²⁴

However, there is a phenomenon where knowledge does not align with attitude and is inversely related to behavior. This is also true for adolescent reproductive health knowledge, which is not always consistent with attitudes and behaviors, a concept known as cognitive dissonance. This dissonance occurs when an individual's internal cognitive elements are contradictory. If an individual encounters stimuli that provoke conflicting opinions or beliefs, dissonance arises. In the context of reproductive health, these contradictions can lead adolescents toward unhealthy sexual behaviors if they do not acquire a better understanding promptly.²⁵ Likewise in Tambaksumur Village, although in general the data on the level of knowledge of adolescents with attitudes related to RHR are recorded linearly, but some village adolescents show the opposite results, where good knowledge of RHR is not supported by a positive attitude towards RHR, meaning that there is dissonance in the individual due to conflicting cognitive elements, which are likely to arise because of a number of information received as long as they are inconsistent or incompatible with each other. As is the case with the results of Ma'aruf N's research, about cognitive dissonance in adolescent girls who have premarital sexual

Kejadian Menarche Dini pada Remaja Putri di SMP Negeri 15 Padang, *Jurnal Kesehatan Saintika Meditory*, vol.5, no.2 (2022): 55-64, <https://jurnal.syedzasaintika.ac.id/index.php/meditory/article/viewFile/1578/1057> (accessed July 17, 2023).

²³ Notoatmodjo, Soekidjo, *Ilmu Kesehatan Masyarakat*, Jakarta: PT Rineka Cipta, 2005.

²⁴ Nugraha CTH, Made Ayu NG, dan Sari Y, Hubungan Pengetahuan dengan Sikap Pencegahan TRIAD KRR pada Remaja Komunitas Penyanyi Jalanan (KPJ) di Kabupaten Serang Tahun 2021, *Journal of Issues in Midwifery*, vol.5, no.3 (2022): 129-139, <https://joim.ub.ac.id/index.php/joim/article/view/523> (accessed July 20, 2023).

²⁵ Notoatmodjo, Soekidjo, *Ilmu Kesehatan Masyarakat*, Jakarta: PT Rineka Cipta, 2005

intercourse. He mentioned that cognitive dissonance occurs because young women are aware of the existence of societal and religious norms that are resistant to premarital sexual behavior, but on the other hand there is an emotional understanding such as love and the desire to express affection that can bind in a more permanent relationship.²⁶

To maintain the integrity and continuity of the educational functions and public health promotion related to reproductive health within the Karang Taruna youth organization in Tambaksumur, active participation from the adolescents of Karang Taruna is required, along with support from village administrative bodies as administrators, facilitators, and coordinators of activities. Health providers and academics also play essential roles in mentoring, educating, and organizing health programs driven by the youth of Karang Taruna. Puskesmas as the spearhead of public health must be able to carry out its vital role in maintaining the continuity of the RHR program in Tambaksumur Village, because after all, health providers have a direct professional responsibility related to their function in handling adolescent reproductive health problems. As said by Pesiwarissa, the main role of Puskesmas as a health service provider is to increase the knowledge and skills of adolescents related to RHR issues. The three things that become the main functions of Puskesmas in this case are policies, facilities, and actual programs.²⁷

Conclusion

The implementation of community service activities by the Karang Taruna youth organization regarding reproductive health issues in Tambaksumur, Sidoarjo Regency, employing the P-Process and Community-Based Research (CBR) models, proved effective in both process and output. This success is attributed to the focus on not just improving individual knowledge and attitudes but also on strengthening Karang Taruna through the internalization of educational and health promotion functions related to reproductive health.

Peer Education, as a learning model centered around peer groups operating on the principles of, by, and for adolescents, significantly contributes to increasing the knowledge and fostering positive attitudes among the youth of Karang Taruna concerning reproductive health issues in Tambaksumur, Sidoarjo Regency. The optimal form of internalizing the roles and functions of a Karang Taruna concerned with reproductive health in Tambaksumur is through peer-education activities conducted by Karang Taruna alongside the integration of the Youth Health Post under the supervision

²⁶ Ma'aruf, Nilma, Disonansi Kognitif pada Remaja Putri Pelaku Hubungan Seksual Pranikah (Studi Kasus pada Lima Remaja Putri Berdomisili di Jakarta dan Sekitarnya), *Skripsi*, Universitas Indonesia, 1998.

²⁷ Pesiwarissa, Paulete E, Gambaran Implementasi Program Kesehatan Reproduksi Remaja di Puskesmas Getasan, *Skripsi*, Program Studi Ilmu Keperawatan FKIK UKSW, 2019.

of the Community Health Centers.

The efforts to enhance Adolescent Reproductive Health in Tambak Sumur must be understood not only from a health perspective but also from sociocultural, religious, psychological, technological advancement, and adolescent perspectives. The sustainability of the community service outcomes related to reproductive health issues in Tambaksumur can be maintained through the integration of the Youth Health Post program with Karang Taruna and the ongoing support of health academics, balanced by active participation from adolescents and other community members.

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