



Reproductive Health Education as Prevention of Unsafe Sexual Behavior among Street Children

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ABSTRACT

This study was driven by the social problems faced by street children related to reproductive health, which contributes to sexual violence, human trafficking, premarital sex, unwanted pregnancies, and HIV/AIDS exposure. This study aimed to provide reproductive health education as a preventive measure against unsafe sexual practices among street children. The research employed a service learning approach, combining survey, observation, interviews, mini workshops, focus group discussions, Q&A sessions, and documentary filmmaking. The findings revealed increased awareness and willingness among street children to access reproductive health services and comprehensive knowledge of reproductive health. The role of peer educators and empathic social support emerged as key factors in program success. This study recommends integrating reproductive health education targeting marginalized groups into relevant university curricula as part of service learning.

Keywords: reproductive health, street children, peer educators, service learning, social support.

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INTRODUCTION

Unsafe sexual behavior among street children has become a persistent social issue over the years, with the potential to cause serious health and social problems (Abate et al., 2022; Deb et al., 2020; Hartmann et al., 2021). This problem creates an urgent need for comprehensive research and effective solutions. Street children frequently live in environments highly vulnerable to exploitation, sexual abuse, and assault (Bounds et al., 2020; Franchino-Olsen, 2021). Limited access to education, reliable information, and reproductive health services further increases their risk.

Unsafe sexual practices among this group are often triggered by unprotected sexual intercourse. This condition exposes them to sexually transmitted diseases (STDs), including HIV/AIDS, as well as unwanted pregnancies (C. Millanzi, 2023; Worede et al., 2022). The lack of preventive knowledge and the absence of supportive systems contribute to the cycle of vulnerability that many street children experience.

Besides the evident health risks, unsafe sexual behavior also leads to psychological and social consequences (Fauk et al., 2022). Many street children are subjected to stigma and discrimination from the broader society, which can worsen their mental health. This marginalization often leads to isolation and further restricts their access to essential support services (Gayapersad et al., 2023).

Their limited understanding of reproductive health rights makes them more susceptible to becoming victims of sexual abuse, human trafficking, and commercial sexual exploitation (Franchino-Olsen, 2021; Shoji & Tsubota, 2022). These interrelated issues make the problem increasingly complex and highlight the need for evidence-based interventions that are both appropriate and contextually relevant.

Unsafe sexual behavior also often leads to premarital sexual relations, which are prohibited not only because they contradict religious norms but also because they can undermine human dignity, evoke moral harm, and generate broader social damage (Jones, 2023). Moreover, such behaviors heighten the risks of disease transmission and unintended pregnancy, creating significant negative impacts on individuals' physical and emotional well-being.

This situation requires serious attention to develop effective solutions through reproductive health communication. It is essential to implement preventive measures that target the phenomenon of unsafe sexual behavior among street children. Considering their limited access to accurate information, an educational approach becomes a key strategy to reduce the risk of sexually transmitted infections, unwanted pregnancies, and exploitation.

This educative approach should include knowledge of reproductive rights, appropriate contraceptive use within the context of marriage, and the importance of maintaining personal hygiene and reproductive health. Empowering street children with this information can support them in making healthier decisions. Additionally, this approach can help them recognize early signs of sexual violence or harassment and encourage them to seek appropriate support, thus enabling more effective prevention in this vulnerable population.

Street children are widely recognized as a vulnerable group with heightened exposure to various health and social risks. Research has consistently shown that their living conditions often involve poverty, lack of shelter, and limited protection from

violence and exploitation (Abate et al., 2022; Deb et al., 2020). These structural challenges create an environment where unsafe sexual behaviors, such as unprotected intercourse and transactional sex, become more likely. The absence of adequate social support networks further exacerbates their vulnerability and hinders their ability to access necessary reproductive health services.

Several studies have highlighted the prevalence of sexually transmitted infections (STIs), including HIV/AIDS, among street children, as well as the high incidence of unintended pregnancies (Hartmann et al., 2021; Worede et al., 2022). According to Moore et al. (2020), unprotected sexual activity is frequently driven by misinformation, coercion, or economic necessity. This combination of factors makes street children susceptible not only to physical health consequences but also to long-term psychological trauma.

In addition to health risks, unsafe sexual practices have significant social and moral implications. For communities with strong religious or cultural norms, premarital sex is often condemned and stigmatized (Jones, 2023). This stigma contributes to feelings of shame and isolation among street children, discouraging them from seeking help or disclosing experiences of abuse (Gayapersad et al., 2023). As a result, many remain trapped in cycles of exploitation and marginalization, further reinforcing their exclusion from mainstream services.

Reproductive health education has been identified as a critical strategy to address these challenges. Interventions that combine accurate information about sexual health, life skills training, and empowerment can reduce risky behaviors (Siddiqui et al., 2020; Pourkazemi et al., 2020). For example, peer education models have shown promise in reaching marginalized youth populations, as peers can act as credible sources of information and role models for healthy behaviors (Obeagu et al., 2023).

Service learning has also emerged as an effective approach in reproductive health promotion, particularly in contexts where trust in authorities is low. Afandi et al. (2022) emphasized that service learning bridges the gap between academic knowledge and community realities, allowing students to engage directly with at-risk populations. This model encourages experiential learning and fosters empathy, while also enhancing the community's access to relevant health information and resources.

Despite these promising approaches, gaps remain in the literature regarding integrated strategies that combine reproductive health education, peer-led interventions, and culturally sensitive communication. More research is needed to evaluate the effectiveness of such models in diverse settings and to understand how contextual factors—such as religion, local norms, and economic pressures—interact with health behaviors among street children.

MATERIALS AND METHODS

This study adopted a *service learning* approach to provide reproductive health education for street children in Cirebon City. Service learning integrates academic learning with community engagement, enabling students to apply theoretical knowledge in real-life contexts while addressing social problems through participatory action (Afandi et al., 2022). This approach has been recognized as an effective model for

building empathy and empowering marginalized populations through direct educational interventions (Siddiqui et al., 2020). Activities were designed to promote experiential learning and deliver relevant reproductive health information tailored to the target group.

Data collection began with a preliminary investigation phase involving surveys, direct observation, and semi-structured interviews. This process aimed to identify knowledge gaps, reproductive health needs, and contextual risk factors among street children (Muiz & Fitriani, 2022). Peer educators—former street children who had previously received reproductive health training—were engaged to build trust and facilitate communication (Obeagu et al., 2023). The interview guides and observation tools were validated in consultation with reproductive health professionals from the local Public Health Center (Nada et al., 2024).

Following the needs assessment, the team developed educational materials tailored to the age, literacy level, and socio-cultural background of the participants, who were mainly between 17 and 30 years old. The materials emphasized reproductive anatomy, prevention of sexually transmitted infections including HIV/AIDS, responsible contraceptive use within marriage, and personal hygiene practices (MacAfee et al., 2020). Consultations with a reproductive health counselor and a certified midwife ensured that the content was medically accurate, culturally appropriate, and in line with public health guidelines (Pourkazemi et al., 2020).

The intervention phase consisted of a mini workshop, two sequential focus group discussions, and an interactive question-and-answer session. The first focus group discussion brought together street children, peer educators, health counselors, and the research team. Educational sessions applied adult learning principles (andragogy) to encourage engagement and reflection (Rubi'ah et al., 2023). The second focus group involved key stakeholders—including the Department of Social Affairs, the Health Department, and the Municipal Police—to review the findings and discuss collaborative strategies for sustaining support for this vulnerable population (Syarifah & Prabawati, 2021).

To reinforce learning and extend outreach, the team produced a documentary film capturing the entire intervention process. The film featured interviews with participants, educational highlights, and testimonies from street children about their experiences. Multimedia documentation was intended not only to disseminate accurate reproductive health information but also to serve as a reference and advocacy tool for future programs (Moore et al., 2020). All phases of the research were conducted with careful attention to ethics, informed consent, and ensuring the safety and comfort of all participants involved.

RESULT AND DISCUSSION

The community service activities were conducted in eight structured phases over several months, involving collaboration between the research team, peer educators, reproductive health professionals, and local authorities. In the initial phase, the team established coordination and mapped the primary locations where street children typically gathered, including traffic light intersections and informal settlements. The

strategic involvement of peer educators, who had once shared similar life experiences, proved instrumental in building rapport and reducing distrust among participants (Obeagu et al., 2023). This preparatory stage resulted in detailed baseline data on reproductive health knowledge, attitudes, and practices.

The preliminary surveys and interviews revealed that most street children were between 18 and 25 years old, although some participants were as old as 36. Approximately 73.68% of respondents reported prior experience of premarital sexual intercourse, while the remainder had never engaged in sexual relations. The interviews also uncovered that several individuals had been involved in transactional sex or had experienced sexual exploitation, highlighting the intersection of economic vulnerability and risky behavior (Hartmann et al., 2021; Franchino-Olsen, 2021).

During the mini workshop and the first focus group discussion, participants showed keen interest but initially expressed discomfort in discussing sensitive topics. However, the supportive presence of peer educators and the use of empathic communication gradually fostered a safe environment, allowing more active engagement (Siddiqui et al., 2020). Questions raised by participants frequently related to contraception, HIV transmission, and personal hygiene. Notably, some respondents shared that this was their first exposure to accurate reproductive health information (Moore et al., 2020).

Table 1. Summary of Community Service Phases

Phase	Activities	Objectives
Phase 1	Coordination meeting with team and peer educators, mapping locations	To establish planning and identify gathering spots
Phase 2	Surveys, interviews, observations at street intersections	To assess needs and collect baseline data
Phase 3	Distribution of educational T-shirts “Aku Ingin Pulang”	To motivate return to family and safer lifestyles
Phase 4	Survey evaluation and targeting of female participants	To ensure inclusivity and refine intervention
Phase 5	Preparation of focus group discussions with health professionals	To design culturally appropriate educational materials
Phase 6	Focus Group Discussion I with street children	To deliver reproductive health education
Phase 7	Focus Group Discussion II with stakeholders	To validate findings and discuss sustainability
Phase 8	Production of a documentary film	To document activities and promote advocacy

One significant outcome of the intervention was an observable increase in participants’ willingness to access reproductive health services. Several street children reported having previously avoided health facilities due to fear of being judged or misunderstood. Following the educational activities, multiple participants voluntarily visited the Public Health Center for reproductive health consultations, assisted by peer educators who accompanied them to reduce anxiety (Nada et al., 2024). This shift indicated a promising change in health-seeking behavior.

The second focus group discussion with stakeholders, including the Health Department, Social Affairs Office, and Municipal Police Unit, confirmed the field findings and revealed persistent structural barriers. Stakeholders agreed on the importance of integrating reproductive health education with broader social services, such as shelter provision and skills training (Gayapersad et al., 2023). The production of

a documentary video further amplified the project's impact by raising community awareness and documenting the intervention process (Rubi'ah et al., 2023).

Overall, the program demonstrated that combining peer-led education, service learning, and stakeholder engagement can effectively increase knowledge, build confidence, and promote positive behaviors among marginalized youth. These outcomes underscore the value of participatory approaches in reducing reproductive health disparities and protecting street children from sexual exploitation (Afandi et al., 2022).

Based on observations and interviews, the age range of the street children involved in this study spanned from 17 to 36 years, with the majority between 18 and 25 years old. All participants identified themselves as Muslim, and some were already married and had toddlers. The most frequently reported sexual activities included kissing, touching, and intercourse. Among the 19 respondents, 73.68% admitted to having engaged in premarital sexual intercourse, while 26.32% reported that they had never done so. These findings confirm that risky sexual behaviors are prevalent in this population and often occur without adequate preventive knowledge.

From a religious perspective, particularly within Islamic teachings, premarital sexual intercourse is explicitly prohibited. The Quran states, "*And do not approach unlawful sexual intercourse. Indeed, it is ever an immorality and is evil as a way*" (Q.S. Al-Isra [17]:32). This verse underscores that not only is zina (adultery and fornication) forbidden, but also any actions that lead to it. Among street children, the combination of environmental exposure, lack of religious education, and weak social supervision contributes significantly to these behaviors.

These circumstances highlight the need for moral education and social protection strategies to help prevent sexual relations outside of marriage. Effective interventions should not only address the health aspects but also incorporate faith-based approaches that align with the values of the community. In this way, reproductive health education can be more readily accepted and internalized by participants who hold religious beliefs.

In terms of prevailing social norms, many communities still regard premarital sexual relationships as taboo and morally unacceptable. However, in the context of street children, harsh living conditions and economic pressures often reduce the influence of these norms. For many, engaging in sexual activity is not merely a personal choice but also a survival strategy, sometimes involving transactional sex or coercion. This complexity necessitates interventions that are sensitive to both social and structural factors.

An important observation was that prior to the intervention, street children expressed fear and reluctance to visit the Public Health Center for reproductive health services. Through the reproductive health education sessions, however, participants reported that they gained valuable knowledge and felt more confident about their health. Their willingness to attend the focus group discussions and engage in dialogue became a clear indicator of the program's initial success.

Despite this progress, many participants still required the presence of peer educators to feel comfortable accessing health facilities. Peer educators played a critical role as bridges between street children and service providers, conveying information in a relatable way and reducing fear of stigma or judgment. This finding aligns with

previous studies indicating that peer-led education can be highly effective among marginalized groups (Obeagu et al., 2023; Siddiqui et al., 2020).

Another key insight was the importance of introducing sexual and reproductive health education from an early age within the family. Contrary to misconceptions in Indonesian society that such education should only be given during puberty or adulthood, early education is essential to equip children with accurate knowledge about their bodies and personal boundaries. This preventive approach helps children recognize and protect themselves from potential risks such as sexual abuse, unplanned pregnancy, and psychological trauma.

Finally, the study also highlighted how environmental factors, such as slum housing conditions, exacerbate reproductive health risks. In cramped single-room dwellings without adequate privacy, children are often exposed to adult sexual activities. This early exposure can normalize risky behaviors and weaken internalized social or religious prohibitions. Therefore, interventions must also address broader social determinants, including housing conditions, to create safer and healthier environments for vulnerable children.

CONCLUSION

This community service program successfully provided reproductive health education for street children in Cirebon City as a preventive effort against unsafe sexual behaviors that contribute to sexual violence, human trafficking, premarital sexual relations, unwanted pregnancies, and HIV/AIDS transmission. Through a combination of surveys, observations, interviews, mini-workshops, and focus group discussions, the program facilitated comprehensive learning about the physical, mental, and social aspects of reproductive health. The involvement of peer educators proved vital in reducing stigma and encouraging street children to access reproductive health services more confidently.

The outcomes demonstrated increased awareness, readiness to undergo reproductive health check-ups, and greater openness among street children to discuss sensitive issues. The experience highlights that collaborative, community-based approaches integrating peer support and service learning can be an effective model for similar interventions. Strengthening partnerships with stakeholders and incorporating reproductive health and social protection themes into educational curricula are crucial steps toward sustaining these positive impacts and fostering healthier, more empowered communities.

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REFERENCES

- Abate, D., Eyeberu, A., Adare, D., Negash, B., Alemu, A., Beshir, T., Deressa Wayessa, A., Debella, A., Bahiru, N., Heluf, H., Abdurke Kure, M., Abdu, A., Oljira Dulo, A., Bekele, H., Bayu, K., Bogale, S., Atnafe, G., Assefa, T., Belete, R., ... Dessie, Y. (2022). Health status of street children and reasons for being forced to live on the streets in Harar, Eastern Ethiopia. Using mixed methods. *PLOS ONE*, 17(3), e0265601. <https://doi.org/10.1371/journal.pone.0265601>
- Afandi, A., Laily, N., Wahyudi, N., Umam, M. H., Kambau, R. A., Aisyah Rahman, S., Sudirman, M., Jamilah, J., Kadir, N. A., Junaid, S., Nur, S., Parmitasar, R. D. A., Nurdiyana, N., Wahyudi, J., & Wahid, M. (2022). *Metodologi pengabdian masyarakat* (1st ed.). Direktorat Pendidikan Tinggi Keagamaan Islam Direktorat Jenderal Pendidikan Islam Kementerian Agama RI. <https://repository.uinjkt.ac.id/dspace/handle/123456789/71356>
- Bounds, D. T., Otwell, C. H., Melendez, A., Karnik, N. S., & Julion, W. A. (2020). Adapting a family intervention to reduce risk factors for sexual exploitation. *Child and Adolescent Psychiatry and Mental Health*, 14(1), 8. <https://doi.org/10.1186/s13034-020-00314-w>
- Bylund, S., Målqvist, M., Peter, N., & Herzig Van Wees, S. (2020). Negotiating social norms, the legacy of vertical health initiatives and contradicting health policies: A qualitative study of health professionals' perceptions and attitudes of providing adolescent sexual and reproductive health care in Arusha and Kilimanjaro region, Tanzania. *Global Health Action*, 13(1), 1775992. <https://doi.org/10.1080/16549716.2020.1775992>
- Deb, S., Sunny, A. M., & Majumdar, B. (2020). Street children: The paradox of untapped human resources. In S. Deb, A. M. Sunny, & B. Majumdar, *Disadvantaged children in India* (pp. 1-47). Springer Singapore. https://doi.org/10.1007/978-981-15-1318-3_1
- Dickson, E., Parshall, M., & Brindis, C. D. (2020). Isolated voices: Perspectives of teachers, school nurses, and administrators regarding implementation of sexual health education policy. *Journal of School Health*, 90(2), 88-98. <https://doi.org/10.1111/josh.12853>
- Fauk, N. K., Mwanri, L., Hawke, K., Mohammadi, L., & Ward, P. R. (2022). Psychological and social impact of HIV on women living with HIV and their families in low- and middle-income Asian countries: A systematic search and critical review. *International Journal of Environmental Research and Public Health*, 19(11), 6668. <https://doi.org/10.3390/ijerph19116668>
- Franchino-Olsen, H. (2021). Vulnerabilities relevant for commercial sexual exploitation of children/domestic minor sex trafficking: A systematic review of risk factors. *Trauma, Violence, & Abuse*, 22(1), 99-111. <https://doi.org/10.1177/1524838018821956>
- Gayapersad, A., Embleton, L., Shah, P., Kiptui, R., Ayuku, D., & Braitstein, P. (2023). Using a sociological conceptualization of stigma to explore the social processes of stigma and discrimination of children in street situations in western Kenya. *Child Abuse & Neglect*, 139, 104803. <https://doi.org/10.1016/j.chiabu.2020.104803>

- Hartmann, C. F., Silva, L. N., Corrêa, M. L., Oliveira, G. F., Dutra, J. C., Ishikame, K. R., Pereira, L. B., Carvalho, F. T., & Dos Santos Paludo, S. (2021). Risky sexual behavior among street children, adolescents, and young people living on the street in southern Brazil. *Journal of Community Health*, 46(6), 1188-1196. <https://doi.org/10.1007/s10900-021-01010-2>
- Hidayat, A., Mutaqin, Z., & Isnaeni, N. (2025). The Wellbeing and Vulnerability of Child Labor in Urban Slum Areas of Cirebon: a Study of Photovoice Narrative. *SETARA: Jurnal Studi Gender dan Anak*, 7(1), 147-166. <https://doi.org/10.32332/jsga.v7i01.10021>
- Jones, P. (2023). Catholic social teaching and the peripheries: The case for addressing prostitution. *International Journal for the Study of the Christian Church*, 23(1), 3-17. <https://doi.org/10.1080/1474225X.2022.2150459>
- MacAfee, L. K., Harfmann, R. F., Cannon, L. M., Minadeo, L., Kolenic, G., Kusunoki, Y., & Dalton, V. K. (2020). Substance use treatment patient and provider perspectives on accessing sexual and reproductive health services: Barriers, facilitators, and the need for integration of care. *Substance Use & Misuse*, 55(1), 95-107. <https://doi.org/10.1080/10826084.2019.1656255>
- Millanzi, W. C. (2023). Adolescents' world: Know one tell one against unsafe sexual behaviours, teenage pregnancies and sexually transmitted infections including chlamydia. In M. Sarier (Ed.), *Infectious diseases* (Vol. 23). IntechOpen. <https://doi.org/10.5772/intechopen.109048>
- Moore, S., Rosenthal, D., & Mitchell, A. (2020). *Youth, AIDS and sexually transmitted diseases* (1st ed.). Routledge. <https://doi.org/10.4324/9781315788111>
- Muiz, M. R., & Fitriani, W. (2022). Urgensi analisis kebutuhan dalam pelayanan bimbingan dan konseling di sekolah. *Jurnal Consulenza: Jurnal Bimbingan Konseling dan Psikologi*, 5(2), 116-126. <https://doi.org/10.56013/jcbkp.v5i2.1378>
- Nada, Q. N., Kusumastuti, I., & Darmayanti, E. (2024). Evaluasi pemeriksaan viral load pada orang dengan HIV di UPTD Puskesmas Tangerang. *PREPOTIF: Jurnal Kesehatan Masyarakat*, 8(3), 7249-7257. <https://doi.org/10.31004/prepotif.v8i3.37457>
- Obeagu, E. I., Obeagu, G. U., Ede, M. O., Odo, E. O., & Buhari, H. A. (2023). Translation of HIV/AIDS knowledge into behavior change among secondary school adolescents in Uganda: A review. *Medicine*, 102(49), e36599. <https://doi.org/10.1097/MD.00000000000036599>
- Pourkazemi, R., Janighorban, M., Boroumandfar, Z., & Mostafavi, F. (2020). A comprehensive reproductive health program for vulnerable adolescent girls. *Reproductive Health*, 17(1), 13. <https://doi.org/10.1186/s12978-020-0866-7>
- Rubi'ah, S., Rahmansyah, A., Nugraha, L. P., Malida, M., & Hamdalah, H. (2023). Sosialisasi upaya pencegahan pernikahan usia dini dan kesehatan reproduksi di Desa Senanggalih, Kecamatan Sambelia, Kabupaten Lombok Timur. *Jurnal Bakti Nusa*, 4(2), 73-80. <https://doi.org/10.29303/baktinusa.v4i2.92>

- Shoji, M., & Tsubota, K. (2022). Sexual exploitation of trafficked children: Survey evidence from child sex workers in Bangladesh. *Journal of Comparative Economics*, 50(1), 101-117. <https://doi.org/10.1016/j.jce.2021.06.001>
- Siddiqui, M., Kataria, I., Watson, K., & Chandra-Mouli, V. (2020). A systematic review of the evidence on peer education programmes for promoting the sexual and reproductive health of young people in India. *Sexual and Reproductive Health Matters*, 28(1), 1741494. <https://doi.org/10.1080/26410397.2020.1741494>
- Solomon, D., & Theiss, J. (2022). *Interpersonal communication: Putting theory into practice* (2nd ed.). Routledge. <https://doi.org/10.4324/9781351174381>
- Stephany, K. (2021). *Cultivating empathy*. Bentham Science Publishers.
- Syarifah, V. R., & Prabawati, I. (2021). Kampung Anak Negeri sebagai wujud implementasi kebijakan pemerintah Kota Surabaya dalam penanganan anak jalanan. *Publika*, 9(3), 167-180. <https://doi.org/10.26740/publika.v9n3.p167-180>
- Utami, F. P., Sulistiawan, D., & Syam, N. S. (2023). Penguatan peran ibu dalam mencegah kenakalan remaja di Desa Potorono, Kecamatan Banguntapan, Kabupaten Bantul, D.I Yogyakarta. *Jurnal Pengabdian Masyarakat*, 4(1), 112-123. <https://doi.org/10.32815/jpm.v4i1.1129>
- Wang, K., Pan, Y., & Yao, X. (2023). A visual question answering method based on question intention. In *2023 8th International Conference on Intelligent Computing and Signal Processing (ICSP)* (pp. 1691-1694). IEEE. <https://doi.org/10.1109/ICSP58490.2023.10248540>
- Worede, J. B., Mekonnen, A. G., Aynalem, S., & Amare, N. S. (2022). Risky sexual behavior among people living with HIV/AIDS in Andabet district, Ethiopia: Using a model of unsafe sexual behavior. *Frontiers in Public Health*, 10, 1039755. <https://doi.org/10.3389/fpubh.2022.1039755>

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