

REVIEW ARTICLE

Community involvement in adolescent pregnancy prevention: A literature review

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Abstract

The objective of this study was to assess the influence of various community factors, including parents, peers, schools, and community leaders in initiatives aimed at preventing adolescent pregnancy. The methodology involved a comprehensive database search across Scopus, PubMed, ScienceDirect and ResearchGate. The primary search terms used were 'community roles' and 'prevention of adolescent pregnancy'. There were seven articles obtained for analysis of the suitability of the topics, objectives, methods used, sample size, and results in each article. We evaluated the relevance of selected articles for their relevance to the topic, alignment with research objectives, research methods employed, sample sizes, and the results presented in each article. The main findings indicate that community factors play crucial roles in supporting adolescent pregnancy prevention. This study explores the significance of the community, encompassing peers, parents, schools, and the environment as key support and social control factors within the framework of adolescents' pregnancy prevention. (*Afr J Reprod Health* 2024; 28 [10s]: 293-302).

Keywords: Community involvement, prevention, adolescent pregnancy

Résumé

L'objectif de cette étude était d'évaluer l'influence de divers facteurs communautaires, notamment les parents, les pairs, les écoles et les dirigeants communautaires, dans les initiatives visant à prévenir les grossesses chez les adolescentes. La méthodologie impliquait une recherche complète dans les bases de données Scopus, PubMed, ScienceDirect et ResearchGate. Les principaux termes de recherche utilisés étaient « rôles communautaires » et « prévention des grossesses chez les adolescentes ». Sept articles ont été obtenus pour analyser la pertinence des sujets, des objectifs, des méthodes utilisées, de la taille de l'échantillon et des résultats de chaque article. Nous avons évalué la pertinence des articles sélectionnés en fonction de leur pertinence par rapport au sujet, de leur adéquation avec les objectifs de recherche, des méthodes de recherche utilisées, de la taille des échantillons et des résultats présentés dans chaque article. Les principales conclusions indiquent que les facteurs communautaires jouent un rôle crucial dans la prévention des grossesses chez les adolescentes. Cette étude explore l'importance de la communauté, englobant les pairs, les parents, les écoles et l'environnement, en tant que facteurs clés de soutien et de contrôle social dans le cadre de la prévention des grossesses chez les adolescentes. (*Afr J Reprod Health* 2024; 28 [10s]: 293-302).

Mots-clés: : Implication communautaire, prévention, grossesse chez les adolescentes

Introduction

Adolescent pregnancy is a widespread issue that affects not only the health of the expectant mother and child but also contribute to crucial social development difficulties. More than 16 million children worldwide are born to mothers who are between the ages of 15 -19 years. The birth rates in the 10-14 year olds range in Angola, Bangladesh, Mozambique, and Nigeria were greater than 10 births per 1000 girls¹. Although all social groups

experience childbirth, 12.8 million cases occur in developing countries. In Indonesia, 36.7% of women aged 15-19 years have given birth and 13.1% were pregnant with their first child. The average age of mothers who become pregnant for the first time is 18 years old (46%). The results of the 2017 Indonesia Demographic and Health Survey (IDHS) indicate that 7% of women aged 15-19 years have become mothers, 5% have given birth, while 2% are pregnant with their first child². According to the WHO, females who experience sexual abuse, child

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marriage, or low socioeconomic level are more likely to become pregnant³. Adolescent pregnancy is caused by a lack of knowledge about pregnancy and misconceptions about contraception among young girls^{4,5}. Adolescent marriage and pregnancy are more common in South Asia due to sociodemographic and cultural characteristics such as low levels of education for women, low socioeconomic status, and belonging to an ethnic or religious minority⁶. Low family income, marital status, a lack of communication, and a history of parental adolescent pregnancy are additional risk factors for adolescent pregnancy^{7,8}. Initiation by sex is a cause of adolescent pregnancy. Research has shown that teenagers' personal values regarding premarital sex, deeply loving their partner and excessive drinking lead to uncontrolled behaviour resulting in pregnancy. Other risk factors such as poverty, divorced parents, permissive values about sex, and older partners are also determinants of sexual initiation in adolescents. Adolescents experience significant disparities in health care and socioeconomic opportunities. Socioeconomic factors influence adolescent pregnancy. The intervention steps taken include increasing income and providing reproductive health education. Cross-sector collaboration and active community participation are needed to overcome this problem⁹.

Pregnancy should occur at the right age, when the reproductive organs are ready to receive the results of conception. Pregnancy at young age has serious risks for both mother and baby so prevention efforts need to be made. The importance of school support, providing opportunities for adolescents to continue their education and increase adolescent knowledge, family support, increased school, social and community roles, and discussions with parents about sexual experiences in adolescent girls who have never received formal education regarding sexual education^{10,11}. The role of society is an important factors that needs to be considered in efforts to prevent unwanted pregnancies in teenagers. The role of parents, friends and the environment influences teenagers' behaviour which can lead to unwanted pregnancies. The role of parents is one of the keys to early sexual education

in adolescents. Adolescents need to be given supervision and education regarding their reproductive health from puberty until the end of adolescence. Parents with low social and economic levels are more likely to not provide reproductive health education for their children. This is because parents' time is used to earn a living so they do not have time to pay attention to their children in detail, especially regarding their reproductive health¹².

Reproductive health education given to teenagers is not only about puberty but also needs to be integrated with limiting interactions with the opposite sex. Apart from that, education regarding the long-term impact of premarital sexual behaviour, namely unwanted pregnancy. Pregnancy prevention is also influenced by moral, environmental, cultural and social maturity issues in the surrounding environment. Adolescent girls who experience unwanted pregnancies will look for solutions to their pregnancies. The solution often taken by teenagers is to get married or abort the pregnancy.

Unwanted pregnancies among teenagers present a significant public health challenge with far-reaching consequences. In response, several developed countries have implemented programs that actively involve community participation to prevent these occurrences. The community's role in health promotion is crucial, as it directly influences the ability to identify and resolve local health issues. The effectiveness of community involvement in health initiatives is multifaceted, encompassing various factors such as education, knowledge, awareness, care, habits, access, leadership, economic status, social capital, community participation, local resources or wisdom, village community deliberations, and the contributions of health workers and government entities at the village, sub-district, and district levels¹³⁻¹⁵. Each of these elements contributes to a comprehensive strategy that empowers communities to tackle health issues proactively and effectively. This study aims to explore the various dimensions of community involvement and its impact on preventing teenage pregnancies, thereby ensuring that adolescents can lead healthy, high-quality lives.

Methods

This literature review employed a thorough and comprehensive research strategy, encompassing the exploration of articles across various research journal databases, internet sources, and a detailed article review process. The first step in this literature review was to define the inclusion and exclusion criteria using the keywords 'adolescent pregnancy prevention' and 'community roles', specifically targeting qualitative and mixed-methods studies. A comprehensive search was conducted across Scopus, PubMed, ScienceDirect, and ResearchGate, resulting in a total of 944 articles: 659 from Scopus, 20 from PubMed, 255 from ScienceDirect, and 10 from ResearchGate. These articles were then imported into Mendeley for organization and management. The initial screening involved evaluating the titles, abstracts, and ensuring the articles were published from 2015 to 2022. This process narrowed down the results to 12 articles. A subsequent detailed review, focusing on relevance to the research objectives, further refined this list to 7 key articles selected for in-depth analysis. This method led to the selection of seven articles for a detailed examination. The researcher closely assessed the articles matched in terms of their topics, research goals, research methods, sample sizes, and the results they presented.

Results

As shown in Table 1, of the seven articles related to the role of society in preventing adolescent pregnancy, several objectives were found, namely: 1 article aimed to determine the effectiveness of using relationships between young women and those closest to them in preventing adolescent pregnancy; 3 articles evaluated adolescent pregnancy prevention programs in the community; while 3 articles developed models for preventing adolescent pregnancy in the community. The analysis of the method used can be explained as follows: of the eight articles, six articles used a qualitative study, while one article used mix method study. The sample sizes in the eight articles were as follows: two articles used teenagers as samples with sample

sizes of 10 to 22,411 people (10 samples, 419 samples, 22,411 samples), peer educators or peers totalling 15 participants; parents 6 to 48 participants; and stake holders (community leaders, religious leaders, traditional leaders, adolescent reproductive health program managers) numbering 21 to 81 participants.

The literature review of seven articles identified three main themes: society as a source of social capital in preventing teenage pregnancy, community-based strategies for teenage pregnancy prevention, and community role models in this prevention effort.

Society as a source of social capital

Research results from the seven articles found that parents, siblings, teachers and religious groups are important sources of social capital for adolescents in developing resilience to pregnancy¹⁶.

Community-based strategies for preventing teenage pregnancy

Community strategies for preventing teenage pregnancy involve a multicomponent approach (building community support for reproductive health services, providing technical assistance to health services for adolescent, strengthening referral partnerships between community organizations and clinical services, and educating adolescents about how to access reproductive health services) were effective in preventing adolescent pregnancy. Peer educators have positive educational experiences, positive personal growth, and are able to mentor their colleagues in efforts to prevent adolescent pregnancy. Some teenagers, society, religious leaders, and their parents still consider contraception taboo, influencing the independent choices of young women. Ignorance and failure of communication as well as strong religious, cultural, and social values, play important roles in the decision not to use contraception to prevent adolescent pregnancy^{17,18}.

. The Ministry of Health plays a leading role in the development of adolescent sexual and reproductive health (ASRH) policy and is categorized as a 'saviour'. NGOs are categorized as

Table 1: Literature review article

No	Researcher, Title, Year	Research purposes	Method	Sample	Result
1.	Gyan, et al (2017) <i>Social Capital And Adolescent Girls' Resilience To Adolescent pregnancy In Begoro, Ghana</i> ¹⁶	To assess the efficacy of using intimate ties between young women and girls and their closest influences to prevent and mitigate the hazards of premarital sex and adolescent pregnancy in Begoro, Ghana	Mix method research	419 samples (aged 15-19 years) and interviews with 10 young women.	Parents, siblings, teachers, and religious groups are vital providers of social capital for non-pregnant girls, aiding in the development of resilience against adolescent pregnancy.
2.	Sotolongo, et al (2017) <i>Integrated Community Strategies for Linking Youth to Adolescent Reproductive Health Services: A Case Study</i> ¹⁷	To describe the creation of a through youth health services promotion centre within the department of health to enhance young people's access to contraception and reproductive health care.	Qualitative research	22,411 young adolescent clients	The implementation of a comprehensive strategy includes: Establishing community support for adolescent reproductive health service, offering technical assistance to health departments to establish youth-centred full-service clinics, enhancing referral partnerships between community organizations and clinical services and providing education to adolescents on accessing reproductive health services.
3.	Roets, L and Clemence, I. S (2021) <i>Adolescent pregnancy prevention: The church, community, culture and contraceptives</i> ¹⁸	To discuss opinions on peer educator programs that carry out training programs for peer educators and their effect on teenage sexual behaviour.	Qualitative research	15 participants (peer educators)	Peer education can have several positives outcomes, including enhancing educational experiences, promoting personal growth, and fostering a desire to mentor colleagues. Some individuals may encounter challenges when guiding others due to factors such as religious beliefs, cultural norms, and parental or societal opinions.
4.	Zulu, et al (2022) <i>Application of community dialogue approach to prevent adolescent pregnancy, early marriage and school dropout in Zambia: a case study</i> ¹⁹	To comprehends parents' opinions on how the community discussion technique might be used in a cluster randomized controlled trial to address teenage early	Qualitative research (case study)	Each of the six FGDs had from 6 to 10 participants, and the total sample 48	Community dialogue play a significant role in raising parents awareness regarding the importance of ensuring that adolescents receive comprehensive information about reproductive health and sexuality. This awareness empowers parents to engage in open and constructive conversations with their adolescent children on these critical topics, thereby enabling them to make informed decision.

5.	Oyedele, <i>et al</i> (2015) Community participation in adolescent pregnancy prevention using the community as partner model ²⁰	pregnancy and school dropout. Investigating how the community feels about the stakeholders' role in reducing teen pregnancy using the community as a partner model	Qualitative research	adolescents, parents of adolescents, teachers, professional nurses who serve adolescents in primary health care clinics, religious and community leaders. The sample consisted of 75 participants	This model places a strong emphasis on the collective well-being of society and underscores the significance of collaborating with community stakeholders. Health workers in this context play an important role in assisting the community.
6.	Agu, <i>et al</i> (2022) An analysis on the roles and involvements of different stakeholders in the provision of adolescent sexual and reproductive health services in Southeast Nigeria ²¹	To examine how government or public institutions and non-governmental organizations participated in the formulation and implementation of ASRH policy	Qualitative research	81 policy makers and health program managers 59 stake holders	The State Ministry of Health (MOH) assumes a central role in shaping ASRH policy, often referred to as the key facilitator. Most public institutions are recognized as 'enablers'. Regarding ASRH policy development, traditional rulers/village heads and regional government secretaries are seen as 'supporters', while public schools are labeled as 'neutral contributors'. Government secondary schools and regional/local government administrative secretaries are regarded as 'key contributors', while heads of neighborhood development unions, classified as 'supporters', also play an essential role. Several stakeholders, like religious leaders are considered 'crucial allies' when it comes to involving local authorities in ASRH matters.
7.	Bhuiya, <i>et al</i> (2017) Strategies to Build Readiness in Community Mobilization Efforts for Implementation in a Multi-Year Teen Pregnancy Prevention Initiative ²²	to implement the Youth First program, a local effort to reduce teen pregnancies, is assess. The assessment also informs the measures utilized to improve community readiness.	Qualitative research	Also, among the 25 interviewed, there were three stakeholders each representing a different Latino-based organization.	Strategies for readiness: increase stakeholder education about adolescent pregnancy, share initiative findings annually with the community mobilization team for updated data and progress reports, identify barriers to addressing adolescent pregnancy and establish a clear leadership structure to support collaboration, promote local leadership, and build community infrastructure.

'friends', who support the ASRH policy-making process. In implementing the ASRH program, most public institutions are categorized as 'saviours'. Most of these institutions are classified as 'trip wire' at local government levels. ASRH policy development note that traditional village heads and regional government secretaries were noted as 'friends', and public schools were classified as 'acquaintances'. Stakeholders, including religious leaders are classified as 'saviours' regarding the involvement of local authorities^{20,21}.

Community role models in preventing teenage pregnancy

The literature identified several community role models that could be applied to prevent teenage pregnancy: the community dialogue model, the community as a partner model, and the community readiness model.

First, Community dialogue model; this model contribute to parents' awareness of the need to ensure that adolescents receive appropriate information about reproductive health, are able to make decisions, and to be willing to communicate with their adolescent children about reproductive health topics. The community's perception and experience regarding the role of stakeholders in preventing adolescent pregnancy using the community model as a partner is important in order to build the agency for preventing adolescent pregnancy¹⁹.

Second, Community as partner model; This model emphasizes the importance of community-wide collaboration with stakeholders. Health workers play a key role as health advocates or facilitators, helping the community achieve, maintain, and promote health. By strengthening the community's ability to address health issues independently, this model aligns with primary health care principles and reinforces comprehensive interventions for preventing teenage pregnancy. The competence of stakeholders to solve their own problems enhances the community's defense mechanisms against high rates of teenage pregnancy²⁰.

Third, Community Readiness Model; Research on community readiness in adolescent pregnancy

prevention programs found the following: 1) Perceived level of readiness: The majority of stakeholders are ready to address adolescent pregnancy, despite the need for additional staff and funding; 2) Existing resources and efforts: some have provided evidence-based sexual health education or information, offered contraception to teens, and participated in adolescent pregnancy prevention coalitions; some have provided financial investment; some stakeholders expressed the need to share data on adolescent pregnancy and the impact of prevention programs on organizations, and some stated that specific data on adolescent pregnancy prevention program activities should be collected; 3) Leadership: more than half of respondents are interested in playing a role in the community representing their organization in adolescent pregnancy prevention programs, they need additional information and training to address this problem appropriately; 4) The community is in the initial planning stages to address adolescent pregnancy prevention²².

Discussion

Based on the results of the analysis of seven articles by looking at the suitability of the topic, objectives, methods used, sample size and the results of each article, it was found that various efforts to prevent adolescent pregnancy were carried out involving the participation of communities. The main focus was on teenagers themselves, where efforts to help teenagers to prevent and avoid pregnancy require self-resilience which is supported by the community around teenagers, in this case namely parents, peers, teachers, and community leaders including religious and traditional leaders. Leveraging young women's relationships with those closest to them, who are considered sources of social capital, presents a significant opportunity to address reproductive and sexual health issues effectively. Encouraging these influential individuals, such as family members and community leaders, to educate girls about abstinence and the use of personal protection can help prevent premarital sex and teenage pregnancy. By accessing and utilizing social capital—through family support, social networks, and community organizations—

young women can increase their resilience and reduce the likelihood of experiencing teenage pregnancy. This approach underscores the importance of a supportive social environment in empowering young women to make informed decisions about their reproductive health. Parents, relatives, teachers and religious groups are important sources of social capital for girls in developing resilience. Girls who have access to social support from these sources are more likely to avoid the risk of adolescent pregnancy.

This study suggests that stakeholders and policymakers should ensure that girls receive appropriate information in addition to the valuable social support they get from parents, relatives, teachers, and religious groups. This support helps reduce the risk of adolescent pregnancy by offering guidance, knowledge, and resources to teenage girls. These sources of social support play crucial roles in shaping the behaviour and decision-making of adolescent girls, helping them to become more resilient to adolescent pregnancy. Parents and relatives are especially important in providing this support. They establish the norms and expectations within the family, offering guidance on relationships, sexuality, and reproductive health. Furthermore, they provide emotional support and encouragement to help girls make responsible choices. When parents and relatives promote open communication and maintain a supportive atmosphere, they help adolescent girls build self-worth, self-esteem, and self-confidence. These qualities act as protective factors against engaging in risky sexual behaviour.¹⁶

Teachers play important roles in reducing the prevalence of adolescent pregnancies by providing education and guidance on sexual and reproductive health. Sexuality education in schools aims to reduce unplanned pregnancies and sexually transmitted infections and to improve the quality of adolescent sexual life²³. Religious groups can provide social support by promoting values, beliefs, and norms that prohibit premarital sex and adolescent pregnancy. The information religious leaders share with youth helps them live responsible lives. The research results show that; religious leaders consider the promotion of adolescent sexual

reproductive health and rights to imply an increase in sexual immorality. Religious leaders have a protective and preventive influence in promoting adolescent sexual reproductive health and rights.

Community-based adolescent pregnancy prevention initiatives have succeeded in increasing access to adolescent reproductive health services through the establishment of Adolescent Health Centres and the implementation of various strategies. The evaluation demonstrated positive changes in knowledge and desired behaviour among youth. The development and promotion of a full-service adolescent health centre as part of a community-based teen pregnancy prevention initiative resulted in increased access to adolescent reproductive health services. Strategies implemented include building community support, providing technical assistance to health departments, strengthening referral partnerships, and educating adolescents about how to access reproductive health services. The opening of the Teen Wellness Centre led to a significant increase in the number of adolescent clients receiving reproductive health services, including family planning services. This program highlights the importance of using data to inform strategies, promoting reproductive and sexual health to adolescents and adults, providing information about reproductive and sexual health access to adolescents, and adopting a multicomponent approach to the prevention of adolescent pregnancy¹⁷.

Peer education have had positive educational experiences and personal growth, and want to serve as mentors to their peers. Some participants face challenges in mentoring other participants due to religious, cultural and community influences. The importance of involving churches, communities, cultures, and diverse norms and traditions in discussions about contraception for effective teen pregnancy prevention, including nursing staff attitudes, gender inequalities, accessibility to contraception, misconceptions, and sociocultural expectations. Peer education provides guidance, motivation, and emotional support to adolescents that is critical in making decisions regarding contraception. The opinions of parents and community members can influence peer educators'

ability to guide others. This can create fear or shame among young people, making it difficult for peer educators to discuss these topics openly and honestly. Participants who underwent a peer education training program on teen pregnancy prevention reported positive experiences and personal growth. This program empowers them to be assertive and have a voice in their relationships and believe in themselves. Peer educators serve as mentors and believe that their experiences and knowledge can influence others in a positive way. This empowers them, increases their self-esteem, and equips them with the knowledge and skills to make informed decisions about their sexual health¹⁸. Peer education and the involvement of education on reproductive health in the curriculum is a method that can improve adolescent understanding of reproductive health²⁴.

Community dialogue was effective in encouraging open discussions about sexual and reproductive health, improving parent-child communication, and raising awareness of children's rights and collective responsibilities. The main benefits of community dialogue meetings include: 1) provide as a safe and respectful space for parents and children to discuss sensitive topics, such as sexual and reproductive health. This leads to more open and honest communication between parents and children, removing cultural barriers and allowing for meaningful conversations; 2) help parents learn effective strategies for discussing sensitive topics with their children like sexual health and early marriage, which have traditionally been considered taboo; 3) raise awareness among parents about children's rights, including the right to education, protection from early marriage, and access to sexual and reproductive health information. Parents are becoming more informed about these rights and are expressing a collective responsibility to ensure the well-being and empowerment of their children. Facilitators encourage active participation and dialogue among parents, leading to open discussions about sexual and reproductive health topics. Group interactions and sharing of experiences during meetings help parents clarify their values and feel more comfortable communicating about sexual and reproductive health issues with their children.

Cultural and religious beliefs among parents regarding the use of condoms and contraceptives pose challenges in conveying reproductive health messages. Challenges faced in conveying reproductive health messages at community dialogue meetings, especially those related to cultural and religious beliefs¹⁹.

Strategies for building community readiness are mapped into the following readiness domains: 1) the need for increased stakeholder education; 2) periodically present initiative evaluation findings to the community mobilization team; 3) identify barriers to addressing teen pregnancy, including a lack of appropriate tools and resources to support prevention efforts. Collaboration with adolescent builds their capacity and clarifies their role in supporting the program; 4) A clear leadership structure for partnerships to function well. To ensure efforts are aligned and integrated, develop and implement strategies to promote local leadership and build community infrastructure to support collaboration. The implementation of adolescent reproductive and sexual health initiatives is supported by important stakeholders; however many pertinent government and non-government organizations are not involved in the policy-making process. To strengthen the sense of ownership and sustainability of adolescent reproductive and sexual health program interventions, there is a need for more active and intentional participant of relevant stakeholders in policy formulation.

Strengths, weaknesses, and policy implications

This study highlights the critical role of society in preventing teenage pregnancy, identifying society as a vital source of social capital for adolescents to enhance their reproductive and sexual health quality. It emphasizes the significant influence of religious institutions, ethnicity, cultural values, and community leaders in shaping adolescent sexual behavior, mapping the roles of various stakeholders. Several models illustrate community involvement in preventing teenage pregnancy, such as community dialogue, the community as partner model, and the community readiness model. These findings guide

stakeholder engagement prioritization and inform effective and efficient resource allocation. However, the study's focus on the societal role does not encompass the comprehensive system necessary for effective prevention. Successful prevention programs require the active participation of individual teenagers, parents, families, communities, and the government. To combat high rates of teenage pregnancy effectively, a holistic approach integrating efforts from the home, school, community, and healthcare environment is essential.

Adolescents are an underserved population, yet reproductive health services are crucial for preventing teenage pregnancy. The strategies documented in this study offer valuable insights for communities and stakeholders interested in improving adolescents' access to reproductive health information and services. Policymaking must involve the community, considering local religious and cultural contexts. This includes assessing community readiness for planning, implementing, and evaluating policies and mobilizing the community to support teenage pregnancy prevention initiatives on a broader scale.

Conclusion

The community plays an important role in supporting teenagers to prevent risky sexual behaviour which can result in unwanted pregnancies. A multicomponent approach is needed so that the programs implemented can be successful, by identifying each role. The existence of social capital (family ties, religious and educational institutions), youth-centred clinics with complete services, peer educator training have a positive impact on reducing cases of adolescent pregnancy through efforts to promote adolescent reproductive and sexual health.

Contribution of authors

Riyanti : conceptualized and designed the study

Muji Sulistyowati: conceptualized and edited the paper

Ira Dwijayanti : wrote the discussion and edited the paper

Rini Fortina: wrote the discussion and edited the paper

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References

1. United Nations. Fertility among Young Adolescents at Ages 10-14 Years - A Global Assessment Fertility Among Young Adolescents. 2020. <https://www.un.org/>
2. Central Bureau Of Statistics, National Population And Family Planning Board, And Ministry Of Health Of The Republic Of Indonesia. Indonesia Demographic And Health Survey. Adolescent Book. 2017. <https://archive.org/details/LaporanSDKI2017>
3. WHO. Adolescent pregnancy. The Lancet 2022: 335 <https://www.who.int/news-room/fact-sheets/detail/adolescent-pregnancy>.
4. Kennedy E, Gray N, Azzopardi P and Creati M. Adolescent fertility and Family Planning in East Asia and the Pacific: a review of DHS reports. *Reproductive Health* 2011;8(11) :1-12. doi:10.1186/1742-4755-8-11
5. Habito CM, Vaughan C and Morgan A. Adolescent sexual initiation and pregnancy: What more can be learned through further analysis of the demographic and health surveys in the Philippines? *BMC Public Health* 2019;19(1142): 1–13 <https://doi.org/10.1186/s12889-019-7451-4>
6. Ali A., Khaliq A, Lokeesan L, Meherali S and Lassi ZS. Prevalence and p Predictors Of Teenage Pregnancy In Pakistan: A Trend Analysis From Pakistan Demographic And Health Survey Datasets From 1990 To 2018. *International Health* 2022; 14: 176–182. Doi:10.1093/Inthealth/Ihab025.
7. Kidan Ayele BG, Gebregzabher TG, Hailu TT and Assefa BA. Determinants of Teenage Pregnancy in Degua Tembien District, Tigray, Northern Ethiopia: A community-Based Case-Control Study. *Plos One* 2018; 13(7): 1–15. <https://doi.org/10.1371/Journal.Pone.0200898>
8. Sámano R. Family Context and Individual Situation of Teens before, During and After Pregnancy in Mexico City. *BMC Pregnancy Childbirth*. 2017; 17 (1), 1–16. <http://dx.doi.org/10.1186/S12884-017-1570-7>
9. Effendi DE, Handayani L, Nugroho AP and Hariastuti I. Adolescent Pregnancy Prevention in Rural Indonesia: A Participatory Action Research. *Rural*

- Remote Health. 2021; 21(3): 6639. <https://doi.org/10.22605/RRH6639>
10. Biney AAE and Nyarko P. Is a Woman's First Pregnancy Outcome Related to Her Years of Schooling? An Assessment of Women's Adolescent Pregnancy Outcomes and Subsequent Educational Attainment in Ghana. *Reproductive Health* 2017;14(123):1–15 <http://dx.doi.org/10.1186/s12978-017-0378-2>
 11. Timæus IM and Moultrie TA. Teenage Childbearing and Educational Attainment in South Africa. *Studies In Family Planning* 2015; 46 (2), 143–160. <http://dx.doi.org/10.1111/J.1728-4465.2015.00021.X>
 12. Mann ES, Cardona V and Gomez CA. Beyond the Discourse of Reproductive Choice: Narratives of Pregnancy Resolution among Latina / o Teenage Parents. *Culture, Health & Sexuality*, 2015; 17(9):1090–1104. <http://dx.doi.org/10.1080/13691058.2015.1038853>
 13. Nieuwenhuijze M and Leahy-Warren P. Women's Empowerment in Pregnancy and Childbirth: A Concept Analysis. *Midwifery*.2019;78:1–7 <http://dx.doi.org/10.1016/j.midw.2019.07.015>
 14. Sell M and Minot N. What factors explain women's empowerment? Decision-Making among Small-Scale Farmers in Uganda. *Womens Studies International Forum*.2018;71, 46–55 <https://doi.org/10.1016/j.wsif.2018.09.005>
 15. Sulaeman ES, Karsidi R, Murti B and Kartono DT. Community Empowerment Mon the Ability in Health Problem Solving: A Community-Based Study in Indonesia. *Advanced Science Letters*2017;23(1): 427–431. <http://dx.doi.org/10.1166/asl.2017.7207>
 16. Gyan SE, Ahorlu C, Dzorgbo DBS and Fayorsey CK. Social Capital And Adolescent Girls' Resilience To Teenage Pregnancy In Begoro, Ghana. *Journal Of Biosocial Science* 2017; 49(3), 334–347. <https://doi.org/10.1017/S002193201600047X>
 17. Sotolongo J, House LD, Swanson S and Davis SEH. Integrated Community Strategies for Linking Youth to Adolescent Reproductive Health Services: A Case Study. *Journal Of Adolescent Health* 2017; 60(3S), S45–S50. Doi: 10.1016/J.Jadohealth.2016.11.026.
 18. Roets L and Clemence IS. Teenage Pregnancy Prevention: The Church, Community, Culture And Contraceptives. *African Journal Of Reproductive Health* 2021; 25 (6), 51–57. Doi: 10.29063/Ajrh2021/V25i6.6
 19. Zulu IZ, Zulu JM, Svanemyr J, Michelo C, Mutale W and Sandøy, I. F. Application Of Community Dialogue Approach To Prevent Adolescent Pregnancy, Early Marriage And School Dropout In Zambia: A Case Study. *Reproductive Health* 2022; 19 (1), 1–9. <https://doi.org/10.1186/S12978-022-01335-8>
 20. Oyedele O, Wright S and Maja T. Guidelines for Community Participation in Teenage Pregnancy Prevention Based on the Community-as-Partner Model. *Journal Of Scientific Research & Reports* 2015; 5 (3), 234–247.
 21. Agu C, Mbachu C, Agu I, Iloabachie U and Onwujekwe O. An Analysis On The Roles And Involvements Of Different Stakeholders In The Provision Of Adolescent Sexual And Reproductive Health Services In Southeast Nigeria. *BMC Public Health* 2022;22 (1), 1–14. <http://dx.doi.org/10.1186/S12889-022-14644-1>
 22. Bhuiya N, House LD, Desmarais J, Flethcher E, Conlin M, Perez-Mcadoo S, Wagget J and Tendulkar SA. Strategies To Build Readiness In Community Mobilization Efforts For Implementation In A Multi-Year Teen Pregnancy Prevention Initiative. *Journal Of Adolescent Health* 2017; 60 (3S), S51–S56. <http://dx.doi.org/10.1016/J.Jadohealth.2016.11.001>
 23. Vieira Martins M, Karara N, Dembinski L, Jacot-Guillarmod M, Mazur A, Hadjipanayis, A and Michaud P. Adolescent Pregnancy: An Important Issue For Paediatricians And Primary Care Providers—A Position Paper From The European Academy Of Paediatrics. *Frontier In Pediatrics* 2023; 11(1), 1–6. <https://doi.org/10.3389/Fped.2023.1119500>
 24. Sari IP. The Effective Methods and Medias Used in Health Promotion about Adolescent Health Production. *The Indonesian Journal Of Public Health* 2023; 18 (3), 505-517. <https://doi.org/10.20473/Ijph.V18i3.2023.505-517>