

Use of Contraceptives among Adolescents: What Does Global Evidence Show and How Can Nepal Learn?

Dirgha Raj Shrestha,¹ Rajendra Bhadra,² Ganesh Dangal³

¹Health and Development Solutions, Kathmandu, Nepal, ²Health and Development Solutions, Kathmandu, Nepal, ³Department of Obstetrics and Gynecology, Kathmandu Model Hospital, Kathmandu, Nepal.

ABSTRACT

Background: Adolescent pregnancy is a global health problem. Early pregnancies among adolescents have major health consequences for adolescent mothers and their babies. Contraceptives can prevent early pregnancy and its consequences. However, there is a low use of contraceptives among adolescents. Global evidence has shown which programmatic approaches are effective to increase the use of contraceptives among adolescents.

Methods: This is not a systematic review. Desk review was done using Google Scholar and PubMed. Different policies, strategies, and reports published by agencies were also reviewed.

Results: There is a low use of contraceptives and high unmet need for family planning and high adolescent fertility rate. Various studies conducted in different parts of the world have shown that there are some programmatic approaches implemented which are effective to improve the contraceptives use among adolescents. We have categorized the findings into three parts; i) delivery of services ii) increasing demand for services, and iii) creating an enabling environment.

Conclusions: The use of contraceptives is low among adolescents in low- and middle-income countries including Nepal. So, the current programmatic approaches should be reviewed and the evidence-based practices implemented to bring better results. Ministry of Health and Population and partner agencies in Nepal also need to review the current programmatic approaches and implement them based on the evidence-based practices to improve contraceptives use among adolescents.

Keywords: adolescents; contraceptive; evidence-based

INTRODUCTION

There are an estimated 1.2 billion adolescents (10-19 years old) in the world. One in six of the world's population comprise of adolescents today, which is the largest population of adolescents in the history of mankind.¹ More than half of all adolescents globally live in Asia. South Asia is home to more adolescents - around 340 million adolescents, which is higher than any other region.² Adolescence is an important stage of human development and an important time for laying the foundations of good health.³ Investing in adolescent health-related programs will bring triple dividends: better health for adolescents, improved well-being and productivity in their future adult life, and reduced health risks for their children.⁴ Numbers of adolescents experience the health problems related to

consequences of early and unprotected sexual activity, unintended pregnancy, unsafe abortions, pregnancy-related mortality and morbidity, STIs including HIV, and the social and economic costs.⁵ Much of this is preventable or treatable. Adolescent pregnancies are a global problem and are more likely to occur in marginalized families and communities.⁶ This study aims to identify the global evidence-based practices improving contraceptive behaviors among adolescents. The findings of this study will be helpful to fulfill the contraceptive needs of adolescents in Nepal.

METHODS

This is not a systematic desk review. We searched articles especially focusing on evidence-based peer reviewed documents published in various open

Correspondence: Mr Dirgha Raj Shrestha, Health and Development Solutions (HEADS), Baluwatar, Kathmandu Nepal, Email: dirgharajshrestha@gmail.com, Phone: +9779851074163.

access journals. In addition, we also reviewed the strategies, guidelines, and reports published in the area of adolescent sexual and reproductive health (ASRH) and adolescent contraceptives published by different organizations. Moreover, after identifying the appropriate articles and reports in the area of adolescent contraceptives, we used snowballing to search cited lists, grey literature, and relevant program Web pages. The electronic database PubMed along with Google Scholar search engines were used for the literature search. The keywords used for searching the literature were “adolescent contraceptive”, “evidence based”, “systematic literature review”, “what works and does not work” “policy”, and “framework”.

RESULTS AND DISCUSSION

We reviewed over 50 publications, including peer-reviewed original research articles, review articles, and grey literature. The included reviews cover global evidence and policy documents, including the ones for low resource settings. Studies clearly show that early pregnancies among adolescents have many health consequences for adolescent mothers and their babies.

Pregnancy and childbirth complications are the leading cause of death among adolescent girls, in low- and middle-income countries accounting for 99% of global maternal deaths of women aged 15-49 years.⁷ Adolescent girls aged 15-19 are twice as likely to die of pregnancy related complications as their peers who are over 20 years of age, while younger women under the age of 15 are five times more likely to die. Their babies were 50% more likely to die than children born to women in their 20s.⁸ Adolescent pregnancy can also have negative social and economic effects on girls, their families, and communities.

Access to contraceptives information and services can minimize early pregnancy and thus consequences of its effect on their health. Young people can safely use any contraceptives method. Age is not a medical reason for denying any method to adolescents.⁹ However, in real situation, adolescent girls are significantly less likely to use modern contraceptives and more likely to have an unmet need for family planning especially in low-and middle-income countries.¹⁰ Only 22 percent of adolescent females have contraceptives use as compared to 60 percent for women older than 30 years of age.¹¹ They are facing barriers related to availability, accessibility, and acceptability. In many places, contraceptives are not available to adolescents (especially unmarried ones)

because of restrictive laws and policies. In addition, they are not using the contraceptives correctly due to fear of confidentiality, limited or incomplete knowledge of how to use them, myths and misconception, and fears of side effects.¹² In resource-poor settings, low-quality services also hinder access to services for them. The use of contraceptives could prevent unintended pregnancies in developing countries and save millions of lives and improve the social status of young women in developing countries.¹³ According to WHO, meeting the unmet need for modern contraception in adolescents would reduce unintended pregnancies among this age group by 6.0 million annually, leading to 2.1 million fewer unplanned births, 3.2 million fewer abortions, and 5600 fewer maternal deaths.¹⁴ Moreover, it will boost women’s education and economic prospects.³

Findings of the review have been analyzed and documented using the three most important factors i) Delivery of Services ii) Increasing demand for services, and iii) Creating enabling environment. These are essential components of quality family planning services which help to meet clients’ reproductive intentions.¹⁵

EVIDENCE-BASED AND HIGH IMPACT PRACTICES

There are increasing trends in the use of evidence-based programs and intervention in the public health program. Evidence-based programs represent the “gold standard” along a continuum of what research supports as effective and these are usually published in scientific literature such as in professional journals, books, or government reports.¹⁶ In order to better facilitate the use and scale up of evidence-based practices in family planning, a list of high impact practices (HIP) in family planning programs have been developed. HIPs are a set of evidence-based family planning practices vetted by experts against specific criteria and documented in an easy-to-use format.¹⁷ HIPs are used for advocacy, program design to inform policies and guidelines, and to support implementation.¹⁸ In the past, activities and interventions were usually designed and implemented based on experience, intuition, tradition, and other loose bodies of knowledge.¹⁹ When such activities and interventions are implemented, they frequently do not provide intended outcomes and it also wastes time and effort. Evidence-based program does not work the same for everyone.²⁰ Contextual factors also plays a greater role in the success and failure of the program. So, the programmatic approach or solution which works in one part does not guarantee that it works in other parts of the world.

FINDINGS ON PROGRAMMATIC APPROACHES

Delivery of services

Adolescent friendly services: Adolescent friendly services (AFSs) are a widely used approach to support adolescents to obtain the contraceptive methods they need. However, successful examples of adolescent-friendly programs that have demonstrated an impact on adolescent contraceptive behaviors are sparse and varied in their approaches.¹³ Providers need to be adequately trained on the medical techniques and contraceptive options, counseling skills, and knowledge of current relevant guidelines in order to provide high quality family planning services to adolescents.²¹ They also need to be responsive to the social and emotional needs of adolescents. The interventions that utilize trained youth assistants have had some success.²² A number of evaluations on AFSs have shown that the following 4 complementary approaches must be implemented together to get success; i) providers are trained and supported to be nonjudgmental and friendly to adolescent clients, ii) health facilities are welcoming and appealing, iii) communication and outreach activities inform adolescents about services and encourage them to make use of services, and iv) community members are supportive of the importance of providing health services to adolescents. However, many projects and programs around the world that aimed to provide AFSs did not implement these 4 approaches together.²³ Facilities must have a welcoming atmosphere, adequate stocks of commodities, and empathetic and competent health workers.²⁴ An evaluation of youth-friendly services in Zambia found that positive changes in social and community-level factors were as important in improving adolescents' use of reproductive health information and services as making services youth-friendly.²³

Use of variety of outlets: Use of a variety of outlets can improve their access to contraceptives information and services - on the spot or through referral.²⁵ A social franchise intervention which was specifically branded as providing services for adolescents and providers who received training in AFSs, was also able to increase the number of adolescents seeking services.²⁶ The systematic reviews found that workplace-based programs can greatly impact adolescents' reproductive health knowledge and attitudes and have the potential to impact sexual behavior as well.²⁷ Mobile clinic and home-based service delivery, as well as policies permitting pharmacies to sell emergency contraception (EC) without a prescription, were found to be some of the most effective approaches to increasing access.^{28,29}

Youth centers: The use of youth centers is one of the widely implemented activities in the field of ASRH which is usually conceptualized as meeting points and "one-stop shops" for adolescents to get information and non-clinical commodities. However, a number of evaluations have shown this approach is not effective as it does not result in increased use of SRH services or any meaningful SRH behavior change.³⁰ However, the centers may be better positioned to improve reproductive health knowledge.^{31,32}

Increasing Demand for Services

Use of mass media: Mass media (radio and television programs), peer-education, and interpersonal communication and information education communication materials (such as posters and leaflets) have been used mostly to communicate health information to adolescents and to influence their norms.³³ The systematic reviews concluded that mass media can clearly influence adolescents' knowledge and attitudes, however, there is less evidence that these programs consistently and directly influence sexual behavior.³⁴ Mass media programs have been largely successful in contributing to changes in knowledge and communication around contraceptives use.³⁵ Programs that incorporated multiple types of media were the most successful in changing not only knowledge but also behaviors.³⁶ Studies further suggest that large-scale, more broadly targeted campaigns are most effective when coordinated with other interventions such as school-based or clinic-based programs, and when they are developed and implemented through multiple channels with mutually reinforcing messages. Mass media programs that target specific contraceptive methods use and deliver messages through multiple media channels, including the Internet, mobile phones, and social networking services have been the most successful.³⁵

Use of digital media: Mobile phone technology, the Internet and social media are increasingly being used in almost all the countries. These technologies are potentially valuable for communicating contraceptive information and options to adolescents conveniently and discretely.³⁷ A systematic review found that the interventions that showed significant improvement in contraceptives uptake used a combination of unidirectional and interactive communication styles and involved multiple BCC components. However, simple unidirectional text message reminders had no effect on improving contraceptives uptake. Involvement of male partners was also found to be most effective in LMICs.³⁸

School-based programs: The evidence strongly indicates that school-based programs are more likely to change knowledge and attitudes than impact sexual behaviors.³⁹ Adolescents who are in school are less likely to have sex and more likely to use contraception when they do have sex. In fact, each additional year of a girl's education increases contraceptives use and reduces fertility by ten percent.⁴⁰

Peer to peer education: This approach is also widely used for educating and changing behaviors of sexual and reproductive health. The systematic reviews found that peer-to-peer education programs were effective in changing adolescents' knowledge and attitudes but does not improve behaviors related to family planning and fertility outcomes.⁴¹ However, peer education might be more effective if it is integrated into holistic interventions and if the role of peer educators is redefined in a way that makes them a source of sensitization and referral to experts and services.⁴²

Comprehensive sexuality education (CSE) has been well-evaluated and has been shown to improve ASRH knowledge, attitudes, and behaviors when implemented well. However, the CSE program should be implemented in a proper way.⁴³ Studies show, however, that many school-based CSE programs are not implemented with adequate attention to essential characteristics, and the curriculum content tends to be weak.²³

CREATING ENABLING ENVIRONMENT

Laws and policies should be developed appropriately to ensure that adolescents are able to obtain contraceptive information, counseling and services. In addition, contraceptives should be provided to adolescents at no or reduced cost. WHO has suggested improving the understanding of influential community leaders and of the community at large on adolescent's needs for information and contraception, and the risks to their wellbeing of not responding to these needs.⁴⁴

Clear guidelines that support health professionals to provide services and information to adolescents are critical for expanding adolescents' access to services. The facility should have copies of relevant service delivery policies and standards, and providers should be well oriented on their use.⁴⁵

Major partner agencies working in the area of ASRH⁴⁶ have made global consensus and statement for expanding contraceptives choice for adolescents and youth and recommended on creating an enabling environment for a full range of method choice for adolescents and youth,

partner with adolescents and youth, and encouraging them to advocate for themselves, appropriate task-sharing of responsibilities among providers, strengthen pre-service and in-service education, and ensuring robust and sustainable health systems for quality services.

The use of contraceptives by adolescents is very low among the poor and marginalized communities residing in hard to reach areas. Social norms and the role of male partners also affect a lot in the utilization of contraceptives by adolescents. However, there is a gap in evidence on how the program can effectively reach these adolescents and what approaches could help to create positive social norms and ways to engage male partners for joint decisions on the use of contraceptive methods.

SITUATION IN NEPAL

In Nepal, adolescents comprise nearly a quarter of the total population (23.6 %) in 2011 and it is estimated to be 19.4% by 2020 (middle variant).⁴⁷ More than one-fourth (27%) of adolescents age 15-19 years are married, although the legal age for marriage for Nepal is 20 years. About 17% of adolescent girls 15-19 years were either pregnant or already had their first child. As compared to married women, adolescents have the highest unmet need for family planning (35%) compared to the average unmet needs (24%).⁴⁸ The use of modern methods of contraception among female adolescents increased from 4% in 1996 to 14% in 2006. However, it has been stagnated since 2006.⁴⁹ Adolescent Fertility Rate (AFR) was decreasing steadily from 1996 to 2011, however, it increased slightly between 2011 and 2016 (increased from 81/1000 births in 2011 to 88/1000 in 2016).⁴⁸ It is creating a challenge for the country to achieve SDG target of 51/1000 in 2022 and 30/1000 births in 2030. The existing AFR is much higher than the average of South East Asia region (54 per 1000).^{49,50} So, why has the adolescent fertility rate increased? Why has the use of modern contraceptives among adolescents stagnated between 2011 and 2016?. These remain big questions for the policymakers and implementers.

Ministry of Health and Population (MoHP), Family Welfare Division (FWD) and partner agencies are implementing various activities to increase utilization of contraceptives services among the adolescents and overall sexual and reproductive health and rights. FWD, National Health Training Centre (NHTC) and National Health Education, Information and Communication Centre (NHEICC) are implementing various activities to scale up health facilities as AFS, conducting training for service providers, school health programs, establishing

information center, sensitizing program for students, teachers and parents, and distribution of sanitary pads at school.^{47,48,50} Similarly, partner organizations are implementing youth information centers, youth friendly service centers, peer education program, radio interactive programs, hotline services, printing and distributing Information, Education and Communication (IEC) materials, service through private medical shops, and so on.⁴⁷

A number of studies have found that the most widely implemented interventions and intervention-delivery mechanisms are ineffective. Some of the interventions that were found to be delivered ineffectively e.g. delivered piecemeal basis, inadequate dosage (i.e., they are of low intensity or for a short duration), and inadequately reached the target population.²³ To achieve better results in improving the use of contraceptives by adolescents, we need to ensure that these activities are designed and implemented based on adequate evidence, used a holistic approach, incorporated essential components of the intervention, and implemented for an appropriate time period.

CONCLUSIONS

Adolescent pregnancy is one of the global health problems. Early pregnancies among adolescents have major health consequences for adolescent mothers and their babies. The use of contraceptive services by adolescents can minimize unintended pregnancy and its consequences on adolescents and their babies. Adolescents can safely use any type of modern contraceptives. However, the use of contraceptives is very low in comparison to adult women. Overall, the policy in Nepal is supportive of adolescent family planning use. MoHP and partner agencies are implementing various programmatic approaches to increase the use of contraceptives among adolescents. However, the use of contraceptives among Nepali adolescents is very low and the unmet need is very high. There is also an increase in the AFR in 2016 as compared to 2011. Review of the current interventions of the programmatic approaches as per the evidence-based and high impact practices might help Nepal design and implement better practices in the coming days.

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