REVIEW ARTICLE

Improving Adolescent Access to Contraception in Sub-Saharan Africa: A Review of the Evidence

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Abstract

Global commitments to and support for sexual and reproductive health (SRH) have increased over the past 10 years. Adolescent access to contraception has emerged as a crucial area of focus within this agenda, particularly in sub-Saharan Africa (SSA), where there is the greatest unmet need for contraception. Yet there is little synthesized knowledge around adolescents' use and knowledge of, and access to contraception in SSA. This review summarizes and analyzes literature on the subject in order to determine implications for policy and program development, and to guide future research. The majority of existing research focuses on South Africa, with numerous studies from East Africa also present. Most of this research is qualitative, with few mixed method studies, and only one randomized control trial of an intervention. Findings from multiple countries confirm that adolescents in SSA have a significant unmet need for contraception. Most adolescents get their information about contraception from the media or peers. Persistent myths regarding effectiveness and side effects, as well as cultural and gender norms, impede access to and demand for contraception. Other determinants of access and use include education level and socio-economic status. As a result, intervention evaluations note that cultural barriers and socio-economic conditions limit SRH outcomes. *(Afr J Reprod Health 2020; 24[1]: 152-164).*

Keywords: Family planning, Africa, youth, sexual health, reproductive health, policy, implementation

Résumé

Les engagements mondiaux et le soutien à la santé sexuelle et de la reproduction (SSR) ont augmenté au cours des 10 dernières années. L'accès des adolescentes à la contraception est devenu un domaine d'intérêt crucial dans ce programme, en particulier en Afrique subsaharienne (ASS), où le besoin de la contraception est le plus important. Pourtant, il existe peu de connaissances synthétisées sur l'utilisation, la connaissance et l'accès des adolescents à la contraception en ASS. Cette revue résume et analyse la documentation sur le sujet afin de déterminer les implications pour le développement des politiques et des programmes et d'orienter les recherches futures. La majorité des recherches existantes se concentrent sur l'Afrique du Sud et de nombreuses études provenant d'Afrique de l'Est sont également présentes. La plupart de ces recherches sont qualitatives, avec peu d'études de méthodes mixtes et un seul essai témoin randomisé d'une intervention. Les résultats de plusieurs pays confirment que les adolescents en ASS ont un besoin non satisfait significatif de contraception. La plupart des adolescents obtiennent leurs informations sur la contraception auprès des médias ou de leurs pairs. Les mythes persistants concernant l'efficacité et les effets secondaires, ainsi que les normes culturelles et de genre, entravent l'accès et la demande de contraception. D'autres déterminants de l'accès et de l'utilisation comprennent le niveau d'éducation et l'état socio-économique. En conséquence, les évaluations des interventions notent que les barrières culturelles et les conditions socio-économiques limitent les résultats de SSR. *(Afr J Reprod Health 2020; 24[1]: 152-164).*

Mots-clés: Planification familiale, Afrique, jeunesse, santé sexuelle, santé génésique, politique, mise en œuvre

Introduction

Global commitments to improve sexual and reproductive health (SRH) around the world have increased over the past 10 years. Sustainable Development Goals 3 and 5 include the target of ensuring universal access to SRH services and rights by 2030. These echo the UN Secretary-General's Global Strategy for Women's, Children's and Adolescents' Health. The number

of countries who have made Family Planning 2020 commitments has grown to 59, and bilateral aid for family planning increased by 32% between 2012 and 2014[1].

Efforts to improve SRH have identified adolescent SRH as a crucial area of focus. The Lancet Commission on Adolescent Health and Wellbeing, announced in May 2016, noted that, "Failure to address the distinctive challenges that come with adolescence could not only jeopardize all that has been accomplished so far"[2]. The Global Strategy on Women's and Children's Health has been expanded to focus on Women's, Children's and Adolescents' Health, and includes objectives to achieve universal access to contraception and address the unmet needs of adolescents.

These initiatives note that as adolescents experience the period of transition from childhood to adulthood, with the related biological and social changes, their sexual behaviors and decisions impact future social, educational and economic prospects[3]. As adolescent girls are biologically more at risk of sexually transmitted infections, bear the majority of the childcare burdens, and are more likely to experience stigma and isolation if they have children outside of cultural norms around marriage, their future can be particularly impacted by SRH outcomes. Despite the importance of ensuring adolescents' SRH, research, policy development and program implementation has been limited by lack of funding, political and cultural barriers, and limited knowledge around adolescent health needs[4].

Adolescents' access to contraception is a particularly pertinent SRH issue in SSA. Existing data indicate that SSA has the greatest need to scale up access to contraception[5]. One review found that knowledge of contraception methods was lowest among young women and men in SSA compared to other regions[6]. This is particularly troubling as, with 44 percent of its population under the age of 15, SSA has the highest concentration of adolescents[7, 8]. This youth bulge has potential positive economic and social development implications. However, if family planning programs are not effective in meeting the demand for contraception, national economies could develop a large youth dependency burden[7]. Furthermore, as maternal mortality is a leading cause of death among young people (age15-24) in SSA, accounting for 15 percent of all deaths, lack of access to contraception shortens the lives of girls and young women[9].

Patton *et al*. note that the first step to improving adolescent SRH in SSA is "filling the knowledge gap around adolescent health"[10]. More specifically, Hindin *et al* noted for increased knowledge around contraception as a crucial area of adolescent SRH[10]. Yet there is little synthesized knowledge around adolescents' use of and access to contraception in SSA. Prata *et al*. found that "the need for a concerted effort to address the gaps in family planning services for youth in sub-Saharan Africa has been underreported and underexplored"[11]. There are reviews of contraception use among adults in SSA[12], as well as those that focus on adolescents in developing countries broadly[13,14], or SRH in general[15,16]. However, there has not been a systematic analysis of the evidence on adolescent access to, use and knowledge of, contraception in SSA specifically[17,18].

In order to assess current research on adolescents and contraception in SSA - what findings suggests, and what gaps remain - this review aims to summarize and analyze current literature on the subject in order to determine implications for policy and program development, and to guide future research agenda. This literature is reviewed to determine what is known about: level of access and unmet need for contraception among adolescents in SSA; adolescents' use and knowledge of contraception; determinants of contraception use; and interventions that aim to improve adolescent access and use of contraception.

Methods

Google scholar, POPLINE and Science Direct databases were searched for the terms adolescent(s) OR teenager(s) OR youth AND contraception OR family planning AND Africa in the title, keywords or abstract. Articles published in English since 2006 were downloaded in order to capture more recent research findings and in recognition of the increasing focus on adolescent

SRH over the past 10 years. Initially, 448 articles were downloaded (259 from Google Scholar; 111 from Popline; 56 Science Direct).

The abstracts of these were then read to determine if they met inclusion criteria, including: a focus on adolescent populations between the ages of 10-19 as defined by the WHO (as many studies include young people of varying age ranges we included all that fell within but not outside of this range; for example studies of 15-18 year old or school aged youth, but not studies of 16-25 year old); a primary focus on SSA as a region or countries within it (this included articles that focus on lower and middle income countries (LMICs) but had substantial sections related to SSA); and with clearly stated research methods. Articles that focused on preventing sexually transmitted diseases, as opposed to contraception, were excluded. Articles focusing on abortion were also excluded, due to the unique barriers and access issues related to abortions' illegal status in most SSA countries, which necessitates a separate review. Based on these criteria, we were left with 105 publications for analysis. Research published in peer reviewed journals (82), as well as studies by non-governmental (18) or governmental organizations (3) were included.

Sources were organized into themes, derived inductively from the reading of the abstracts and refined following the full review of all articles: unmet need or access to contraception; use of contraception; knowledge of contraception methods; determinants of contraception access and use; and impact evaluations of interventions. Some articles were classified under more than one theme. Research was further organized based on methods and countries of focus. The articles were then read, and findings were compared and analyzed within the themes to develop an overview of current knowledge, its implications and gaps.

Overview of the literature

Table 1 indicates the number of articles that focus on adolescents and contraception in specific countries in SSA. South Africa tops the list with 22 articles, followed by Ethiopia with 13, and Kenya and Tanzania with 12. Numerous countries are not represented in the literature. Many of these are Francophone countries, and so research from these countries may have been excluded by the search, which was conducted in English. 26 articles discuss contraception and adolescents in the SSA region or in LMICs in general. There is clearly need for more detailed research on many countries in SSA. Considering the high adolescent pregnancy and maternal mortality rates in West and Central Africa, much greater research is required in these countries[19].

The majority of published studies use qualitative methods (55), including eight review articles, and 18 commentaries that discuss the topic in general terms in relation to perceived policy and programming needs in SSA and LMICs broadly. 38 quantitative research papers were found, the majority of which consider levels of access and use among specific population groups (i.e. adolescents in townships in South Africa), though a few meta-analyses draw on Demographic Health Survey Data to generate regional statistics. 12 papers reflected a mixed methods approach.

Table 2 indicates the number of articles within each topic theme. Detailed analysis of key findings under each theme is described below.

Unmet need and access to contraception

Research, both quantitative and qualitative, from multiple countries repeatedly confirms that adolescents in SSA have a substantial unmet need for contraception. Focus group discussions conducted in Uganda document the multiple unmet SRH needs of adolescents, including access to youth friendly services that provide contraception[20]. Research on SRH needs of adolescents in Ghana finds that the majority of young women who had become pregnant would have accepted family planning assistance prior to the pregnancy if it had been available[21, 22]. A study of the 18 least developed countries in SSA found that 73.1% of adolescents felt it would be a problem if they became pregnant, but 92.4% of them were not using contraception[23]. Similarly, an assessment of unmet need for contraception in LMICs found that in a third of all countries in SSA, 40% of births by adolescents are unplanned[24]. Trends in addressing the gap in

Table 1: Number of publications by country

Country	Publications
Benin	1
Cameroon	1
Ethiopia	13
General SSA	26
Ghana	9
Kenya	12
Madagascar	4
Malawi	3
Mozambique	1
Niger	3
Nigeria	9
Rwanda	1
Senegal	1
South Africa	22
Swaziland	1
Tanzania	12
Uganda	7
Zimbabwe	2

Table 2: Number of publications by theme

Theme	Publications
Unmet Need/Access	7
Use of Contraception	17
Knowledge of Contraception	20
Detriments of Access and Use	26
Evaluations	17

contraception provision appear to vary: unmet need for family planning decreased in Ethiopia between 2000 and 2011[25], but increased in Kenya from 14% in 1998 to 26% in 2008-9[26]. However, differences in methods and time periods make results for such studies difficult to compare. There is need for much greater research to indicate where unmet need is increasing or decreasing, and why.

Use of contraception

Blanc *et al*. used Demographic Health Survey (DHS) data from 1986 - 2006 to determine trends and prevalence of contraception use in 20 SSA countries (as well as in 20 Latin American countries)[27]. They found that the average prevalence in SSA was 12% but note large differences within the region. For example, in nine countries prevalence was 20-34%, yet Namibia had a prevalence of 40%, while Sahel-Chad, Eritrea, Rwanda, Mali, Niger and Senegal had prevalence under 5%. Country case studies confirm a wide range of prevalence of use. A study in Uganda found that 35% of females between the ages of 15-19 used contraception at last sex, as did 57% of males[28], while a study from Ethiopia found that 79.2% of 15-19 years olds surveyed utilized family planning[29]. Multicounty studies find that more adolescents in urban areas (9.3%) use contraception compared to those in rural areas (6.2%)[25]. Similarly, research comparing contraception use in urban and rural Ghana found urban adolescents were more likely to use contraception than rural adolescents[30].

The majority of studies focused on condom use, noting that condoms are reported to be the most common form of contraception in SSA[31]. However, a USAID study on adolescents in Kenya found that there was increasing use of pills and injectables[32], and a DHS analysis found adolescents preferred injections and pills to other methods[25]. Where condoms are unavailable or undesirable, withdrawal (coitus interruptus) remains a common method of contraception[33].

In research based in Ethiopia, Booth analyzes qualitative evidence of young people's use of emergency contraception pills and finds use is increasing. Interestingly, this study notes that male partners are often the providers of and purchasers of emergency contraception for young women[34]. Through ethnographic studies, the study determined the reasons young peoples' use emergency contraception to include a perception that it is discreet and has minimal side effects on beauty and fertility[35,36].

Knowledge of contraception methods

Across SSA, knowledge of condoms appears to be the highest, compared to other contraception methods. A study from Ghana found that contraception related knowledge of the male condom was high among 88.9% of 793 respondents, while knowledge of other methods such as pills and injections was low (7.9 to 0.9%)[37]. Similarly, a study from Nigeria found that 67.5% of respondents had correct knowledge regarding condom use, while other studies indicate low knowledge of other methods of contraception, particularly of emergency contraception[38,39].

The most common source of information on contraception, as presented in the literature, is the media and peers[40-42]. Ngome *et al.* found that

having good access to the media is likely to increase contraceptive use[43]. Mekaku *et al*. noted that discussions on SRH with peers and family have a positive effect on contraceptive knowledge of students[44]. A number of studies analyze the role of parents in providing knowledge about contraception to adolescents, stressing the important role of parents as SRH educators[45,46]. The main barrier to effective communication between parents and adolescents around contraception is cultural norms that frame sexual activity as shameful or contraception as taboo[47]. Such research argues for interventions that empower parents with knowledge and tools to overcome these barriers in order to communicate effectively with their children.

While misconceptions around contraception use, particularly related to side effects and impact on future fertility, discourage adolescents from accessing contraception, research also indicates that improving knowledge about contraception does not necessarily result in behavior change[45,48]. Many of these studies employ a Knowledge, Attitudes, and Practice (KAP) framework to assess the relationships between learning and behavior. For example, Kanku *et al*. notes that though most teenagers in South Africa perceive negative consequences to early pregnancy and have knowledge of contraceptive methods, they still practice unprotected sex[49]. Another study of school-aged adolescents in South Africa found that despite having knowledge about the risks of unwanted pregnancy and sexually transmitted infections, many female adolescents continued to engage in unprotected sex[50]. Similarly, Anyanwu and Fulton find that though knowledge of condom use was high in their study of adolescents in Nigeria, incorrect use of condoms remained common[51]. Barriers to accessing condoms, due to lack of availability or embarrassment were cited as reasons for infrequent use despite high SRH knowledge[52]. Conversely, Meekers *et al* found a correlation between perceived effectiveness and condom use among youth in Madagascar[53]. Similarly, relationships are demonstrated between knowledge of reproductive health and utilization of health services in multiple contexts[54,55]. Mixed findings on the relationship between knowledge and use, suggest that knowledge is only one of many determining factors related to contraception use.

Determinants of contraception access and use

Cultural beliefs and gender norms greatly influence contraception use. Numerous studies note that barriers to operationalizing knowledge related to contraception use include peer pressure and young women's difficulty in negotiating condom use with male partners[56-59]. Research from South Africa, Kenya and Tanzania finds a relationship between female adolescents who have an older partner and low rates of condom use[60-62]. These studies indicate that older male partners often determine condom use due to their position of power within the relationship.

Across various contexts, tensions are apparent between adolescents' positive perception of contraception as essential to their health and well-being, and negative perceptions based on cultural beliefs and gender norms[63,64]. The idealization of gender roles influence adolescents' attitudes towards and use of family planning in Northern Uganda, with girls reluctant to use contraception because it contradicts their idealized roles as future mothers[65]. Similarly, cultural norms around early marriage and practices related to initiation rites in Tanzania, prevented adolescent girls from accessing contraception services[66]. Research in a township in South Africa found that cultural norms resulted in high rates of early childbearing[67]. A World Bank assessment of the SRH needs of adolescents in Niger found that while knowledge of contraception was high, the majority of adolescent girls did not use it due to societal and cultural beliefs[68].

Numerous studies note that health workers' attitudes discourage and prevent adolescents from accessing contraception. For example, in one study, more than half of Nigerian health workers surveyed felt that adolescents who asked for contraception should be encouraged to abstain from sex, as opposed to provided with services[69]. In Kenya health providers reportedly felt ill equipped to provide counseling on contraception use, particularly because their

personal beliefs (that adolescent sexual activity should be discouraged) contradicted their professional roles[70]. Research in South Africa found that in some cases contraception was denied to adolescent girls due to the personal beliefs of the health workers[71]. Another South African study found health workers implemented recommendations related to providing contraception inconsistently based on personal and cultural beliefs[72]. Research suggests an urgent need for greater training of health services providers on SRH services for adolescents[73,74], and the need for supportive legislation on access to contraception for adolescents in order to provide consistent policies to guide health workers[75,76].

Education and socio-economic factors are also associated with contraception use. MacPhail *et al.*, drawing on a representative survey of 15-24-year olds in South Africa, found a positive relationship between being a student or employed and contraception use[77]. The relationship between education level and contraception use is noted in numerous other studies[78-80]. For example, a study from Zimbabwe finds that higher education levels are related to higher condom use[47]. This relationship appears consistent across the continent: data from 20 SSA countries found that youth with a higher education reported more frequent condom use[3].

A study on contraceptive use in rural South Africa found that youth from higher social economic status groups had greater likelihood of condom use than those from lower social economic statuses. Similarly, a cross-sectional population-based household survey in South Africa found that unemployment and poverty was associated with adolescent pregnancy[81]. Spiezer *et al*. found the same situation in Kenya where wealthier female youth were more likely to use contraception, compared to their less well-off peers[82]. Extremely vulnerable youth, such as street children, had the most limited access to contraception and suffered from unwanted pregnancies, unsafe abortions and related health complications[83]. These studies confirm that education and socio-economic status are determinants of contraception use across SSA.

Evaluations of interventions and policies

Only 16 evaluations of interventions were identified. A number of studies attempt to develop youth friendly services, with research from Kenya and Uganda demonstrating the effectiveness of providing services to youth on days different from that of adults and integrating health, HIV and family planning health services[84,85]. An evaluation of an intervention to provide youth-friendly contraception services in Ethiopia finds that such services increased the probability of youth adopting long-acting methods[86]. A USAID evaluation of a voucher program implemented by Marie Stopes Madagascar found that providing youth with vouchers for SRH services increased demand for contraception, with 78% of youth who received vouchers redeeming them[87]. One evaluation finds franchise clinics are viable alternatives for providing SRH services to youth in Western Kenya, noting that youth clinic members are more likely than other youth (using general population statistics) to use modern methods of contraception[88]. Interestingly, a study from Kenya found that while female youth generally had a positive view of the centers that provide SRH services, male youth viewed them as serving only women and children[89]. This indicates a barrier in involving young men in choices regarding contraception use and family planning, and the need to develop health centers that respond to their needs.

Two studies focused on school-based interventions. One was the only randomized control trial included in this review and assessed school-based interventions among adolescents in Tanzania and South Africa[90]. The trial found that intergenerational communication on sexual issues was associated with a number of positive outcomes, but also noted further research is needed. An evaluation of SRH programs implemented through schools and health facilities in Tanzania documents the challenges of integrating SRH programs that include contraception education and provision within institutions shaped by dominant social norms and political ideologies[91].

Plautz *et al* evaluated the 100% jeune program in Cameroon, which aimed to promote abstinence as a contraceptive method[92]. They found that while the program contributed to greater contraception use with regular partners with all youth, and with casual partners with male youth, it had no impact on abstinence (or levels of sexual activity or number of partners). This confirms previous findings regarding the ineffectiveness of abstinence-based programs.

An evaluation of a program that aimed to improve the reproductive health of married adolescent girls, through information and service provision to both the girls and their husbands, found program exposure was associated with increased likelihood of family planning, with program participants (where both members of the couple participated) twice as likely as non-program participants to have ever used family planning[93]. However, the authors recognize there is possible selection bias, wherein those couples willing to participate in the program were already likely to use family planning.

At the structural level, Hainsworth *et al.* evaluated the scaling-up of adolescent contraceptive services in Ethiopia, Ghana, Mozambique and Tanzania[94]. Findings indicate that scale-up must occur through both expansion and institutionalization, complemented by capacity building, advocacy and youth empowerment programs. Similarly, a review of a partnerships between NGOs and local government authorities in five countries that aimed to scale up SRH initiatives for youth found that, despite capacity building and other interventions with the local government authority, the NGOs maintained leadership of the program and institutional scale-up was limited[95]. The authors suggested that interventions that aim scale-up through transfers to local authorities recognize the extended period of time and resources such initiatives require.

There were only three evaluations of policy developments. Jewkes *et al* argued that South Africa had made progress on improving adolescent SRH through an "empowering social policy"[95]. Similarly, a review South Africa's national contraception policy from a human rights perspective found it comprehensive and forward looking[96]. In contrast, a review of Kenya's implementation of its Adolescent Reproductive Health and Development Policy, found that, while the policy had resulted in positive change at the health governance level by increasing partnerships between government and civil society, for example, it had not yet improved youth access to contraception due to persistent socio-economic and cultural barriers[97].

Many of the evaluations noted that education-based interventions were limited by the broader determinants of access and use, as identified in the previous section. An evaluation of SRH education program in Kenya, found that while surveys pre and post intervention indicated increased knowledge about contraception use, focus group discussions demonstrated continued challenges in operationalizing knowledge due to misconceptions about contraception and difficulties negotiating condom use[98]. Similarly, an evaluation of youth clubs found that participation in SRH education and service programs did not lead to greater contraception use, and site misconceptions related to contraception, as well as accessibility and poor attitudes of health workers[99]. Wight *et al* documented that an adolescent sexual health program led to improved knowledge, attitude and behavior outcomes among adolescent, but not biological outcomes. They identified contextual barriers related to socio-structural factors: culture, economic circumstances, social status and behavior[100].

Conclusion

Research gaps, policy implications and future directions

Despite the scarcity of research on adolescents' access and use of contraception in SSA, particularly in specific countries and regions, there is a high degree of consensus within what research exists. It is clear that across the region access is low and unmet need is high. While in some cases the trend appears to be towards improved access, in others access may be decreasing; and most notably there is a lack of comparable research on trends. There is need for much more comprehensive research across the region, including those countries where little to no research has been carried out to date.

Research on adolescents' knowledge of contraception documents a basic familiarity with condoms, but persistent misunderstandings related to side effects and effectiveness of other methods. These are largely influenced by cultural norms and the sources of information. Evidence suggests the media plays a primary role in informing adolescents about contraception use. Furthermore, while the majority of studies on contraception discuss condom use, they also demonstrate that adolescents are increasingly interested in other forms of contraception.

Determinants of adolescent access to and use of contraception are well documented and appear to be similar across the continent. They include access to education, socioeconomic status and cultural attitudes towards contraception, including those of health workers. Individual studies indicate gender norms can limit adolescents' use of contraception by discouraging girls from delaying pregnancy and discouraging boys from accessing services they perceive as being for women and children. There are only a handful of evaluations of interventions that aim to improve adolescent access to and use of contraception, making it difficult to identify generalizable findings. Benefits of developing youth friendly services are documented, but most evaluations suggest modest gains in contexts of multiple challenges.

Despite the limited research on the subject, the literature suggests guidelines for improving adolescent access to, use and knowledge of, contraception. First, considering the strong correlation between contraception use and education in multiple contexts, improving adolescents' access to quality education may be one of the most effective strategies for increasing demand for, and proper use of, contraception. Second, interventions that aim to improve the broader socio-economic context of adolescents, through access to employment and other necessities for well-being, are likely to increase contraception demand. Third, interventions and policies that aim to improve access to contraception need to address cultural attitudes towards adolescents' access to contraception, particularly among health workers (who provide contraception) and parents (who can influence knowledge and perceptions of contraception use). Finally, interventions that aim to improve adolescent knowledge of contraception would do well to work with the media as adolescents' preferred source of information.

Considering the scarcity of research there are numerous gaps in the current literature. Those that particularly stand out include a need for more rigorous mixed methods studies that are able to document unmet need and trends, as well as document relationships between determinants of access and use. Furthermore, there are many countries and regions in SSA where little to no research on adolescent and contraception has been conducted, and much more research is required on what types of contraception adolescents prefer, and then on how their access to these methods can be improved. Research might also assess current messaging related to contraception in the popular media and opportunities to use the media to improve knowledge and address cultural barriers. Most urgently, rigorous evaluations of interventions are needed in order to inform good practices and learn from past experiences.

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References

1. Jacobstein R, Curtis C, Spieler J and Radloff S. Meeting the need for modern contraception: Effective solutions to a pressing global challenge. International Journal of Gynecology & Obstetrics. 2013;121:S9–S15. doi:10.1016/j.ijgo.2013.02.005.
2. Patton GC, Sawyer SM, Santelli JS, Ross D, Allen N, Arora M, Azzopardi P, Baldwin W, Bonell C, Kakuma R, Kennedy E, Mahon J, McGovern J, Mokdad A, Patel V, Petroni S, Reavley N and Viner R. Our future: a Lancet commission on adolescent health and wellbeing. The Lancet. 2016;387(10036):2423-2478. doi:10.1016/S0140-6736(16)00579-1.
3. Blanc, A. Patterns and Trends in Adolescents' contraceptive Use and Discontinuation in Developing Countries and Comparisons with Adult Women. International Perspectives on Sexual and Reproductive Health, 2009:35(2):63-71
4. Morris JL and Rushwan H. Adolescent sexual and

reproductive health: The global challenges. Today's evidence, tomorrow's agenda: Implementation of strategies to improve global reproductive health. Papers presented at the FIGO XX PreCongress Workshop, October 5–6, 2012, Rome, Italy. 2015;131, Supplement 1:S40. doi:10.1016/j.ijgo.2015.02.006.

5. Fatima J. Introduction to the Special Issue on Adolescent Sexual and Reproductive Health in Sub-Saharan Africa. Studies in Family Planning. 2008;39(4):239-244.
6. Khan S and Mishra V. Youth Reproductive and Sexual Health: DHS Comparative Reports 19. Calverton: Macro International Inc; 2008.
7. Ashford L. Africa's Youthful Population: Risk or Opportunity. Washington DC: Population Reference Bureau; 2007.
8. Bankole A and Malarcher S. Removing Barriers to Adolescents' Access to Contraceptive Information and Services. Studies in Family Planning. 2010;41(2):117-124.
9. Patton GC, Sawyer SM, Santelli JS, Ross D, Afifi R, Allen N, Arora M, Azzopardi P, Baldwin W, Bonell C, Kakuma R, Kennedy E, Mahon J, McGovern T, Mokdad A, Patel V, Petroni S, Reavley N, Taiwo K, Waldfogel J, Wickremarathne D, Barroso C, Bhutta Z, Fatusi A, Mattoo A, Diers J, Fang J, Ferguson J, Ssewalmal F and Viner R.. Our future: a Lancet commission on adolescent health and wellbeing. The Lancet. 2016;387(10036):2423-2478. doi:10.1016/S0140-6736(16)00579-1.
10. Hindin MJ, Christiansen CS and Ferguson BJ. Setting research priorities for adolescent sexual and reproductive health in low- and middle-income countries. Bull. World Health Organ. 2013;91(1):10-18. doi:10.2471/BLT.12.107565.
11. Prata N, Weidert K and Sreenivas A. Meeting the need: youth and family planning in sub-Saharan Africa. Contraception. 2013;88(1):83-90. doi:10.1016/j.contraception.2012.10.001.
12. Foss AM, Hossain M, Vickerman PT and Watts CH. A systematic review of published evidence on intervention impact on condom use in sub-Saharan Africa and Asia. Sexually Transmitted Infections. 2007;83(7):510-516. doi:10.1136/sti.2007.027144.
13. Mmari K and Blum R. Risk and protective factors that affect adolescent reproductive health in developing countries: A structured literature review. Global Public Health. 2009;4(4):350-366. doi:10.1080/17441690701664418.
14. Gottschalk LB and Ortayli N. Interventions to improve adolescents' contraceptive behaviors in low- and middle-income countries: a review of the evidence base. Contraception. 2014;90(3):211-225. doi:10.1016/j.contraception.2014.04.017.
15. McQueston K. The Efficacy of Interventions to Reduce Adolescent Childbearing in Low- and Middle-Income Countries: A Systematic Review. Studies in Family Planning. 2;44(2013):370-388.
16. Fatch K, Zgambo M and Yukai D. Effective Adolescent Sexual and Reproductive Health Education Programs in Sub-Saharan Africa. Californian Journal of Health Promotion. 2013;11(2):32-42.
17. Molina RC, Roca CG, Zamorano JS and Araya EG. Family planning and adolescent pregnancy. Best Practice & Research Clinical Obstetrics & Gynaecology. 2010;24(2):209-222. doi:10.1016/j.bpobgyn.2009.09.008.
18. Phillips SJ and Mbizvo MT. Empowering adolescent girls in Sub-Saharan Africa to prevent unintended pregnancy and HIV: A critical research gap. Today's evidence, tomorrow's agenda: Implementation of strategies to improve global reproductive health. Papers presented at the FIGO XX PreCongress Workshop, October 5–6, 2012, Rome, Italy. 2016;132(1):1-3. doi:10.1016/j.ijgo.2015.10.005.
19. UNFPA. Adolesent Pregnancy: A review of the evidence. Geneva: UNFPA; 2013
20. Atuyambe LM, Kibira SP, Bukenya J, Muhumuza C, Apolot RR and Mulogo E. Understanding sexual and reproductive health needs of adolescents: Evidence from a formative evaluation in Wakiso district, Uganda. Reproductive Health. 2015;12(35):1-10.
21. Enuameh Y, Boamah E, Nettey OE, Tawiah C, Manu A, Sulemana A, Zandoh C, Adjei G, Mahama E, Gyaase S, Afari-Asiedu S and Owusu-Agyei S. Improving Family Planning Service Delivery to Adolescents in Ghana: Evidence from Rural Communities in Central Ghana. 2012. https://www.cpc.unc.edu/measure/publications/WP-11-128.
22. Enuameh Y, Nettey OE, Mahama E, Tawiah C, Boamah E, Abubakari S, Adjei G, Gyaase S, Asiedu S, Manu A, Zandoh C, Asante KP and Owusu-Agyei S. Family planning needs of adolescents in predominantly rural communities in the central part of Ghana. Open Journal of Preventive Medicine. 2015;5(6):269-279. doi:10.4236/ojpm.2015.56030.
23. Mccurdy RJ, Schnatz PF, Weinbaum PJ and Zhu J. Contraceptive use in adolescents in Sub-Saharan Africa: evidence from Demographic and Health Surveys. Connecticut Medicine. 2014;78(5):261-72.
24. Woog V, Singh S, Browne A and Philbin J. Adolescent women's need for and use of sexual and reproductive health services in developing countries; 2015. http://www.guttmacher.org/pubs/Adolescent-SRHS-Need-Developing-Countries.pdf.
25. Gebreselassie T and Govindasamy P. Levels and trends in unmet need for family planning among adolescents and young women in Ethiopia. Further analysis of the 2000, 2005, and 2011 Demographic and Health Surveys; 2013. http://www.measuredhs.com/pubs/pdf/FA72/FA72.pdf.

26. Obare F, Birungi H, Undie CC, Wanjiru M, Liambila W and Askew I. Levels, trends and determinants of contraceptive use among adolescent girls in Kenya; 2011. http://www.popcouncil.org/pdfs/2011RH_APHIAII_ContraUseAdolGirls.pdf.
27. Blanc. Patterns and Trends in Adolescents' contraceptive Use and Discontinuation in Developing Countries and Comparisons with Adult Women. International Perspectives on Sexual and Reproductive Health, 2009:35(2):63-71
28. Darabi LBA, Serumaga K, Neema S, Kibombo R, Humera A and Banoba P. Protecting the Next Generation in Uganda. New York: Guttmacher Institute; 2008.
29. Feleke S, Koye D, Demssie A and Mengesha Z. Reproductive health service utilization and associated factors among adolescents (15–19 years old) in Gondar town, Northwest Ethiopia. BMC Health Serv Res. 2013;13(1):294. doi:10.1186/1472-6963-13-294.
30. Marrone G, Abdul-Rahman L, De Coninck Z and Johansson A. Predictors of contraceptive use among female adolescents in Ghana. African Journal of Reproductive Health. 2014;18(1):102-109. http://www.ajol.info/index.php/ajrh/article/download/102468/92739.
31. Duru CB, Nnebue CC, Uwakwe KA, Obi-Okaro AC, Diwe KC, Chineke HN and Abejega C. Sexual behaviours and contraceptive use among female secondary school adolescents in a rural town in Rivers State, South-south Nigeria. Nigerian Journal of Medicine. 2015;24(1):17-27.
32. Obare F, Birungi H, Undie CC, Wanjiru M, Liambila W and Askew I. Levels, trends and determinants of contraceptive use among adolescent girls in Kenya; 2011. http://www.popcouncil.org/pdfs/2011RH_APHIAII_ContraUseAdolGirls.pdf.
33. Higgins JA, Gregor L, Mathur S, Nakyanjo N, Nalugoda F and Santelli JS. Use of Withdrawal (Coitus Interruptus) for Both Pregnancy and HIV Prevention among Young Adults in Rakai, Uganda. The Journal of Sexual Medicine. 2014;11(10):2421-2427. doi:10.1111/jsm.12375.
34. Both R. Young people's use and perceptions of emergency contraceptives in sub-saharan Africa: Existing insights and knowledge gaps. Sociology Compass. 2013;7(9):751-761. doi:10.1111/soc4.12066.
35. Both R and Samuel F. Keeping silent about emergency contraceptives in Addis Ababa: a qualitative study among young people, service providers, and key stakeholders. BMC Women's Health. 2014;14(1):134. doi:10.1186/s12905-014-0134-5.
36. Both R. Emergency contraceptive use in Addis Ababa, Ethiopia: Challenging common assumptions about young people's contraceptive practices. Reproductive Health Matters. 2015;23(45):58-67. doi:10.1016/j.rhm.2015.06.005.
37. Boamah EA, Asante KP, Mahama E, Manu E and Ayipah EK. Use of contraceptives among adolescents in Kintampo, Ghana: a cross-sectional study. Dovepress. 2014;5:7-15. doi:10.2147/OAJC.S56485.
38. Ramathuba DU, Khoza LB and Netshikweta ML. Knowledge, attitudes and practice of secondary school girls towards contraception in Limpopo Province. Curationis. 2012;35(1):E1-7.
39. Attahir. Knowledge, Perception and Practice of Emergency Contraception among Female Adolescent Hawkers in Rigasa Suburban Community of Kaduna State Nigeria. 2010.
40. Onyeonoro UU, Oshi DC, Ndimele EC, Chuku NC, Onyemuchara IL, Ezekwere SC, Oshi SN and Emelumadu OF. Sources of Sex Information and its Effects on Sexual Practices among In-school Female Adolescents in Osisioma Ngwa LGA, South East Nigeria. Journal of Pediatric and Adolescent Gynecology. 2011;24(5):294-299. doi:10.1016/j.jpag.2011.05.002.
41. Ochako R, Mbondo M, Aloo S, Kaimenyi S, Thompson R, Temmerman M and Kays M. Barriers to modern contraceptive methods uptake among young women in Kenya: a qualitative study. BMC Public Health. 2015;15(1):118. doi:10.1186/s12889-015-1483-1.
42. Dangat CM and Njau B. Knowledge, attitude and practices on family planning services among adolescents in secondary schools in Hai District, northern Tanzania. Tanzania Journal of Health Research. 2013;15(1):19-25.
43. Ngome E and Odimegwu C. The social context of adolescent women's use of modern contraceptives in Zimbabwe: a multilevel analysis. Reproductive Health. 2014;11(1):64. doi:10.1186/1742-4755-11-64.
44. Melaku YA, Berhane Y, Kinsman J and Reda HL. Sexual and reproductive health communication and awareness of contraceptive methods among secondary school female students, northern Ethiopia: a cross-sectional study. BMC Public Health. 2014;14:252. doi:10.1186/1471-2458-14-252.
45. Crichton J, Ibisomi L and Gyimah SO. Mother–daughter communication about sexual maturation, abstinence and unintended pregnancy: Experiences from an informal settlement in Nairobi, Kenya. Journal of Adolescence. 2012;35(1):21-30. doi:10.1016/j.adolescence.2011.06.008.
46. Remes P, Renju J, Nyalali K, Medard L, Kimaryo M, Changalucha J, Obasi A and Wight D. Dusty discos and dangerous desires: community perceptions of adolescent sexual and reproductive health risks and vulnerability and the potential role of parents in rural Mwanza, Tanzania. Culture, Health & Sexuality. 2010;12(3):279-292.

doi:10.1080/13691050903395145.
47. Yohannes Z and Tsagaya B. Barriers of Parent-Asolexcent Communication on Sexual Health Issues among Secondary and Preparatory School Students in Yirgalem Town South Ethiopia.
48. Zhyane I and Ehlers WJ. Swazi Youths' Attitudes And Perceptions Concerning Adolescent Preg-Nancies And Contraception. International Journal of Adolescent Medicine and Health. 2006;11(1):31-42.
49. Kanku T and Mash R. Attitudes, perceptions and understanding amongst teenagers regarding teenage pregnancy, sexuality and contraception in Taung. South African Family Practice. 2010;52(6):563-572. http://www.safpj.co.za/index.php/safpj/article/download/1514/2116.
50. Phillips SJ and Mbizvo MT. Empowering adolescent girls in Sub-Saharan Africa to prevent unintended pregnancy and HIV: A critical research gap. Today's evidence, tomorrow's agenda: Implementation of strategies to improve global reproductive health. Papers presented at the FIGO XX PreCongress Workshop, October 5–6, 2012, Rome, Italy. 2016;132(1):1-3. doi:10.1016/j.ijgo.2015.10.005.
51. Anyanwu PE and Fulton J. Knowledge and perception of young adults in Nigeria on effectiveness of condom use in prevention of sexually transmitted infections. International Journal of Adolescent Medicine and Health. 2015. doi:10.1515/ijamh-2015-0050.
52. Chimah UC, Lawoyin TO, Ilika AL and Nnebue CC. Contraceptive knowledge and practice among senior secondary schools students in military barracks in Nigeria. Nigerian Journal of Clinical Practice. 2016;19(2):182-8. doi:10.4103/1119-3077.175970.
53. Meekers D, Silva M and Klein M. Determinants of Condom Use Among Youth In Madagascar. J. Biosoc. Sci. 2006;38(03):365. doi:10.1017/S0021932005007200.
54. Abajobir AA and Seme A. Reproductive health knowledge and services utilization among rural adolescents in east Gojjam zone, Ethiopia: A community-based cross-sectional study. BMC Health Services Research. 2014;14(1). doi:10.1186/1472-6963-14-138.
55. Lebese RT, Maputle SM, Ramathuba DU and Khoza LB. Factors influencing the uptake of contraception services by Vatsonga adolescents in rural communities of Vhembe District in Limpopo Province, South Africa. Health SA Gesondheid. 2013;18(1). doi:10.4102/hsag.v18i1.654.
56. Gaughran M and Asgary R. On-site comprehensive curriculum to teach reproductive health to female adolescents in Kenya. Journal of Women's Health. 2014;23(4):358-64. doi:10.1089/jwh.2013.4523.
57. Bakeera-Kitaka S, Nabukeera-Barungi N, Nöstlinger C, Addy K and Colebunders R. Sexual risk reduction needs of adolescents living with HIV in a clinical care setting. CAIC. 2008;20(4):426-433. doi:10.1080/09540120701867099.
58. Lince-Deroche N, Hargey A, Holt K and Shochet T. Accessing Sexual and Reproductive Health Information and Services: A Mixed Methods Study of Young Women's Needs and Experiences in Soweto, South Africa. African Journal of Reproductive Health. 2015;19(1):73-81.
59. Folayan MO, Odetoyinbo M and Harrison A. Differences in use of contraception by age, sex and HIV status of 10-19-year-old adolescents in Nigeria. International Journal of Adolescent Medicine and Health. 2015. doi:10.1515/ijamh-2015-0059.
60. Dietrich J, Sikkema K, Otwombe KN, Sanchez A, Nkala B, de Bruyn G, Van Der Watt M and Gray GE. Multiple Levels of Influence in Predicting Sexual Activity and Condom Use Among Adolescents in Soweto, Johannesburg, South Africa. Journal of HIV/AIDS & Social Services. 2013;12(3-4):404-423. doi:10.1080/15381501.2013.819312.
61. Speizer IS, Fotso JC, Davis JT, Saad A and Otai J. Timing and Circumstances of First Sex Among Female and Male Youth From Select Urban Areas of Nigeria, Kenya, and Senegal. Journal of Adolescent Health. 2013;53(5):609-616. doi:10.1016/j.jadohealth.2013.06.004.
62. McCleary-Sills J, Douglas Z, Rwehumbiza A, Hamisi A and Mabala R. Gendered norms, sexual exploitation and adolescent pregnancy in rural Tanzania. Reproductive Health Matters. 2013;21(41):97-105. doi:10.1016/S0968-8080(13)41682-8.
63. Klinger A and Asgary R. Perceptions and Attitudes regarding Sexually Transmitted Infection (STIs) and Family Planning among Adolescents in Northern Madagascar. Women and Health. 2016. doi:10.1080/03630242.2016.1178684.
64. Kapito E, Kazembe A, Maluwa A, Malata A and Odland JO. Attitudes towards contraceptive use among schooling adolescents in Malawi. Journal of Research in Nursing and Midwifery. 2012;1(4): 47-55. http://interesjournals.org/JRNM/pdf/2012/November/Kapito%20et%20al.pdf.
65. Adams MK, Salazar E and Lundgren R. Tell them you are planning for the future: Gender norms and family planning among adolescents in northern Uganda. International Journal of Gynaecology and Obstetrics. 2013. doi:10.1016/j.ijgo.2013.07.004.
66. Mbeba RM, Mkuye MS, Magembe GE, Yotham WL, Mellah AO and Mkuwa SB. Barriers to sexual reproductive health services and rights among young people in Mtwara district, Tanzania: a qualitative study. Pan African Medical Journal. 2012;13 Suppl 1:13.
67. Mkhwanazi N. Understanding teenage pregnancy in a post-apartheid South African township. Culture, Health & Sexuality. 2010;12(4):347-358. doi:10.1080/13691050903491779.

68. Barroy H, Cortez R, Le Jean N and Wang H. Addressing adolescent sexual and reproductive health in Niger; 2016. http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2016/04/21/090224b0842b4761/1_0/Rendered/PDF/Addressing0ado0tive0health0in0Niger.pdf.
69. Ahanonu EL. Attitudes of Healthcare Providers towards Providing Contraceptives for Unmarried Adolescents in Ibadan, Nigeria. Journal of Family and Reproductive Health. 2014;8(1):33-40.
70. Godia PM, Olenja JM, Lavussa JA, Quinney D and Hofman JJ. Sexual reproductive health service provision to young people in Kenya; health service providers' experiences. BMC Health Services Research. 2013;13(476):[13] p. doi:10.1186/1472-6963-13-476.
71. Holt K, Lince N, Hargey A, Struthers H, Nkala B and McIntyre J. Assessment of Service Availability and Health Care Workers' Opinions about Young Women's Sexual and Reproductive Health in Soweto, South Africa. African Journal of Reproductive Health. 2012;16(2):283-294.
72. Müller A, Röhrs S, Hoffman-Wanderer Y and Moult K. "You have to make a judgment call". – Morals, judgments and the provision of quality sexual and reproductive health services for adolescents in South Africa. Gender and health: Relational, intersectional, and biosocial approaches. 2016;148:71-78. doi:10.1016/j.socscimed.2015.11.048.
73. Michaels-Igbokwe C, Terris-Prestholt F, Lagarde M, Chipeta E and Cairns J. Young People's Preferences for Family Planning Service Providers in Rural Malawi: A Discrete Choice Experiment. PloS One. 2015;10(12):e0143287. doi:10.1371/journal.pone.0143287.
74. Tilahun M, Mengistie B, Egata G and Reda AA. Health workers' attitudes toward sexual and reproductive health services for unmarried adolescents in Ethiopia. Reproductive Health. 2012;9(19):[7]p. doi:10.1186/1742-4755-9-19.
75. Enuameh Y, Tawiah C, Afari-Asiedu S, Nettey OE, Sulemana A, Mahama E, Adjei G, Boamah E, Manu A, Gyaase S, Zandoh C, Amanfo N, Asante KP, Letsa T, Owusu-Agyei S. Making family planning services relevant to adolescents: Perspectives from rural communities in Central Ghana. Open Journal of Preventive Medicine. 2014;4(11):852-859. doi:10.4236/ojpm.2014.411096.
76. Kangaude G. Enhancing the role of health professionals in the advancement of adolescent sexual health and rights in Africa. Today's evidence, tomorrow's agenda: Implementation of strategies to improve global reproductive health. Papers presented at the FIGO XX PreCongress Workshop, October 5–6, 2012, Rome, Italy. 2016;132(1):105-108. doi:10.1016/j.ijgo.2015.10.001.
77. MacPhail C, Pettifor AE, Pascoe S and Rees HV. Contraception use and pregnancy among 15-24 year old South African women: a nationally representative cross-sectional survey. BMC Med. 2007;5(1):31. doi:10.1186/1741-7015-5-31.
78. Feleke S, Koye D, Demssie A and Mengesha Z. Reproductive health service utilization and associated factors among adolescents (15–19 years old) in Gondar town, Northwest Ethiopia. BMC Health Serv Res. 2013;13(1):294. doi:10.1186/1472-6963-13-294.
79. Calvert C, Baisley K, Doyle AM, Maganja K, Changalucha J, Watson-Jones D, Hayes RJ and Ross DA. Risk factors for unplanned pregnancy among young women in Tanzania. Journal of Family Planning and Reproductive Health Care. 2013;39(4):e2. doi:10.1136/jfprhc-2012-100389.
80. Nyarko SH. Prevalence and correlates of contraceptive use among female adolescents in Ghana. BMC Women's Health. 2015;15:60. doi:10.1186/s12905-015-0221-2.
81. Mchunu G, Peltzer K, Tutshana B and Seutlwadi L. Adolescent pregnancy and associated factors in South African youth. African Health Sciences. 2012;12(4):426-34.
82. Speizer IS, Fotso JC, Davis JT, Saad A and Otai J. Timing and Circumstances of First Sex Among Female and Male Youth From Select Urban Areas of Nigeria, Kenya, and Senegal. Journal of Adolescent Health. 2013;53(5):609-616. doi:10.1016/j.jadohealth.2013.06.004.
83. Wachira J, Kamanda A, Embleton L, Naanyu V, Ayuku D and Braitstein P. 'Pregnancy Has Its Advantages': The Voices of Street Connected Children and Youth in Eldoret, Kenya. PLoS ONE. 2016;11(3):e0150814. doi:10.1371/journal.pone.0150814.
84. Hagey JM, Akama E, Ayieko J, Bukusi EA, Cohen CR and Patel RC. Barriers and facilitators adolescent females living with HIV face in accessing contraceptive services: a qualitative assessment of providers' perceptions in western Kenya. Journal of the International AIDS Society. 2015;18(1). doi:10.7448/IAS.18.1.20123.
85. Kityo J. Challenges of preventing early pregnancy among HIV-positive Ugandan teenagers. Exchange on HIV / AIDS Sexuality and Gender. 2013;(1):10-12. http://smartsite.kit.nl/net/KIT_Publicaties_output/showfile.aspx?e=2075.
86. Pathfinder International. Evidence to Action for Strengthened Reproductive Health, Pathfinder International. Integrated Family Health Program Plus. Testing a service-delivery model for offering long-acting reversible contraceptive methods to youth in Ethiopia; 2015. http://www.e2aproject.org/publications-tools/pdfs/testing-a-service-delivery-model-larcs-for-youth.pdf.

87. Burke E and Gold J. Increasing access to voluntary family planning and STI services for young people. The youth voucher program in Madagascar; 2015. https://mariestopes.org/sites/default/files/Mobile%20Outreach%20Madagascar.pdf.
88. Decker M and Montagu D. Reaching Youth through Franchise Clinics: Assessment of Kenyan Private Sector Involvement in Youth Services. Journal of Adolescent Health. 2007;40(3):280-282. doi:10.1016/j.jadohealth.2006.09.018.
89. Godia PM, Olenja JM, Hofman JJ and Van Den Broek N. Young people's perception of sexual and reproductive health services in Kenya. BMC Health Services Research. 2014;14(1). doi:10.1186/1472-6963-14-172.
90. Namisi F, Aaro KE, Kaaya S, Kajula LJ, Kilonzo GP, Onya H, Wubs A and Mathews C. Adolescents' communication with parents, other adult family members and teachers on sexuality: Effects of school-based interventions in South Africa and Tanzania. AIDS and Behavior. 2015;2015 Feb 28:[15] p. doi:10.1007/s10461-015-1019-9.
91. Obasi AI, Cleophas B, Ross DA, Chima KL, Mmassy G, Gavyole A, Plummer ML, Makokha M, Mujaya B, Todd J, Wight D, Grosskurth H, Mabey DC and Hayes RJ. Rationale and design of the MEMA kwa Vijana adolescent sexual and reproductive health intervention in Mwanza Region, Tanzania. AIDS Care. 2006;18(4):311-322. doi:10.1080/09540120500161983.
92. Plautz A and Meekers D. Evaluation of the reach and impact of the 100% Jeune youth social marketing program in Cameroon: findings from three cross-sectional surveys. Reprod Health. 2007;4(1):1. doi:10.1186/1742-4755-4-1.
93. Erulkar A and Tamrat T. Evaluation of a reproductive health program to support married adolescent girls in rural Ethiopia. African Journal of Reproductive Health. 2014;18(2):68-76. http://www.bioline.org.br/pdf?rh14026.
94. Hainsworth G, Engel DM, Simon C, Rahimtoola M and Ghiron LJ. Scale-up of adolescent contraceptive services: lessons from a 5-country comparative analysis. Journal of Acquired Immune Deficiency Syndromes. 2014;66 Suppl 2:S200-S208. doi:10.1097/QAI.0000000000000180.
95. Jewkes R, Morrell R and Christofides N. Empowering teenagers to prevent pregnancy: lessons from South Africa. Culture, Health & Sexuality. 2009;11(7):675-688. doi:10.1080/13691050902846452.
96. Hoopes AJ, Chandra-Mouli V, Steyn P, Shilubane T and Pleaner M. An Analysis of Adolescent Content in South Africa's Contraception Policy Using a Human Rights Framework. The Well-Being of Adolescents in Vulnerable Environments Study. 2015;57(6):617-623. doi:10.1016/j.jadohealth.2015.08.012.
97. Kenya National Council for Population and Development. Division of Reproductive Health, Population Reference Bureau. Kenya adolescent reproductive health and development policy. Implementation assessment report; 2013. http://www.prb.org/pdf13/kenya-policy-assessment-report.pdf.
98. Gaughran M and Asgary R. On-site comprehensive curriculum to teach reproductive health to female adolescents in Kenya. Journal of Women's Health. 2014;23(4):358-64. doi:10.1089/jwh.2013.4523.
99. Lusinje AC, Phiri C, Majawa P and Muula AS. Youth clubs' contributions towards promotion of sexual and reproductive health services in Machinga district, Malawi. Tanzania Journal of Health Research. 2015;17(3):1-9. doi:10.4314/thrb.v17i3.6.
100. Wight D, Plummer M and Ross D. The need to promote behaviour change at the cultural level: one factor explaining the limited impact of the MEMA kwa Vijana adolescent sexual health intervention in rural Tanzania. a process evaluation. BMC Public Health. 2012;12(788):[12] p. doi:10.1186/1471-2458-12-788.