

Helpdesk Report: Adolescent sexual and reproductive health

Date: 10 June 2016

Query: What is the evidence for the greater impact of having targeted programmes on adolescence in achieving broader Sexual and Reproductive Health (SRH) goals?

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1. Overview

There are 23 million adolescent women with an unmet need for modern contraceptive services. This would lead to an estimated: 2.1 million fewer unplanned births; 3.2 million fewer abortions including 2.4 million fewer unsafe abortions; 700,000 fewer miscarriages of unintended pregnancies; and 5,600 fewer maternal deaths related to unintended pregnancies. Most of the maternal deaths averted would be in Africa (Darroch et al. 2016).

This helpdesk identified a number of reviews on adolescent SRH. Key findings include:

- Facilitating school attendance reduces childbearing and schools are an effective platform for reproductive health education (McQueston et al, 2013).
- To improve access and use one review recommends: enacting and implementing laws and policies requiring education and reproductive health services, building community support for contraception provision; providing sexuality education within and outside of school settings; and making health services adolescent-friendly (Chandra-Mouli et al, 2014).
- Merrick (2014) finds evidence that adolescent childbearing and early marriage are detrimental to girls' health, school completion, and long-term earning potential, and their babies' health and development, contributing to poverty at the household and national level.
- Involving adolescents in the planning process improved effectiveness, as did programmes sustained over long periods (Gottschalk and Ortayli, 2014).
- Social marketing and behaviour change communication interventions have been effective in increasing contraceptive uptake, but had low impact on effective use and continuation (Merrick, 2014).
- Mobile phones and social media are promising means of increasing contraceptive use among adolescents (Chandra-Mouli et al, 2014).

- McQueston et al. (2012) recommend a rights-based approach to adolescent fertility and shifting focus from the proximate to distal causes of pregnancy, including human rights abuses, gender inequality, child marriage, and socioeconomic marginalisation.
- In providing adolescent friendly services Denno et al. (2015) recommend approaches that use a combination of health-worker training, adolescent-friendly facility improvements and broad information dissemination via the community, schools, and mass media.
- Cash transfers are effective in motivating change in a variety of settings (Merrick, 2014; McQueston et al., 2012).

Difficulty in drawing conclusions on the best practice for improving SRH for adolescents is noted within many of the reviews. Gottschalk and Ortayli (2014) found programmes that changed adolescent contraceptive behaviours combined numerous approaches making it difficult to determine which elements worked best. Mixed results and difficulty in identifying how setting effects these results is echoed in another review (Merrick, 2014). McQueston et al. (2012) find variable results for different methods to reduce teenage pregnancies. Glinski et al. (2014) comment on the evidence base being not sufficiently rigorous (see also Gottschalk and Ortayli, 2014) and that results are dependent on contextual factors. For example school-based programmes have been very effective in some settings but have shown mixed effects in others (Merrick, 2014). Multipronged interventions are needed to address the varied factors that influence adolescent reproductive health behaviours and outcomes.

Case study findings include:

- Research found improvement in sexual health knowledge but no improvement in outcomes from an intervention in Tanzania. The intervention included community activities; sexual health education; training to provide 'youth-friendly' sexual health services; and peer condom social marketing from an intervention in Tanzania (Doyle et al, 2010; Ross et al., 2007).
- An annual review of a DFID family planning programme in Ghana involving service delivery and operational research was identified (HEART, 2015). The programme scored well on developing adolescent-friendly services and provider capacity; and learning about factors affecting uptake. The programme did not score well on increasing provision, knowledge and awareness of ASRH services; and increasing availability of FP commodities
- Social marketing in Cameroon was found to positively affected awareness of sexual risks and birth control methods; discussion of sexuality and contraceptives; and use of contraceptives among females (Van Rossem and Meekers, 2000).
- The Community-Embedded Reproductive health Care for Adolescents in Latin-America (CERCA) project aimed to affect change by improving knowledge (Degomme et al., 2015). A combination of action-research, community based participatory research and intervention mapping was used. Family and community support, mobilisation of parents, community leaders and local institutions has increased impact of the interventions. There was a policy impact at local, national and international level.
- One study looked at what affects adolescent sexual and reproductive health (ASRH) service usage (Broutet et al., 2013). It found the addition of targeted school-based and outreach activities increased service usage by young people more than community mobilisation and training providers in youth-friendly services provision alone.
- An evaluation of Sierra Leone's Youth Reproductive Health Programme emphasised that to reduce HIV incidence amongst young people projects must focus on all components of awareness-raising. This includes: abstinence, reducing sexual partners, consistent condom use and knowing one's HIV status.

One resource on costing was identified (Darroch et al., 2016). The report makes the following estimates:

- The estimated annual cost of providing contraceptive services to the 15 million sexually active women aged 15–19 who currently use modern contraceptives in developing countries is US\$222 million: US\$41 million in Africa, US\$61 million in Asia and US\$119 million in Latin America and the Caribbean.
- The yearly cost of contraceptives and related supplies varies by method: Annual direct costs for IUDs are lowest, at US\$2.45 per user. Condoms and implants fall in the middle, at US\$4.69 and US\$4.81 per user, respectively. Pills and injectables are most expensive, at US\$11.05 and US\$9.31 per user, respectively.
- The average annual cost per current adolescent user of modern contraception in the developing world is US\$7 in direct costs and US\$15 when indirect costs are factored in.
- If services were improved for the 15 million adolescent women currently using modern contraceptives, costs would increase from US\$222 million to US\$313 million.

Value-added for increased costs effectiveness could come from educating contraceptive service users in other areas such as the importance of antenatal care and HIV testing. Money spent on contraceptive services is saved by not spending on health services such as treatment following unsafe abortion and complications during and after child birth. Merrick (2014) notes the evidence base on costs and cost effectiveness is still very weak, especially in low-income countries.

2. Evidence Reviews

The Efficacy of Interventions to Reduce Adolescent Childbearing in Low- and Middle-Income Countries: A Systematic Review

McQueston, K., Silverman, R., & Glassman, A. (2013). *Studies in family planning*, 44(4), 369-388.

<http://onlinelibrary.wiley.com/doi/10.1111/j.1728-4465.2013.00365.x/abstract;jsessionid=8FD8D44F0FC6CCB23C1D89511325E9EF.f02t01?u serIsAuthenticated=false&deniedAccessCustomisedMessage=>

This systematic review considers the efficacy of interventions to reduce adolescent childbearing in low and middle income countries. The reviewed studies indicate that programmes promoting or facilitating school attendance among adolescent girls have a significant effect on reducing marriage and childbearing. Schools can serve as an effective platform for reproductive health education, and schooling itself appears to have a beneficial effect. As a result, lowering the barriers to school attendance or increasing the opportunity cost of leaving school can also reduce adolescent childbearing. Although pregnancy and school attendance are not mutually exclusive, research has shown that continued education is often correlated with reduced rates of pregnancy. One evaluation finds that family planning programmes in Ethiopia for adolescents who have obtained formal education offer no apparent benefit. The authors conclude that improving education may be a substitute for family planning. Similarly, another piece of research found positive effects of cash transfer programmes for recent school dropouts but did not find significant effects for girls who are currently in school. From these findings the authors suggest that policymakers focus on school enrolment and attendance as a priority policy area, particularly among poor populations.

Conditional cash transfers performed well in reducing the age at marriage, the marriage rate among adolescents, total fertility rates, and the prevalence of teen pregnancy. Although it cannot necessarily be concluded that these programmes are more effective than others at reducing adolescent fertility, the available evidence provides stronger support for these

programmes than for other interventions evaluated in this review. Moreover, the scores measuring the quality of the studies of such programs were generally high, demonstrating that their conclusions are derived from rigorous, well-designed studies. The two programmes that provided cash transfers directly to adolescents found fertility-related results for adolescent girls participating in their programmes, whereas the programmes that evaluated community-wide cash transfers were not found to be as effective. A key feature of the design of cash transfer programmes is the targeting of benefits to poor households, using a mix of methods that include geographic targeting of communities and proxy means tests and community-based targeting of households.

Interventions to improve adolescents' contraceptive behaviors in low- and middle-income countries: a review of the evidence base

Gottschalk LB, & Ortayli N. (2014). *Contraception*, 90(3), 211-225.

<http://www.sciencedirect.com/science/article/pii/S0010782414002091>

The authors identify common elements used by programmes that measured an impact on adolescent contraceptive behaviours and summarise outcomes from 15 studies that met inclusion criteria. Effective programmes generally combined numerous programme approaches and addressed both user and service provision issues. Overall, few rigorous studies have been conducted in LMICs that measure contraceptive behaviours. Few interventions reach the young, the out of school and other vulnerable groups of adolescents.

Because most programmes used a combination of elements, it is difficult to determine which elements of a programme work best for reaching adolescents. Successful programmes noted that they should involve adolescents in the planning process, gain community buy-in and use a combination of elements that fits with the needs of that particular community. In addition, this collection of programmes typically addressed both user-side and provision-side issues, which may be why they are among the few studies to measure an impact on adolescent contraceptive use. While this review returned only 15 studies measuring contraceptive use, this group of studies reflects the complexity and reality of life, where there is no place for one single intervention.

The most effective programmes were those that were sustained over longer periods of time. Shorter programmes may be able to change behaviours in the immediate future, but long-term results might be limited. For instance one evaluation indicated that limited educational interventions can be effective for short-term behaviour change (i.e., contraceptive use at first sex). They found, however, that there were no significant differences when it came to consistent condom and contraceptive use over time, which raises questions about the amount of reinforcement necessary to sustain programme results.

Some programme elements that are effective for contraceptive behaviour change in certain groups of adolescents may not work well to reach other groups. Adolescents who interacted with peer educators may have self-selected such that they were already more likely users of contraceptives in one of the studies. Another programme that was centred on peer education found better results among school-going adolescents than among out-of-school adolescents. This may be due to the difficulty in reaching out-of-school youths with peer education. It may also suggest that out-of-school youth would benefit from supplemental interventions to address the complex situations they are in and the additional barriers that they face. Programme planners should bear in mind these challenges to implementation and use evaluation measures that assess whether they are successful in reaching the most at-risk groups of adolescents. A study from rural Ethiopia provides reasonable optimism for a positive impact even in the most difficult environments provided that programmes are designed to adequately address the complexity of the situation and the specific needs of those adolescents. Adolescent-friendly services are a trend in the literature and current focus of the WHO that could address those needs. However, successful examples of adolescent-

friendly programmes that have demonstrated an impact on adolescent contraceptive behaviours are sparse and varied in their approaches. For instance, training of providers was nearly universal amongst the interventions in this review; however, the training itself varied greatly, which could have contributed to positive changes in contraceptive behaviours in some programme areas while others saw no effect.

Contraception for adolescents in low and middle income countries: needs, barriers, and access

Chandra-Mouli V, McCarraher DR, Phillips SJ, Williamson NE, & Hainsworth G. (2014). *Reprod Health*, 11(1).

<https://reproductive-health-journal.biomedcentral.com/articles/10.1186/1742-4755-11-1>

This paper contains a review of research evidence and programmatic experiences on needs, barriers, and approaches to access and use of contraception by adolescents in low and middle income countries. Effective interventions to improve access and use of contraception include enacting and implementing laws and policies requiring the provision of sexuality education and contraceptive services for adolescents; building community support for the provision of contraception to adolescents; providing sexuality education within and outside school settings; and increasing the access to and use of contraception by making health services adolescent-friendly, integrating contraceptive services with other health services, and providing contraception through a variety of outlets. Emerging data suggest mobile phones and social media are promising means of increasing contraceptive use among adolescents.

Lessons from the evidence on effective interventions to increase adolescents' access to and use of contraception were found on: overcoming restrictive laws and policies; making social and group norms supportive; improving knowledge and understanding; and improving access to contraception.

In many countries, laws and policies restrict the provision of contraception to unmarried adolescents or those below a certain age. Policy makers must intervene to reform these laws and policies to ensure that adolescents are able to obtain contraceptive information, counselling and services. Policy makers should also consider providing adolescents contraception at no or reduced cost.

In many societies premarital sexual activity is not considered acceptable, and there is considerable resistance to the provision of contraceptive information and services to unmarried adolescents. To overcome this barrier, it is important to improve 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.

Social and group norms can hinder discussion between couples about contraception. In addition, knowledge gaps and misconceptions prevent use or proper use of contraceptive methods. Mass media (radio and television programmes), peer-education, and inter-personal communication and information education communication materials (such as posters and leaflets) have been used successfully to communicate health information to adolescents, and to influence their norms. Mobile phone technology, the Internet and social media are potentially valuable for communicating contraceptive information and options to adolescents conveniently and discretely.

The evidence of the benefits of curriculum-based comprehensive sexuality education is strong. The most successful sexuality education programmes provide accurate and age-appropriate information and in addition, develop life skills and provide support to deal with

thoughts, feelings and experiences that accompany sexual maturity (e.g. falling in love and refusing unwanted sex). They are also linked to contraceptive provision and services.

Because many adolescents have knowledge gaps and misconceptions about contraception and their side effects, they must be provided accurate information and given opportunities to ask questions and discuss their concerns. They must also be told where they could get contraception.

A wide range of contraceptives need to be made available and accessible with support for choosing a method. Adolescents in many places are unwilling to visit facilities providing contraception because they view them as unfriendly. There is growing evidence of the value of making health services adolescent friendly. Guidance on making adolescent services friendly are outlined.

A systematic review of school-based sexual health interventions to prevent STI/HIV in sub-Saharan Africa

Paul-Ebhohimhen VA, Poobalan A, van Teijlingen ER. (2008) BMC Public Health, 8 (4): 1-13. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2248569/pdf/1471-2458-8-4.pdf>

This review acknowledges the great need for interventions aimed at reducing STI/HIV/AIDS in a sub-Saharan African context, targeting adolescent still in school education. From the 12 articles (representing 10 studies) reviewed, the authors concluded that it is relatively easy to effect changes in knowledge and attitudes regarding STI/HIV/AIDS using school-based interventions that have been carefully designed to suit the sub-Saharan Africa environment. It is more challenging to effect changes in positive intentions regarding sexual risk reduction, and most of all, changes regarding sexual risk behaviours. Measured changes in behaviour either did not reach statistically significant levels, or when they did in the immediate post-intervention period, wore off within weeks to months. Some behaviour changes however appeared to exhibit a delay effect in development. Behavioural change in relation to abstinence was easier to effect among baseline virgins, while condom use appeared to be the more practicable sexual risk protective behaviour for adolescents who are already sexually active.

Making the case for investing in adolescent reproductive health. A Review of Evidence and PopPov Research Contributions

Merrick, TW. (2014) Population and Poverty Research Initiative and Population Reference Bureau

<http://www.prb.org/pdf16/poppov-report-adolescent-srh.pdf>

This review finds recent research, which shows that adolescent childbearing and early marriage are detrimental to girls' health, school completion, and long-term earning potential, and their babies' health and development, contributing to poverty at the household and national level. If countries educate and invest in their young people, then these countries may benefit from the rapid economic growth that may occur when fertility and mortality decline and the working-age population grows in relation to the number of young dependents - a phenomenon known as the demographic dividend. Early marriage and early childbearing can undermine or even erase this potential economic growth through negative effects on the health, education, and earning potential of young mothers and their children.

This report surveys evidence on the effectiveness of several types of interventions:

- **School-based programmes** have been very effective in some settings but have shown mixed effects in others. Most involve a range of interventions (sexuality education, teacher training, services for students). More evidence is needed to sort

out the effects of the specific kinds of interventions that are employed and the contextual factors that influence success in implementation.

- **Peer education** has been employed as a behaviour change tool in a variety of settings but with mixed results. Programme planners need to pay attention to how peer education programmes are designed and implemented and to contextual factors that influence their effectiveness.
- **Youth-friendly services** have proven effective in some settings but the impact has been mixed in others. Most programmes attempt to make their services more youth-friendly through a combination of interventions, including training providers, educating consumers, and improving the accessibility of services. Researchers need to focus evaluations on the specific approaches used to make services more youth friendly and on how they are implemented, particularly in reducing barriers that keep young people from using services.
- **Sexuality education** that is comprehensive rather than focused on a single issue generally increases knowledge but a substantive minority of programmes do not change behaviour. Those programmes that do change behaviour can delay sexual debut, reduce frequency of sex and number of partners, and increase the use of condoms or other contraceptives. Comprehensive sexual education programmes are more cost effective than single-issue interventions, but to achieve behaviour change, we must know more about differences between the successful programmes and the ones that fail.
- **Youth development and life skills training** have multiple benefits such as improved sexual and reproductive health outcomes, depending on the context and how programmes are implemented. Given the social and cultural obstacles to young people's sexual and reproductive health, these broader programmes should continue to be a focus of study.
- **Social marketing and behaviour-change communication** interventions have been effective in motivating uptake of condoms and contraceptives. They have had less impact on effective use and continuation. Research can contribute to exploring the content and delivery mechanisms that would strengthen young people's commitment to these choices.
- **Cash transfers and other financial incentives** are effective in motivating changes in reproductive health-related behaviours in a variety of settings. Programme planners need to pay attention to the specific behaviours targeted and to how incentives to change these behaviours are implemented. In Malawi, for example, unconditional cash transfers to girls proved to be more effective than conditional transfers to their parents.
- **Multipronged interventions** are needed to address the varied factors that influence adolescent reproductive health behaviours and outcomes. Identifying the specific elements of multifaceted programmes that had the strongest effect is often difficult, but is needed to sort out which interventions are more effective in order to make such programmes more cost effective

The evidence base on costs and cost effectiveness is still very weak, especially in low-income countries. Calculations of the relative cost of investing in programmes to meet unmet contraceptive needs of adolescents (as well as to delay early marriage) would provide advocates for these programmes with a useful tool to persuade governments and donors to invest in programmes

Adolescent Fertility in Low- and Middle-Income Countries: Effects and Solutions

McQueston K, Silverman R, & Glassman A. (2012). Center for Global Development Working Paper, no. 295

http://www.cgdev.org/sites/default/files/1426175_file_McQueston_Silverman_Glassman_AdollescentFertility_FINAL_0.pdf

Adolescent fertility in low- and middle-income countries presents a severe impediment to development and can lead to school dropout, lost productivity, and the intergenerational transmission of poverty. However, there is debate about whether adolescent pregnancy is a problem in and of itself or merely symptomatic of deeper, ingrained disadvantage. To inform policy choices and create a revised research agenda for population and development, this paper aggregates recent quantitative evidence on the socioeconomic consequences of and methods to reduce teenage pregnancy in the developing world. The review finds variable results for all indicator types with the partial exception of knowledge-based indicators, which increased in response to almost all evaluating interventions, though it is not clear that such interventions necessarily lead to short- or long term-behaviour change. The evidence base supporting the effectiveness of conditional cash transfers was relatively strong in comparison to other interventions. Similarly, programmes that lowered barriers to attending school or increased the opportunity cost of school absence are also supported by the literature. On the basis of these findings, the authors argue that donors should adopt a rights-based approach to adolescent fertility and shift their focus from the proximate to distal causes of pregnancy, including human rights abuses, gender inequality, child marriage, and socioeconomic marginalisation. Further research should be conducted to strengthen the evidence base by 1) establishing causality, 2) understanding the differential impacts of adolescent fertility in different contexts, and 3) investigating other the impact of adolescent fertility on other socioeconomic outcomes, such as labour participation, productivity, and the intergenerational transmission of poverty.

Effective Strategies to Provide Adolescent Sexual and Reproductive Health Services and to Increase Demand and Community Support

Denno DM, Hoopes AJ, & Chandra-Mouli V. (2015). *Journal of Adolescent Health*, 56(1), S22-S41.

<http://www.sciencedirect.com/science/article/pii/S1054139X14004248>

Access to youth friendly health services is vital for ensuring sexual and reproductive health (SRH) and well-being of adolescents. This study is a descriptive review of the effectiveness of initiatives to improve adolescent access to and utilisation of sexual and reproductive health services (SRHS) in low- and middle-income countries. The authors examined four SRHS intervention types: (1) facility based, (2) out-of-facility based, (3) interventions to reach marginalised or vulnerable populations, (4) interventions to generate demand and/or community acceptance. Outcomes assessed across the four questions included uptake of SRHS or sexual and reproductive health commodities and sexual and reproductive health biologic outcomes. There is limited evidence to support the effectiveness of initiatives that simply provide adolescent friendliness training for health workers. Data are most ample (10 initiatives demonstrating weak but positive effects and one randomised controlled trial demonstrating strong positive results on some outcome measures) for approaches that use a combination of health worker training, adolescent-friendly facility improvements, and broad information dissemination via the community, schools, and mass media. The authors found a paucity of evidence on out-of-facility-based strategies, except for those delivered through mixed-use youth centres that demonstrated that SRHS in these centres are neither well used nor effective at improving SRH outcomes. There was an absence of studies or evaluations examining outcomes among vulnerable or marginalised adolescents. Findings from 17 of 21 initiatives assessing demand-generation activities demonstrated at least some association with adolescent SRHS use. Of 15 studies on parental and other community gatekeepers'

approval of SRHS for adolescents, which assessed SRHS/commodity uptake and/or biologic outcomes, 11 showed positive results. Packages of interventions that train health workers, improve facility adolescent friendliness, and endeavour to generate demand through multiple channels are ready for large-scale implementation. However, further evaluation of these initiatives is needed to clarify mechanisms and impact, especially of specific programme components. Quality research is needed to determine effective means to deliver services outside the facilities, to reach marginalised or vulnerable adolescents, and to determine effective approaches to increase community acceptance of adolescent SRHS.

Demand-Side Financing for Sexual and Reproductive Health Services in Low and Middle-Income Countries: A Review of the Evidence

Witter S, & Somanathan A. (2012). World Bank Policy Research Working Paper, (6213). http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2156108

Demand-side financing approaches have been introduced in a number of low and middle-income countries, with a particular emphasis on sexual and reproductive health. This paper aims to bring together the global evidence on demand-side financing mechanisms, their impact on the delivery of sexual and reproductive health services, and the conditions under which they have been effective. The paper begins with a discussion of modalities for demand-side financing. It then examines 13 existing schemes, including cash incentives, vouchers, and longer term social protection policies. Based on the available literature, it collates evidence of their impact on utilisation of services, access for the poor, financial protection, quality of care, and health outcomes. Evidence on costs and cost-effectiveness are examined, along with analysis of funding and sustainability of policies. Finally, the paper discusses the preconditions for effectiveness of demand-side financing schemes and the strengths and weaknesses of different approaches. These include:

- Correct identification of demand-side barriers to use
- Adequate supply-side capacity and quality
- The right economic conditions
- Appropriate design of package
- The right size of transfers
- Motivated and incentivised suppliers
- Strong political leadership
- Institutional capacity
- Simple payment systems
- Good collection and use of evidence

The extent to which results for sexual and reproductive health services are likely to be generalisable to other types of health care is also highlighted. It is clear that some of these policies can produce impressive results, if the preconditions for effectiveness outlined are met. However, relatively few demand-side financing schemes have benefited from robust evaluation. Investigation of the impact on financial protection, equity, and health outcomes has been limited. Most importantly, cost effectiveness and the relative cost effectiveness of demand-side financing in relation to other strategies for achieving similar goals have not been assessed.

What Does Not Work in Adolescent Sexual and Reproductive Health: A Review of Evidence on Interventions Commonly Accepted as Best Practices

<http://www.ghspjournal.org/content/3/3/333.full.pdf+html>

This review suggests 5 thematic areas that challenge the ability to demonstrate significantly positive results in ASRH programming:

- Significant numbers of adolescents are not adequately reached by the interventions intended for them.
- Interventions that have been shown to be ineffective continue to be implemented.
- Interventions that have been shown to be effective are delivered ineffectively.
- Interventions have limited effects because they are delivered piecemeal.
- Interventions are delivered with inadequate dosage (i.e., they are of low intensity or for a short duration) resulting in limited or transient effects.

3. Programme Case Studies

Long-Term Biological and Behavioural Impact of an Adolescent Sexual Health Intervention in Tanzania: Follow-up Survey of the Community-Based MEMA kwa Vijana Trial

Doyle AM, Ross DA, Maganja K, Baisley K, Masesa C, Andreasen A, & Watson-Jones D. (2010). PLoS Med, 7(6), e1000287.

<http://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.1000287>

The intervention was associated with a reduction in the proportion of males reporting more than four sexual partners in their lifetime (aPR 0.87, 95%CI 0.78–0.97) and an increase in reported condom use at last sex with a non-regular partner among females (aPR 1.34, 95%CI 1.07–1.69). There was a clear and consistent beneficial impact on knowledge, but no significant impact on reported attitudes to sexual risk, reported pregnancies, or other reported sexual behaviours. The study population was likely to have been, on average, at lower risk of HIV and other sexually transmitted infections compared to other rural populations, as only youth who had reached year five of primary school were eligible.

The study concluded that SRH knowledge can be improved and retained long-term, but this intervention had only a limited effect on reported behaviour and no significant effect on HIV/STI prevalence. Youth interventions integrated within intensive, community-wide risk reduction programmes may be more successful and should be evaluated.

Biological and behavioural impact of an adolescent sexual health intervention in Tanzania: a community-randomized trial

Ross DA, Changalucha J, Obasi AIN, Todd J, Plummer ML, Cleophas-Mazige B, Anemona A, Everett D, Weiss H, Mabey DC, et al. (2007). AIDS, 21: 1943-1955.

<http://www.ncbi.nlm.nih.gov/pubmed/17721102>

The objective of this research was to look at the impact of a multicomponent intervention programme on the sexual health of adolescents was assessed in rural Tanzania. A community-randomised trial was used.

Twenty communities were randomly allocated to receive either a specially designed programme of interventions (intervention group) or standard activities (comparison group). The intervention had four components: community activities; teacher-led, peer-assisted sexual health education in years 5-7 of primary school; training and supervision of health workers to provide 'youth-friendly' sexual health services; and peer condom social marketing. Impacts on HIV incidence, herpes simplex virus 2 (HSV2) and other sexual health outcomes were evaluated over approximately 3 years in 9645 adolescents recruited in late 1998 before entering years 5, 6 or 7 of primary school.

The intervention had a significant impact on knowledge and reported attitudes, reported sexually transmitted infection symptoms, and several behavioural outcomes. Only five HIV seroconversions occurred in boys, whereas in girls the adjusted rate ratio (intervention versus

comparison) was 0.75 [95% confidence interval (CI) 0.34, 1.66]. Overall HSV2 prevalences at follow-up were 11.9% in male and 21.1% in female participants, with adjusted prevalence ratios of 0.92 (CI 0.69, 1.22) and 1.05 (CI 0.83, 1.32), respectively. There was no consistent beneficial or adverse impact on other biological outcomes. The beneficial impact on knowledge and reported attitudes was confirmed by results of a school examination in a separate group of students in mid-2002.

In conclusion: The intervention substantially improved knowledge, reported attitudes and some reported sexual behaviours, especially in boys, but had no consistent impact on biological outcomes within the 3-year trial period.

Annual review - Ghana Adolescent Reproductive Health (ARH) Programme

HEART (2015)

<http://www.heart-resources.org/wp-content/uploads/2016/02/Annual-Review-of-the-DFID-Ghana-Adolescent-Reproductive-Health-ARH-Programme.pdf>

The ARH programme is working to improve reproductive health knowledge and behaviour for up to 350,000 adolescents and strengthen the national family planning (FP) programme. The programme is being implemented in two components: service delivery and operational research, which is coordinated by the National Population Council and managed by Futures Group Europe; and the procurement of family planning commodities, which is managed by Crown Agents.

This review summarises progress and lessons learnt since the last review in terms of the four outputs:

Output 1: Increased provision, knowledge and awareness of ASRH services in the focal region

This output substantially did not meet expectations because, following a needs assessment, it was discovered that all the adolescent service platforms proposed by the districts either needed re-designing, renovating or re-equipping to make them adolescent-friendly. Therefore a surveyor has been engaged to visit all the facilities, re-design them and prepare a bill of quantities for renovation. The programme has targeted 60 adolescent service platforms in a region that has 542 facilities—a coverage of only 11%. Without rapidly scaling up adolescent services, the teenage pregnancy rate will not reduce significantly.

Output 2: Adolescent-friendly sexual reproductive health services developed and provider capacity developed

This output exceeded expectations. The current three-arm funding mechanism for grant disbursement remains valid. Grants were disbursed to three institutions at the national level, the Regional Coordinating Council (RCC) in the region and all the 27 district assemblies in Brong Ahafo Region. In 2014 the programme plans to contract non-government organisations (NGOs) to implement some community-based activities, but there is a need to appraise the mechanisms for contracting and financing NGOs in a decentralised, multisectoral ASRH programme.

Output 3: Better evidence of factors affecting uptake of ASRH and FP

This output exceeded expectations. Three longitudinal operations research (OR) studies have been selected. The ORs will identify lessons learnt and good practice, which will inform programme design and provide global evidence for ASRH programming. However, to ensure that research findings inform policy and are adopted by local managers, current engagement with stakeholders should be strengthened.

Output 4: Increased availability of FP commodities

This output moderately did not meet expectations because one of the milestones was over-ambitious. Investments in contraceptive procurement have eliminated stockouts at the Central Medical Stores (CMS) and improved availability of FP commodities at the operational level. Government is working to address the supply chain problem at the regional level. However, delays in implementing the free FP policy are hindering the uptake of FP services; therefore, advocacy on the free FP policy should be strengthened.

One of the main objectives of DFID's development assistance is to address the needs of the vulnerable in society. This need is partly addressed through the allocation of resources between the centre and the local level. Also, a formula for resource allocation was developed to target more funds to populations most at risk of adolescent pregnancy. To ensure that majority of the funds actually address the needs of the population, the project allocated more funds to district and community levels. In addition, a formula was developed to allocate funds to favour districts with a higher teenage pregnancy rate. Even in the start up of the programme, districts with higher adolescent pregnancy rates were selected as part of the first batch of grantees.

An evaluation of the effectiveness of targeted social marketing to promote adolescent and young adult reproductive health in Cameroon

Van Rossem R, & Meekers D. (2000). *AIDS Education and Prevention*, 12(5), 383.
<http://search.proquest.com/openview/2b0e4bb72ddcd3764b38399bdea61a47/1?pq-origsite=gscholar>

This study examines the effectiveness of the PSI/PMSC Horizon Jeunes youth-targeted social marketing programme for improving adolescent reproductive health in urban Cameroon. The programme targeted adolescents through peer education, youth clubs, mass media promotion, and behaviour change communications. After about 13 months of intervention, knowledge of the programme was nearly universal, and the majority of youths had direct contact with the programme. Programme effectiveness is examined using a quasi-experimental research design with a pre-intervention and post-intervention survey in an intervention and comparison site. The intervention had a significant effect on several determinants of preventive behaviour, including awareness of sexual risks, knowledge of birth control methods, and discussion of sexuality and contraceptives. The intervention increased the proportion of female youths who reported using oral contraceptives and condoms for birth control. However, condom use is not yet consistent. Although the proportion of young men who reported using condoms for birth control also increased, this change could not be attributed to the intervention. Although this short intervention successfully increased the reported use of various birth control methods, including condoms, there is no evidence that the intervention increased use of condoms for STD prevention of sexually transmitted diseases.

CERCA Report Summary

Degomme O, De Meyer S, Decat P. (2015) European Commission CORDIS
http://cordis.europa.eu/result/rcn/157425_en.pdf

In Latin America, adolescent sexual activity starts early, with little effort made to prevent sexually transmitted infections or pregnancy, resulting in high incidence of teenage pregnancies, unsafe abortions and sexually transmitted infections. Latin American governments and health policy implementers demand sound proof of effective strategies to improve adolescent sexual and reproductive health (SRH).

CERCA (Community-Embedded Reproductive health Care for Adolescents in Latin-America) has aimed to improve global knowledge about how health systems could be more responsive

to the changing SRH needs of adolescents. Implemented by Latin American and European research institutes, CERCA tested community-embedded interventions to improve adolescent communication on SRH issues; access to accurate SRH information; use of SRH services in primary health settings; and use of modern contraceptives. One randomised and two non-randomised controlled studies demonstrated the interventions' usefulness. The study ran from March 2010 until February 2014 in research settings in three Latin American cities.

The overall methodology was a combination of aspects taken from existing methodologies for intervention research (action-research, community based participatory research and intervention mapping) and from behavioural theories (Theory of Planned Behaviour and Social Cognitive Theory). The CERCA design took account of renewed international interest in community-oriented primary care. A comprehensive approach, including family and community support, mobilisation of parents, community leaders and local institutions has increased impact of the interventions. Use of the participant observation methodology during ethnographic field study contributed to gathering knowledge on how different community actors perceive CERCA interventions and implementation process. The CERCA project stressed national and local ownership involving "health policy and practice oriented" stakeholders and establishing national and community advisory boards.

CERCA generated new quantitative and qualitative evidence on determinants of adolescent SRH; developed a methodological model for developing health promoting strategies, designed a strategy for promoting ASRH in Latin America; demonstrated multi-level intervention strategy impact; and generated expertise in development of adolescent SRH research. Monitoring and qualitative data demonstrated feasibility, acceptability and effectiveness for: use of mobile phone messages for outreach; community interventions by trained young adults; and provision of adolescent friendly services in primary health care centres and schools.

The CERCA research had a policy impact at local level (establishment of local adolescent SRH networks with city government funding, adolescent-friendly services installed in health centres, use of CERCA approach for sexual education in schools), at national level (CERCA researchers contributed to the development of national strategies for adolescent pregnancy prevention) and at international level (CERCA researchers invited as experts to WHO meetings in Geneva (2013) and Ankara (2014) for development of research protocols related to adolescent sexual health). New proposals based on the CERCA outcomes for scaled up interventions and further research are developed and submitted to international agencies. Currently final negotiations are on-going with the WHO for the funding of a research proposal based on CERCA data for the development of a game theory model of adolescent sexual and reproductive behaviour.

Effects of an Adolescent Sexual and Reproductive Health Intervention on Health Service Usage by Young People in Northern Ghana: A Community-Randomised Trial

Broutet, N, Lehnertz, N, Mehl, G, Camacho, A. V, Bloem, P, Chandra-Mouli, V., & Dick, B. (2013). *Journal of Adolescent Health*, 53(1), 6-13.

<http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0125267>

While many Ghanaian adolescents encounter sexual and reproductive health problems, their usage of services remains low. A social learning intervention, incorporating environment, motivation, education, and self-efficacy to change behaviour, was implemented in a low-income district of northern Ghana to increase adolescent services usage. This study aimed to assess the impact of this intervention on usage of sexual and reproductive health services by young people.

Twenty-six communities were randomly allocated to (i) an intervention consisting of school-based curriculum, out-of-school outreach, community mobilisation, and health-worker training

in youth-friendly health services, or (ii) comparison consisting of community mobilisation and youth-friendly health services training only. Outcome measures were usage of sexually-transmitted infections (STIs) management, HIV counselling and testing, antenatal care or perinatal services in the past year and reported service satisfaction. Data was collected, at baseline and three years after, from a cohort of 2,664 adolescents aged 15–17 at baseline.

Exposure was associated with over twice the odds of using STI services (AOR 2.47; 95%CI 1.78–3.42), 89% greater odds of using perinatal services (AOR 1.89; 95%CI 1.37–2.60) and 56% greater odds of using antenatal services (AOR 1.56; 95%CI 1.10–2.20) among participants in intervention versus comparison communities, after adjustment for baseline differences.

The addition of targeted school-based and outreach activities increased service usage by young people more than community mobilisation and training providers in youth-friendly services provision alone.

Does a competitive voucher program for adolescents improve the quality of reproductive health care? A simulated patient study in Nicaragua

Meuwissen, L. E., Gorter, A. C., Kester, A. D., & Knottnerus, J. A. (2006). *BMC Public Health*, 6(1), 1.

<http://bmcpublichealth.biomedcentral.com/articles/10.1186/1471-2458-6-204>

Little is known about how sexual and reproductive (SRH) health can be made accessible and appropriate to adolescents. This study evaluates the impact and sustainability of a competitive voucher programme on the quality of SRH care for poor and underserved female adolescents and the usefulness of the simulated patient (SP) method for such evaluation.

28,711 vouchers were distributed to adolescents in disadvantaged areas of Managua that gave free-of-charge access to SRH care in 4 public, 10 non-governmental and 5 private clinics. Providers received training and guidelines, treatment protocols, and financial incentives for each adolescent attended. All clinics were visited by female adolescent SPs requesting contraception. SPs were sent one week before, during (with voucher) and one month after the intervention. After each consultation they were interviewed with a standardised questionnaire. Twenty-one criteria were scored and grouped into four categories. Clinics' scores were compared using non-parametric statistical methods (paired design: before-during and before-after). Also the influence of doctors' characteristics was tested using non-parametric statistical methods.

Some aspects of service quality improved during the voucher programme. Before the programme started 8 of the 16 SPs returned 'empty handed', although all were eligible contraceptive users. During the programme 16/17 left with a contraceptive method ($p = 0.01$). Furthermore, more SPs were involved in the contraceptive method choice (13/17 vs. 5/16, $p = 0.02$). Shared decision-making on contraceptive method as well as condom promotion had significantly increased after the programme ended.

Female doctors had best scores before- during and after the intervention. The improvements were more pronounced among male doctors and doctors older than 40, though these improvements did not sustain after the programme ended.

This study illustrates provider-related obstacles adolescents often face when requesting contraception. The care provided during the voucher programme improved for some important outcomes. The improvements were more pronounced among providers with the weakest initial performance. Shared decision-making and condom promotion were improvements that sustained after the programme ended. The SP method is suitable and relatively easy to apply in monitoring clinics' performance, yielding important and relevant

information. Objective assessment of change through the SP method is much more complex and expensive.

Evaluation of the African Youth Alliance Program in Ghana, Tanzania, and Uganda

Williams T, Mullen S, Karim A, Posner J. (2007) JSI

http://jsi.com/JSIInternet/Inc/Common/download_pub.cfm?id=4645&lid=3

The African Youth Alliance (AYA) programme was established in 2000 by the Bill & Melinda Gates Foundation as a comprehensive, integrated, and potentially scalable programme that was designed to improve ASRH and to prevent transmission of the human immunodeficiency virus (HIV). AYA was innovative in that it collaborated with public and private sector organisations to implement behaviour change communication (BCC) programmes, it provided youth-friendly services (YFS) at clinics, it built on local capacity, and it integrated ASRH with livelihood skills training. AYA also coordinated policy and advocacy activities for ASRH at local and national government levels while providing institutional capacity building for its implementing partners.

In 2005, the Research and Training Institute of John Snow, Inc., was contracted to evaluate the impact of AYA on sexual and reproductive behaviour among youth in Ghana, Tanzania, and Uganda. The main objective of the evaluation was to determine whether exposure to AYA's comprehensive, integrated programme resulted in improved ASRH knowledge, attitudes, and sexual behaviours among male and female youth age 17–22 in areas where AYA worked. Using a post-test-only evaluation design, the evaluation compared knowledge, attitudes, and behavioural outcomes between (a) intervention sites and control sites and (b) youths who were exposed to AYA programmes and those who were not exposed to AYA. The evaluation did not attempt to address issues such as programme scale, cost analysis, sustainability, or the impact of individual components of the AYA strategy.

Results from the evaluation show that a significant number of young people in AYA implementation areas were reached by AYA programmes and were able to recall ASRH messages, although the degree of exposure varied by country and by type of intervention. Results further demonstrated a significant positive impact of AYA on several variables, most notably condom use, contraceptive use, partner reduction, and several self-efficacy and knowledge antecedents. Overall, the impact of AYA on ASRH behaviours and their antecedents was greater for young women than for young men, especially in Ghana and Uganda.

The evidence from this impact evaluation suggests that multicomponent programmes can be an effective approach to addressing young people's ASRH needs when the programmes combine strategies such as the following:

- BCC that would address risk behaviours
- YFS (for HIV and other sexually transmitted infection counseling and testing and for use of modern contraceptives, including condoms)
- Outreach services such as peer education and other activities in the community.

External Evaluation Report of Sierra Leone's Youth Reproductive Health Programme (2007 – 2012)

<http://restlessdevelopment.org/file/external-evaluation-restless-development-sierra-leone-srh-programme-2007-2012-pdf>

Restless Development Sierra Leone has implemented the Youth Reproductive Health Program (YRHP) for five years (2007 to 2012), with funding from the UK Department for International Development (DFID). The project is rooted in the unique Restless Development

peer-to-peer behavioural change model and harnesses the potential of ex-volunteers to sustain awareness raising campaigns.

The YRHP also has a strong institutional capacity building component, working with the Sierra Leone Government to strengthen their response to HIV/AIDS and include youth-focused policies in their strategies. The YRHP consisted of two core elements: the rural-based Youth Empowerment Programme (YEP) focused on providing sexual and reproductive health (SRH) and life skills education to in-school and out-of-school youth; and the urban-based Youth Leadership and Advocacy Programme (YLAP) focused on building the leadership capacity of alumni from the YEP programme, supporting their transition to employment and increasing their engagement in local and national decision-making.

An independent evaluation used a quasi-experimental study design coupled with qualitative and desk research. Significant findings include:

- Positive behaviour change in all three parameters of sexual behaviour (abstinence, being faithful and condom use) especially when compared with control groups.
- Young people in treatment communities now avail themselves of health services, particularly treatment/advice regarding STIs. This is an important marker as the reduction of STIs in a community and is considered to be the first step in reducing HIV incidence;
- Young people in treatment groups were more likely to identify at least one form of modern contraception (66%) than those in control groups (48.5%).
- Restless Development significantly exceeded targets for livelihoods-related activities, including number of young people demonstrating employability skills and number of ex-volunteers in higher studies or gainful employment in last 12 months.
- Restless Development has successfully engaged key government agencies and assisted them in developing youth-friendly services, monitoring and evaluation systems and directly engaging young people.

Some key lessons include:

- For any project aiming at reducing HIV incidence among young people in communities, it is essential that the project focuses on all components of awareness-raising including abstinence, reducing sexual partners, consistent condom use and knowing one's HIV status.
- The ability of a project to continue operations at the end of the implementation period depends on the foundation created to ensure sustainability. Restless Development's sustainability approach for this project seems to be working at the moment but the sustainability strategy needs to be revised to ensure it is effectively delivered and to guarantee continuity long after Restless Development has exited the communities.
- Restless Development should continue to advocate for the inclusion of SRH and FP activities in to the school curriculum.
- Involving stakeholders such as the Ministries, Departments and Agencies at the design stage of the project increases the likelihood of sustainability.

The cost-effectiveness of a competitive voucher scheme to reduce sexually transmitted infections in high-risk groups in Nicaragua

Borghi J, Gorter A, Sandiford P, & Segura Z. (2005).. Health policy and planning, 20(4), 222-231.

<http://www.ncbi.nlm.nih.gov/pubmed/15965034>

Evidence suggests that sexually transmitted infection (STI) interventions can be an effective means of human immunodeficiency virus (HIV) prevention in populations at an early stage of the epidemic. However, evidence as to their cost-effectiveness when targeted at high-risk groups is lacking. This paper assesses the cost-effectiveness of a competitive voucher

scheme in Managua, Nicaragua aimed at high-risk groups, who could redeem the vouchers in exchange for free STI testing and treatment, health education and condoms, compared with the status quo (no scheme). A provider perspective was adopted, defined as: the voucher agency and health care providers from the public, NGO and private sectors. The cost of the voucher scheme was estimated for a 1-year period (1999) from project accounts using the ingredients approach. Outcomes were monitored as part of ongoing project evaluation. Costs and outcomes in the absence of the scheme were modelled using project baseline data and reports, and relevant literature. The annual cost of providing comprehensive STI services through vouchers was US\$62 495, compared with an estimated US\$17 112 for regular service provision in the absence of the scheme. 4815 vouchers were distributed by the voucher scheme, 1543 patients were tested for STIs and 528 STIs were effectively cured in this period. In the absence of the scheme, only an estimated 85 cases would have been cured from 1396 consultations. The average cost of the voucher scheme per patient treated was US\$41 and US\$118 per STI effectively cured, compared with US\$12 per patient treated and US\$200 per STI cured in its absence. The incremental cost of curing an STI through the voucher scheme, compared with the status quo, was US\$103. A voucher scheme offers an effective and efficient means of targeting and effectively curing STIs in high-risk groups, as well as encouraging quality care practices.

4. Further Resources

Adding it up: Costs and Benefits of Meeting the Contraceptive Needs of Adolescents

Darroch JE, Woog V, Bankole A and Ashford LS (2016). New York: Guttmacher Institute.
https://www.guttmacher.org/sites/default/files/report_pdf/adding-it-up-adolescents-report.pdf

Estimates in this report are based on data from more than 130 nationally representative surveys, which are the principal source of information on women's need for and use of contraceptives in developing countries. They include the Demographic and Health Surveys (DHS), Multiple Indicator Cluster Surveys (MICS), Reproductive Health Surveys (RHS) and other independent surveys. Where data are missing for a particular country, this analysis uses averages from other countries in the same sub-region or region, or data from a demographically or socioeconomically comparable country, so that percentages and absolute numbers represent all regions of the developing world.

Information about actual spending on contraceptive services is not available for most developing countries, but the costs can be estimated from various sources of information about the prices of contraceptive commodities and other components of service provision. The estimated annual cost of providing contraceptive services to the 15 million sexually active women aged 15–19 who currently use modern contraceptives in developing countries is US\$222 million: US\$41 million in Africa, US\$61 million in Asia and US\$119 million in Latin America and the Caribbean.

The yearly cost of contraceptives and related supplies varies by method: Annual direct costs for IUDs are lowest, at US\$2.45 per user. Condoms and implants fall in the middle, at US\$4.69 and US\$4.81 per user, respectively. Pills and injectables are most expensive, at US\$11.05 and US\$9.31 per user, respectively.

The average annual cost per current adolescent user of modern contraception in the developing world is US\$7 in direct costs and US\$15 when indirect costs are factored in. Total costs vary widely by region due to variations in method costs, the mix of methods used and indirect costs. Direct costs are generally higher in Latin America and the Caribbean than in other regions because the costs of commodities and personnel are higher.

In this analysis, service costs for each method are assumed to be the same for adolescents as for older women in the same country. But the contraceptive method mix, and therefore the

average cost per user, differs. This is because adolescents rely to a greater extent on short-term methods, such as condoms and pills, which are more expensive for health systems to provide on an annual basis than the IUD and sterilisation, which older women are more likely to use.

If services were improved for the 15 million adolescent women currently using modern contraceptives, costs would increase from US\$222 million to US\$313 million. The improvements would include changes to increase young people's access to accurate information and education, strengthen contraceptive counselling and follow-up, ensure a mix of modern methods is consistently available, ensure health workers are trained to work with young people, and expand clinic- and community-based service delivery.

If, in addition, the 23 million adolescent women with unmet need were to use the same mix of modern methods as current adolescent users and receive improved services, total costs would increase to US\$770 million annually (US\$259 million in direct costs and US\$511 million in indirect costs). Indirect costs account for a large share of the additional spending because the programmes and systems that support the services need significant improvement, especially in the poorest countries. Improvements are essential for overcoming the barriers that all women, and particularly young women, face in obtaining and using contraceptives effectively. Programmes must ensure that young women—many of whom may be first-time users—receive services from a trained professional, whether in clinics or in other settings, and can choose methods that best meet their personal circumstances and needs.

In 2016, an estimated 38 million adolescent women in developing regions want to avoid pregnancy. Fifteen million of these adolescent women use modern contraceptives, thereby preventing 5.4 million unintended pregnancies. Of these pregnancies, 2.9 million would have ended in abortion at current rates, and most of them would have been unsafe. Current use of modern contraceptives also averts 3,000 maternal deaths annually in developing countries.

Currently, 10.2 million unintended pregnancies occur each year among women aged 15–19 in the developing world, either because women do not use contraceptives or because of contraceptive failure (and non-use of contraceptives accounts for a far greater share of unintended pregnancies than contraceptive failure). The 10.2 million unintended pregnancies result in an estimated 3.3 million unplanned births, 5.6 million abortions (3.9 million of which are unsafe) and 1.2 million miscarriages.

If all 23 million adolescent women with an unmet need for modern contraception were to receive improved contraceptive services, unintended pregnancies would drop by 59% from current levels, or by an estimated 6.0 million per year. (Unintended pregnancies would not be eliminated altogether because some users would experience contraceptive failure—especially those using condoms and other short-term methods that rely on users' actions.) Compared with current levels of contraceptive use, there would be:

- 2.1 million fewer unplanned births (a decline of 62%)
- 3.2 million fewer abortions (a decline of 57%), including 2.4 million fewer unsafe abortions
- 700,000 fewer miscarriages of unintended pregnancies (a decline of 60%)
- 5,600 fewer maternal deaths related to unintended pregnancies (a decline of 71%)

Most of the maternal deaths averted (4,800) would be in Africa, the region with the highest maternal mortality. Satisfying all unmet need in this region would result in the largest gains in health and well-being.

Improvements in contraceptive services can lead to improved outcomes in other areas of reproductive health. For example, young women who go to a provider for contraceptives can be educated about the availability and importance of antenatal and delivery care, and they can be connected to testing, counselling and treatment services for HIV and other STIs.

Contraceptive services can also prevent mother-to-child transmission of HIV by helping young women living with HIV avoid unintended pregnancies.

Although it is not estimated here, spending on contraceptive services saves funds that would otherwise be spent on health services, such as treatment for complications following an unsafe abortion and those that may arise during or after childbirth. The return would be even greater if it took into account the short-term and lifelong effects of early and unplanned childbearing on women's education and employment, as well as its impacts on their children's health.

Reducing adolescent fertility can also contribute to a "demographic dividend." This is the economic boost that can occur when birthrates decline and the share of the working-age population grows relative to the dependent population. Smaller family size makes it possible for both families and governments to invest more in the health and education of each child, and for more women to enter the labour force. If governments enact policies to make the economic environment conducive to growth, and if this large cohort finds well-paying work, a dividend comes as this productive labour boosts family and national income.

Understanding the Adolescent Family Planning Evidence Base

Glinski A, Sexton M and Petroni S. (2014) ICRW.

<http://www.icrw.org/files/publications/FINAL%20Understanding%20the%20Adolescent%20Family%20Planning%20Evidence%20Base%207.30.pdf>

There is a great deal of evidence regarding what works; hundreds of rigorous programme evaluations have been conducted and several systematic reviews have synthesised the evidence on the effects of different programmatic approaches. However, many gaps and unknowns still remain. Much of this evidence is not sufficiently rigorous, and various evaluation findings present nuanced contradictions. As with so many other issues in global health, there is no singular programmatic approach or solution that is guaranteed to work; with so much depending on contextual factors, various approaches and combinations of approaches are necessary in different circumstances. Despite this challenge, several conclusions can be drawn from the evidence regarding which types of approaches and what specific components or characteristics of each work best to tackle the barriers to achieving the various objectives of adolescent family planning demand, access and use.

In general, interventions are better able to achieve improvements in knowledge and attitudes than in behaviour. Of those that are able to impact behaviour, more are able to change contraceptive behaviour than sexual behaviour. Programmes that involve beneficiaries, such as adolescents, in programme design are more successful than those that do not. Programmes that are able to increase contraceptive use usually have at least some health services component in the intervention. On the whole, programmes seem to be most effective when they combine education, improvement of services, and community outreach/mobilisation to both inform community members about available services and to increase the acceptability of adolescents' use of family planning methods. Some of the most effective programmes include educational interventions, mass media, interpersonal/peer-to-peer communication and outreach, conditional cash transfers (CCTs), improvements of health services, and, importantly, multicomponent interventions that include a combination of these interventions.

Some of the interventions that have been most successful in achieving Objective 1 (Desire to avoid, delay, space or limit childbearing) are indirect approaches that increase school enrolment, thereby contributing to a delay in marriage and pregnancy. Programmes that offer CCTs, incentives or support in the form of school uniforms and supplies have been found to lower barriers to attending school and increase the opportunity cost of missing school and getting pregnant. While the evidence base is thinner regarding youth development

programmes, these have been proven to build adolescents' self-confidence and provide them with more life opportunities, which indirectly discourage early marriage and pregnancy.

For Objective 2 (Desire to use family planning), both informational and mass media programmes have been successful in both providing adolescents and community members with information regarding adolescent reproductive health and family planning methods, and in increasing the social acceptability of contraceptive use by adolescents. For school-based educational programmes to have a positive impact, they must have specific characteristics, and teachers need to be suitably trained and feel comfortable with the material. Mass media programmes that target specific contraceptive method use and deliver messages through multiple media channels, including the Internet, mobile phones and social networking services, have been most successful. These programmes show a greater impact when they address gender norms, including those that shape boys' notion of masculinity and limit girls' control over sex, as well as those that pressure girls to quickly and frequently produce children.

Informational programmes, specifically peer-to-peer education interventions, have been most successful at enabling adolescents to achieve Objective 3 (Agency to use family planning) by increasing their communication and negotiation skills to discuss their reproductive desires. While there is some evidence around the use of community-based distribution, vouchers and social franchises to increase adolescents' access to family planning methods and achieve Objective 4 (Access to family planning services), more research is needed. Programmes that work within existing health facilities to make them more youth-friendly—by creating hours that are convenient for adolescents, reasonable waiting times, and affordable fees—have been successful in increasing uptake of services, but only in combination with other supporting interventions. Similarly, to achieve Objective 5 (Provision of quality, youth-friendly services), programmes should focus on working within existing health facilities. Services are most successful when they increase their “youth-friendliness” by training providers how to both technically and socially respond to adolescents' needs, ensure privacy, confidentiality and respect for adolescent clients, and have a consistent supply of multiple methods. Specifically, vouchers have shown some success in increasing the privacy and confidentiality of services, as well as in improving providers' competence in providing needed services and counselling.

Finally, and perhaps most importantly, programmes that involved multiple components of demand creation and social norm change, service improvements and promotion and education around available services were most effective and had a greater impact than any of these programmatic components on their own.

Family Planning Saves Lives

Smith R, Ashford L, Gribble J, & Clifton D. (2009) Population Reference Bureau.

<http://www.prb.org/pdf09/familyplanningsaveslives.pdf>

On adolescents:

Around the world, adolescents are less likely than women just a few years older to use family planning. In Bolivia, for example, only 19 percent of single, sexually active women ages 15 to 19 use a modern method of contraception, compared with 45 percent of those ages 20 to 24. Lack of information, fear of side effects, and other barriers—geographic, social, and economic—prevent young people from obtaining and using family planning methods.

Surveys indicate that many married teenage women prefer to delay, space, or limit their births and are not using contraception. These women are referred to as having “unmet need” for family planning (see figure). Improving access to family planning information and services is vital for adolescents to protect their reproductive health.

Each year, 2.5 million teenagers in developing countries choose to end unintended pregnancies by undergoing abortions that are performed either by persons lacking the necessary skills or in an environment lacking the minimal medical standards, or both. In Africa, about one-fourth of all abortions performed in these circumstances are among young women ages 15 to 19—the highest proportion of any world region—and represent one of the leading causes of death among teenage women. Providing family planning information, counselling and services to young people could significantly reduce the number of abortions and associated risks of death and disability among the world's youth.

5. Additional information

Author

This query response was prepared by **Laura Bolton**

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About Helpdesk reports: The HEART Helpdesk is funded by the DFID Human Development Group. Helpdesk reports are based on 3 days of desk-based research per query and are designed to provide a brief overview of the key issues, and a summary of some of the best literature available. Experts may be contacted during the course of the research, and those able to provide input within the short time-frame are acknowledged.

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