Journal of Adolescent Health 56 (2015) S7–S14

ELSEVIER

JOURNAL OF ADOLESCENT HEALTH

www.jahonline.org

Review article

Creating an Enabling Environment for Adolescent Sexual and Reproductive Health: A Framework and Promising Approaches

Joar Svanemyr, Ph.D. [a,*], Avni Amin, Ph.D. [b], Omar J. Robles, M.S.P.H. [c], and Margaret E. Greene, Ph.D. [d]

[a] *Independent Consultant, Oslo, Norway*
[b] *Department for Reproductive Health Research, World Health Organization, Geneva, Switzerland*
[c] *Women's Refugee Commission, Washington, DC*
[d] *GreeneWorks, Washington, DC*

Article history: Received May 30, 2014; Accepted September 17, 2014
Keywords: Young people; Adolescents; Sexual and reproductive health; Enabling environments

A B S T R A C T

This article provides a conceptual framework and points out the key elements for creating enabling environments for adolescent sexual and reproductive health (ASRH). An ecological framework is applied to organize the key elements of enabling environments for ASRH. At the individual level, strategies that are being implemented and seem promising are those that empower girls, build their individual assets, and create safe spaces. At the relationship level, strategies that are being implemented and seem promising include efforts to build parental support and communication as well as peer support networks. At the community level, strategies to engage men and boys and the wider community to transform gender and other social norms are being tested and may hold promise. Finally, at the broadest societal level, efforts to promote laws and policies that protect and promote human rights and address societal awareness about ASRH issues, including through mass media approaches, need to be considered.

IMPLICATIONS AND CONTRIBUTION

Creating enabling environments to empower young people to realize their sexual and reproductive health and their human rights is an emerging field, although the evidence base is not well established. A conceptual framework offers promising ideas and interventions for further testing in different settings.

After decades of programming to improve adolescent sexual and reproductive health (ASRH), it has become increasingly clear that strengthening access to, and the quality of, services does not alone suffice to improve health outcomes. The sexual and reproductive health (SRH) of adolescents is strongly influenced by a range of social, cultural, political, and economic factors and inequalities. These factors increase adolescents' vulnerability to SRH risks (e.g., unsafe sex, sexual coercion, early pregnancy) and pose barriers to their access to SRH information and services. Addressing these underlying determinants by working with various stakeholders such as parents, community members, and policy makers, is essential for adolescents to realize their SRH and human rights. Such an approach is commonly referred to as building an enabling environment.

Building enabling environments so that adolescents realize their SRH and human rights requires interventions that work at multiple levels—with adolescents, with families, with communities, and at the societal level. Such interventions tend to be complex and can be challenging to evaluate. As a result, there are few rigorously evaluated interventions in this area, and these have not been widely replicated beyond one or two settings. The evidence base for such interventions is still in the initial stages of being established. Therefore, it is premature to definitively identify what works. Rather, those involved in designing and implementing ASRH programs can benefit from a conceptual clarity on the key

Joar Svanemyr was previously affiliated with the World Health Organization's Department of Reproductive Health and Research in Geneva, Switzerland.

Conflicts of Interest: The authors have no conflicts of interest to report.

Disclaimer: Publication of this article was supported by the World Health Organization (WHO). The opinions or views expressed in this paper are those of the author and do not necessarily represent the official position of WHO.

* Address correspondence to: Joar Svanemyr, Ph.D., Consultant, Mor Gohjertas vei 12, 0469 Oslo, Norway.
E-mail address: joarsvanemyr@yahoo.no (J. Svanemyr).

http://dx.doi.org/10.1016/j.jadohealth.2014.09.011

elements they must address, helped by some promising practices that they can draw upon. Therefore, this article offers a conceptual framework and describes the key elements of approaches that work to create an enabling environment to improve SRH and help adolescents realize their human rights. It provides illustrative examples of promising approaches that can contribute to creating enabling environments for ASRH. This article, however, is not meant to be a systematic or comprehensive review of the literature on the effectiveness of interventions to create enabling environments and their impact on ASRH outcomes.

Applying the ecological framework to adolescent sexual and reproductive health

An enabling environment reflects a set of interrelated conditions—legal, political, social, and cultural, among others—that affect the capacity of young people to lead healthy lives and access relevant and necessary services, information, and products [1]. Creating an enabling environment requires addressing broad structural factors beyond the individual that are key to shaping ASRH outcomes as well as other aspects of health and development [2].

We propose to apply the ecological framework to describe the key elements of enabling environments for ASRH. The ecological model provides a comprehensive framework for understanding the multiple and interacting determinants of the SRH behaviors and outcomes for adolescents [3,4]. This model is widely applied in understanding determinants of a wide range of health behaviors and outcomes.

The ecological framework has four guiding principles. First, it recognizes the multiple influences on health behaviors and outcomes including factors that operate at the intrapersonal, interpersonal, organizational, community, and public policy levels. Second, it posits that these influences interact across these different levels. Third, it requires a focus on specific health behaviors and outcomes, identifying which factors are most likely to influence the specific behavior or outcome at each level of the framework. Last, the framework suggests that interventions that address factors at multiple levels may be more effective than those that address only one level (Figure 1).

Applying this framework to different SRH outcomes for adolescents means that

1. At the individual level, there is a need to focus on empowering adolescents including through efforts such as those that build the economic and social assets as well as the resources of adolescents.
2. At the relationship level, there is a need to build relationships that support and reinforce positive health behaviors of adolescents. This may include interventions that target those close relationships which influence the sexual and reproductive experiences of adolescents, such as parents, intimate and other sexual partners, and peers.
3. At the community level, there is a need to create positive social norms and community support for adolescents to practice safer behaviors and access SRH information and services. This involves interventions aimed at broader community members and institutions outside the family—in neighborhoods, schools, and workplaces.
4. At the societal level, there is a need to promote laws and policies related to the health, social, economic, and educational spheres and to build broad societal norms in support of SRH and helping adolescents realize their human rights.

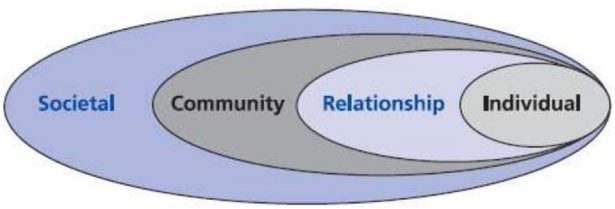

Figure 1. Ecological model for an enabling environment for shaping adolescent sexual and reproductive health [5].

This article is written with several caveats and conceptual considerations. First, in describing elements and intervention examples of enabling environments, the indicators and variables that measure whether an enabling environment has been created are in a pathway where they can be both, outcomes of interest as well as independent variables or determinants of SRH outcomes. For example, interventions to improve girls education or agency and decision making with respect to sex are both considered to be enablers for better SRH outcomes as well as desirable outcomes in their own right. Many of the program examples highlighted in this article, where evaluated, have largely measured impact largely on enabling environment as important outcomes in their own right. A few have attempted to assess whether they have also led to better ASRH outcomes. Not only is this a gap in the evidence but also reflects the nature of "upstream" or "structural" interventions more generally that operate through indirect and complex pathways in influencing health behaviors and outcomes.

Second, the article deliberately considers a broad range of ASRH outcomes including knowledge about SRH and HIV, use of services, behaviors such as contraceptive use, and health outcomes such as rates of sexually transmitted infection (STI) and unwanted pregnancy. This is in part because the upstream nature of enabling environments interventions can potentially influence a range of SRH outcomes and also because the article attempts to identify different elements of enabling environments for ASRH rather than trying to establish their effectiveness on specific outcomes.

Key elements for creating enabling environments

Individual-level interventions

Economic empowerment of girls. Poverty and a lack of resources for key needs and expenses are linked to greater vulnerability to poor SRH outcomes of adolescents, especially girls, for a variety of reasons. For example, a large body of evidence from sub-Saharan Africa shows that young women (15–24 years) are at increased risk of STIs, HIV, and unwanted pregnancies, in part, because they exchange sex (transactional sex) for money, basic necessities, school fees, and other items (e.g., mobile phones) [6–8]. Therefore, several interventions have focused on economic empowerment and poverty reduction as a way of reducing adolescent girls' and young women's vulnerability to SRH issues and HIV. Their premise is that they can bolster the status of girls and young women in the families, improve access to education, and reduce the need for girls and young women to engage in transactional sex.

Economic empowerment interventions have looked at two main types of approaches. First, some programs (e.g., Shaping the

Health of Adolescents in Zimbabwe) have offered microcredit to young women to start a business or small enterprise. The lessons learned from this approach suggest microcredit in and of itself may not be appropriate for adolescent girls in isolation of other approaches to strengthen their vocational skills, provide mentoring, bolster their self-esteem, provide a sense of solidarity, and build skills in communication and negotiation with sexual partners (Table 1).

Second, several cash transfer interventions have specifically targeted adolescent girls and young women with the aim of helping them take fewer risks in their own sexual behavior and relationships [9,10]. For example, a randomized controlled trial that rewarded young people in Tanzania (Rewarding STI Prevention and Control in Tanzania study) who managed to stay free from STIs with conditional cash transfer recorded a reduced STI incidence after 1 year [11]. The Zomba cash transfer randomized controlled trial in Malawi succeeded in keeping girls in school. The assumption was that remaining in school longer would have empowering effects on girls' sexual choices and behaviors. Zomba had significant positive outcomes on a range of SRH outcomes, including reducing HIV prevalence (a 64% reduction) as well as the prevalence of unintended pregnancies, but it did not increase condom use [12] (Table 1). Neither the Zomba (Malawi) nor the Rewarding STI Prevention and Control in Tanzania (Tanzania) interventions were designed to strengthen HIV-related knowledge and negotiation skills or otherwise empower girls. Therefore, while cash transfer interventions hold promise and offer proof of concept in improving SRH and HIV outcomes for girls and young women, their impact on young women's agency and household gender dynamics remain an open question [9].

Creating safe spaces for adolescent girls. Social norms and taboos related to gender, sexuality, and SRH issues create a culture of silence, particularly for adolescent girls, in asking, obtaining information, discussing, and expressing their worries about SRH issues. This is particularly the case when it comes to communication with adults in the family or communities. Many girls have limited agency and mobility, few possibilities to express themselves without judgment, and know few persons and places to seek information and support. The lack of a confidential and judgment-free environment can be a barrier to girls obtaining SRH information, learn skills, and feel supported in expressing their concerns related to their lives and SRH issues.

Several programs have tried to develop girls' agency through a safe spaces model. This model includes providing a physical space where girls can meet regularly; supporting adolescents through an older or peer mentor; and providing life skills (e.g., SRH information, negotiation skills, literacy training) and/or vocational skills training along with socialization and recreation [13]. Some also include financial literacy and microcredit/microfinance components, recognizing that economic empowerment is not sufficient in isolation of other social empowerment approaches. The premise of the safe spaces approach is that by ensuring girls' safety, building their assets, and connecting them with a social network, programs can improve a variety of outcomes [14].

Safe spaces interventions have been implemented in Burkina Faso, Egypt, Ethiopia, Guatemala, India, Kenya, Nigeria, Rwanda, Tanzania, and Uganda. Most of them have targeted girls between the ages 15 and 17 years, although some have also started focusing on younger adolescent girls (10–14 years) recognizing that they need to be reached before the ages when they are likely to drop out of school or be married. These interventions have not yet been evaluated comprehensively as they are either ongoing or have been implemented as pilot projects. Assessing the impact of these programs is not simple because many effects may not be seen until years later. Some have looked at specific outcomes such as in the Ishraq project in Egypt in which, among girls who participated and stayed in the intervention for 30 months, 92% passed the literacy test. Other interventions show an improvement in knowledge of health issues and expanded life goals among girls [15].

Schooling. Education, particularly secondary education, has repeatedly been found to be associated with a whole range of better SRH outcomes such as contraceptive use, age of marriage, number of births, and use of health services. One review of risk and protective factors for ASRH in low- and middle-income countries found that adolescents currently in school are less likely ever to have had sex compared with those who leave school early. Furthermore, the more years adolescents remain in school, the greater the chances that modern contraceptives would be used [16–20]. Another review from eastern, southern, and central Africa found that secondary education is strongly associated with decreased HIV rates and the reduction of risky sexual behavior (e.g., early sexual debut, number of sexual/casual partners, and unprotected sex). The authors concluded that education empowered girls in their sexual relationships and practice of safer sex [21]. Studies on how to promote the enrollment and retention of adolescents, especially girls, in primary and secondary schools are covered elsewhere in the literature and, hence, we do not cover it in this article, except to reiterate its importance for empowering adolescents in relation to their SRH and that education is essential and a right regardless of its impact in ASRH.

Interventions at the relationship level

Parental engagement. Parents and members of the extended family have always been important in the sexual and reproductive knowledge and development of young people [21–25]. Research from African and other settings shows that the communication between adolescents and parents on issues such a sexual relationships, early pregnancy, HIV, and contraception is often very limited [24,26,27]. Barriers to communication about sexuality include a lack of parental knowledge, reliance on schoolteachers, and a perception that talking about sexuality encourages sex [26].

Findings from a small number of intervention studies suggest that if parents are given support to develop the attributes of parental responsiveness, they can and will communicate with their children about sexuality (Table 1). It is possible to improve the content of the discussions and to raise awareness of and challenge social and cultural norms that hinder communication about sexuality [26]. For example, a parent-centered program to strengthen seventh graders' families' abilities to communicate with their teens, provide support, use positive parenting, and increase their involvement was conducted among low-income Latino households in Miami. After 3 years, youth in the intervention groups were less likely to report an STI and unprotected sex at last sex than peers in the two control conditions [28].

Partner-oriented programs. Studies from a number of settings have shown that the experience of forced sex with their first sexual partner is a risk factor for adolescents' sexual and reproductive behaviors; whereas being able to discuss reproductive

Table 1
Illustrative examples of programs aiming at creating an enabling environment for Adolescent Sexual and Reproductive Health and Rights (ASRHR)

Program and content (and references)	Design and objectives	Outcomes and achievements
Individual level		
Type of intervention: economic empowerment of girls: livelihoods, microcredit, cash transfers. The World Bank's Zomba conditional and unconditional cash transfer programs in Malawi. Target population/participants: never-married women aged 13–22 years. Baird et al. [12] Molyneux [45]	Objective: reduce the risk of sexually transmitted infections in young girls and increase girls' school attendance. Design: paid girls' school fees as well as the girls and their parents monthly, on the condition of satisfactory school attendance, that is, if the girl attended for at least 75% of standard school hours. Another group got unconditional cash payments.	• The program increased school attendance and reduced HIV incidence among girls who received the cash, independent of whether a condition was required. • Program beneficiaries were three to four times more likely to be in school at the end of the school year than the control group. • The program led to significant declines in early marriage, teenage pregnancy, and self-reported sexual activity among program beneficiaries. • HIV prevalence was considerably lower in both intervention groups compared with the control group at 18-month follow-up (1.2% vs. 3.0%).
Type of intervention: mentoring and economic empowerment. The Population Council and the K-Rep Development Agency's Tap and Reposition Youth (TRY) program in low-income and slum areas of Nairobi, Kenya. Target population/participants: serving out-of-school adolescent girls and young women ages 16–22 years. Erulkar et al. [48]	Objective: reduce adolescents' vulnerability to adverse social and reproductive health outcomes, including HIV infection, by improving their livelihoods options. Design: the program began with a basic model focused on savings and credit; by Phase II, the program had evolved to include elements of social support, which the organizers found was one of the most important program elements. Safe spaces came to be recognized as a core focus of all programs for young women.	• A significant impact on girls' earnings and savings: TRY girls were significantly more likely than girls in the control sample to have savings. By end line, TRY girls had more than doubled their savings, and the mean savings they had accrued was significantly larger than that of the control group. • TRY girls were more likely than girls in the control sample to be able to insist on condom use and to refuse sex.
Relationship level		
Type of intervention: life-skills training, SRH services, and social support. Shaping the Health of Adolescents in Zimbabwe. Implemented in periurban communities outside Harare, Zimbabwe. Target population/participants: enrolled young women 16–19 years old who had been orphaned and who were currently out of school and not infected with HIV. Dunbar et al. [40]	Objective: reduce risk and prevent HIV and STI. Design:1. Life-skills training including negotiation strategies to avoid violence. 2. Sexual and reproductive health services for all including condom and contraceptives, STI treatment, education about pregnancy, voluntary counseling, and testing. 3. Livelihood development including financial literacy, vocational training, and microgrants. 4. Integrated social support including mentoring, guidance counseling, and reunions.	• A 58% decrease in personal experience of physical and sexual violence over 2 years reported by program participants. • Increase in equitable gender norms and decrease in food security limitation. • No significant difference in HIV, herpes simplex virus (HSV), pregnancy rates, or unintended pregnancies between intervention and control groups.
Type of intervention: parental engagement and peer discussions. Somos Diferentes, Somos Iguales (SDSI) and PATH's Entre Amigas program in Nicaragua. Target population/participants: young people ages 13–24 years. Peña et al. [46] Solórzano et al. [49]	Objective: to reduce HIV risk and promote young people's rights and individual and collective empowerment in relation to sexual and reproductive health and HIV and to build intergenerational solidarity. Design: entertainment–education (edutainment) programs, social mobilization, and local capacity building. Distribution of communication materials to local groups, training for young people, and coordination with nongovernmental organizations and service providers. Intervention engaged girls in peer group discussions, mothers contributed to those peer groups, and the girls watched the carefully designed Sexto Sentido television series on ASRHR and related issues.	• Girls who participated in the peer groups were more likely to have satisfactory sexual health-related self-esteem and views on gender. • Participants with greater exposure to SDSI demonstrated a 62% greater probability of having talked with someone in the last 6 months about domestic violence, HIV, homosexuality, or the rights of young people. • Participants with greater exposure to SDSI demonstrated greater condom use with casual partners (among those who said they would had casual partners) but no difference in condom use with steady partner. • Individuals exposed to the intervention were more likely to know where to find information and services on HIV and violence.
Community level		
Type of intervention: Life skills, critical reflection, gender awareness. Stepping Stones, South Africa. A community intervention program in 70 villages in the Eastern Cape province of South Africa. Target population/participants: men and women aged 15–26 years who were mostly attending schools. Participants were mostly poor youth. Jewkes et al. [43]	Objective: the overall aim is to improve sexual health, gender-equitable norms, and communication and relationship skills. Design: training involves participatory learning to build knowledge, risk awareness, and communication skills and stimulate critical reflection about gender norms, power relationships with intimate partners, and other family and community members.	• Intervention participants experienced a 33% reduction in HSV-2 incidence. • Male intervention participants reported lower levels of violence perpetration (27% reduction at 12 months and 38% reduction at 24 months) and lower levels of risky behavior (i.e., 61% reduction in transactional sex and 32% reduction in problem drinking) at 12-month follow-up. • A process evaluation found that it helped men become less violent and avoid antisocial and risky behavior. Men were more empowered to communicate and showed positive changes in reducing the acceptability of violence. • Although some women showed greater assertiveness and agency, their ability to challenge prevalent gender norms was limited. • There was no evidence that Stepping Stones lowered the incidence of HIV.

Table 1
Continued

Program and content (and references)	Design and objectives	Outcomes and achievements
Type of intervention: community intervention, education, critical reflection, gender awareness. Yari-Dosti: promoting gender equity as to reduce HIV risk and gender-based violence among young men in India. Adaptation of Program H in Brazil involving participatory education and a community campaign for promoting equitable gender norms. Target population/participants: young men and women. Khandekar et al. [44] Pulerwitz et al. [47]	Objectives: challenge and change inequitable gender attitudes among young men and women (respectively), to reduce risky sexual behavior and violence against women. Design: involves peer-led, participatory group education, hourly sessions held every week over 6 months. Topics include gender equality and sexuality; STI/HIV risk and prevention; partner, family, and community violence; reproductive system; alcohol and risk; and HIV-related stigma and discrimination. In Mumbai, a lifestyle social marketing campaign reached 100,000 residents, promoting messages of relationships without violence, egalitarian attitudes, a view of women and girls as deserving respect, and shared responsibility for SRH. At 6-month follow-up, participants were compared with a control group. A similar intervention was undertaken in Ethiopia, with a three-arm quasi-experimental design in three low-income regions of Addis Ababa with young men aged 15–24 years.	• Intervention participants reported significant improvement in attitudes toward gender equity; increase in partner communication about sex, STI, HIV and condom use; increase in condom use at last sex with all partner; and decline in self-reported recent partner violence. • Gender-equitable attitudes were associated positively with a decreased risk of STI/HIV behaviors in the intervention group. • The intervention in Ethiopia showed similar results as the Yari-Dosti, with improvements in gender attitudes, reductions in violence perpetration, and improvements in STI- and HIV-related risk behaviors. • Program H in Brazil showed significant impact on self-reported condom use and improved attitudes toward gender-based violence. • In Yaari-Dosti, communities that were exposed to both group education as well as the lifestyle social marketing campaign were more likely to show positive results compared with those that were only exposed to group education.
Type of intervention: community intervention, work with community leaders. Berhane Hewan ("Light for Eve" in Amharic), a 2-year pilot project conducted in 2004–2006—a joint program of the Ministry of Youth and Sport and the Amhara Region Youth and Sport Affairs Bureau in Ethiopia. Target population/participants: girls aged 10–19 years. Karei and Erulkar [39] Erulkar and Muthengi [41]	Objective: aimed to reduce the prevalence of child marriage in rural Ethiopia. Its overall goal is to establish appropriate and effective mechanisms to protect girls at risk of forced early marriage and support adolescent girls who are already married. Design: a combination of group formation, support for girls to remain in school, and community awareness. Held "community conversations," bringing religious leaders, traditional healers, school administrators, and parents of adolescent girls together to discuss child marriage and other issues in the community. Participants developed an action plan and shared key messages from these meetings with other households in their communities.	• Considerable improvements in girls' school enrollment, age at marriage, reproductive health knowledge, and contraceptive use. • At the end of this program, girls aged 10–14 years were one tenth as likely to be married, three times as likely to still be in school; married girls were three times more likely to use family planning than control. This is one of the first rigorously evaluated interventions to delay marriage in sub-Saharan Africa.
National level		
Type of intervention: strengthening the implementation of laws and policies through youth participation. Geração Biz in Mozambique, a national multisectoral and multicomponent program. Target population/participants: in- and out-of-school youth and their social networks. Pathfinder International and WHO [42]	Objective: to improve ASRH, increase gender awareness, reduce the incidence of unplanned pregnancies, and decrease young people's vulnerability to STIs, HIV, and unsafe abortion; create an enabling environment for youth SRH through advocacy (local and central) and policy development and implementation support, including technical training in ASRH; strengthen the capacities of institutional partners (government, nongovernmental organizations, and other facilitators/service providers) to plan, implement, monitor, and evaluate multisectoral ASRH interventions. Design: improved access to youth friendly health services, school based interventions, and community outreach activities. The Geração Biz project was designed and developed by youth.	• A national network of high-quality youth-friendly health services. • High utilization among youth reporting the services meet their needs. • A significant impact on young people's knowledge, attitudes, and behavior.

ASRH = adolescent sexual and reproductive health; SRH = sexual and reproductive health; STI = sexually transmitted infection.

health issues with sexual partners is protective [16]. Programs addressing partner relationships are described in the following section on community-level interventions because interventions are typically focused on promoting equitable gender norms and attitudes by working with men and boys.

Peer-focused programs. Peers play an important role in adolescent development and socialization. Peers can influence one another either positively or negatively. A review of studies between 1990 and 2010 on risk and protective factors for ASRH found that having peers or friends who had had sex was a risk

factor across health outcomes [16]. Five reviews that assessed the effectiveness of peer education found that some interventions increased SRH knowledge and condom use; delayed first intercourse; promoted gender-equitable attitudes; and prevented STIs. However, the reviews found that the effects of peer-led programs tend to vary, with the young people who receive the peer training often benefitting the most [29].

Mentoring and positive role modeling. Programs in several settings have noted the importance of providing mentors and positive role models to young people as a key to improving SRH outcomes as well as aspirations for fertility, education, and work [30]. Research conducted in urban slums in Ethiopia, Kenya, and Nairobi suggests that girls typically have less opportunity than boys in interacting with peers and mentors [31]. Yet, mentors can be a critical social capital to lessen girls' health and economic risks. Being supported by a female adult role model who demonstrates leadership qualities or having girls themselves take on a visible role within the community and a sense of responsibility can be positive forces for change in the lives of young girls [32]. Hence, some adolescent health interventions are including components that involve a strong emphasis on building leadership skills, particularly of older adolescents, and training them to run mentoring programs for younger adolescents. These are yet to be evaluated to know whether they are effective or not.

Interventions at the community level

Mobilization of adults and community leaders. Community mobilization can foster intergenerational communication in support of ASRH. By engaging in public education efforts, community members learn about ASRH issues in culturally sensitive ways, increasing the prospects for attitudinal change. There is some evidence that the involvement of key community gatekeepers, including religious leaders, can generate wider community support [25,33] (Table 1). However, few community mobilization interventions have been evaluated for their impact, especially on SRH service utilization or even change in community attitudes. One challenge to evaluation is that community mobilization is often implemented as part of multicomponent interventions, and hence, evaluations cannot disentangle the effect of individual components [33].

Working with boys and men to promote gender-equitable norms. Adolescence is a period when both girls and boys are more intensely socialized into their gender roles and also when gender norms become more established. Norms related to masculinity influence boys and young men to take sexual and health risks, perpetrate violence, and perpetuate unequal decision making in relation to girls and women. Likewise, norms related to femininity influence girls and young women into submissive roles and prevent them from asserting themselves in their sexual relationships. Heterosexual norms can promote homophobia and stigmatize same sex relationships [34]. Addressing unequal and harmful gender norms is therefore a key element of creating enabling environments.

A growing number of SRH programs are addressing unequal and harmful gender norms and related behaviors by engaging men and boys using a range of approaches including participatory group education, mass media campaigns, and community mobilization activities. These approaches promote alternative norms and understandings of masculinity and behaviors in intimate relationships that involve mutual respect and equitable decision making, sharing responsibilities for reproductive health (e.g., condom use), and the greater involvement of men as fathers (Table 1). A review conducted by Barker et al [35] shows that integrated interventions that combine group education with men and boys, mass media activities, and community mobilization and outreach are promising in improving SRH, HIV, maternal and child health, and gender-based violence outcomes as well as gender-equitable norms and behaviors. The lessons learned from these interventions reinforce the need for working at multiple levels and promoting long-term changes in gender-equitable norms [35]. However, although there is a growing body of evidence to support this approach, there are still questions about sustaining change over a longer period of time, what are the most effective approaches across different settings, which interventions should be scaled up, which ones are cost effective, and whether approaches to work with men and boys can potentially have unintended negative consequences for the empowerment of girls and women.

Interventions at the societal level

Promoting laws and policies and their implementation. Laws and policies provide a framework for ASRH programming including specifying accountabilities for recourse and redress. Many countries have made commitments to a number of international agreements and consensus documents on human rights that include ASRH. However, in practice, their laws and policies may not always be in line with international human rights norms and standards. For example, many countries still do not have laws to protect adolescents from sexual violence or those that enable adolescent girls to access safe abortion. Moreover, even where good laws exist, they need to be implemented including through political commitment, adequate resource allocation, capacity building, and the creation of systems of accountability. For example, most countries have laws prohibiting marriage before the age of 18 years, but the enforcement of the laws is sporadic or absent, and the laws are routinely violated without any sanctions [36,37].

Media campaigns and large-scale communication programs. Mass media and other large-scale communication programs (e.g., edutainment) can contribute to raising awareness and motivating discussions about ASRH issues [23]. However, very few have been adequately evaluated to assess their impact beyond knowledge or awareness raising. Some that have been evaluated (e.g., Soul City or Sexto Sentido) allow researchers to attribute change, primarily in awareness, knowledge, and attitudes, to the intervention with greater confidence. However, even these have not, by and large, shown impact on changes in ASRH behaviors. In some settings, mass media programs—when combined with other community activities (e.g., the development of educational materials, supporting linkages to health services)—have contributed to changing HIV behavior and social norms among young people [38]. High-level messaging on the part of Heads of State and prominent individuals can also be useful in signaling a Government's position as a basis for advocacy interventions.

The article applies the ecological framework to identify the key elements creating an enabling environment for ASRH. At the individual level, interventions and programs have focused on the economic, social, and psychological empowerment of adolescents and the creation of safe spaces. At the relationship level, they have focused on creating, strengthening, and nurturing

supportive and equitable relationships with parents, peers, mentors, and partners to promote communication about SRH issues and improve access to information and services. At the community level, the work with men and boys through participatory group education and on community mobilization that challenges harmful gender norms and promotes equitable norms has been an important element for enabling environments.

This article does not systematically or otherwise aim to do a comprehensive review of the evidence to conclude that any one approach is effective compared with others. We seek to highlight the different levels and areas in which interventions have been implemented and research conducted as well as the paucity of conclusive evidence. The examples provided for each of the elements (Table 1) highlight that this is an emerging field and that there is a need to build a robust evidence base with well-evaluated interventions. Hence, there is a critical need for interventions research. Some of the examples highlighted in this article can offer ideas for adapting and trying out innovations for creating enabling environments, with the caveat that they need to be monitored and evaluated carefully.

A few lessons learned that have emerged from examples of interventions listed in Table 1 are

1. The need to be holistic: making the environment more enabling requires working at multiple levels. For example, multicomponent programs targeting individuals as well as families or communities such as Berhane Hewan in Ethiopia and Yaari-Dosti in India highlighted the importance of working directly with the adolescents as well as communities.
2. The need to invest for the long term: changing the environment in terms of social norms, community support, and sustaining behavior change among adolescents and their families requires interventions that invest in long-term programming. For example, in the Stepping Stones intervention, male participants showed higher levels of violence perpetration reduction at 24 months than at 12 months after intervention.
3. The need to focus on positive messages: interventions to change social norms may need to focus on positive messages about alternate norms related to masculinity or femininity to connect with the intended audience. For example, the Yaari-Dosti intervention in India was premised on generating positive role models of masculinity.
4. The need for more interventions research that includes early adolescents (10–14 years). Several interventions either focused on 15- to 19-year-olds or even included 20- to 24-year-olds. There is increasing evidence that norms and attitudes toward gender and sexuality, which are the basis for sexual behaviors are formed earlier during childhood and adolescence.
5. There is also a need for interventions to disaggregate the impact of their interventions for 15- to 19-year-olds separate from 20- to 24-year-olds recognizing that the developmental needs and situations including legal of 10- to 14-year-olds are different from 15- to 19-year-olds and likewise from that of 20- to 24-year-olds.
6. The article recognizes the importance of creating enabling environment for both adolescent girls and boys. However, in several instances in the article and the program examples, there has been a larger emphasis on girls. This reflects both, the nature of where programming emphasis on ASRH particularly in low- and middle-income countries has been and the increased global attention to the specific needs of adolescent girls who face increased vulnerability because of gender inequalities. Therefore, there is a need to also strengthen programmatic research for creating enabling environments for boys' SRH in their own right as well as in promoting gender-equitable attitudes and relationships with girls.

To create broader societal support and institutional accountabilities to ASRH programming, laws and policies that promote and protect the human rights of adolescents in relation to their SRH need to be in place and implemented. Supporting adolescents realize their SRH and human rights require building their access to information and services, their sense of entitlement, and their capacity to make decisions on their own behalf, all within the context of informed and encouraging families, healthy relationships, and supportive communities.

Acknowledgments

The authors are very grateful for the research assistance of Stephanie Perlson.

References

[1] Türmen T. Reproductive rights: How to move forward? Health Hum Rights 2000;4:31–6.
[2] Gupta GR, Parkhurst JO, Ogden JA, et al. Structural approaches to HIV prevention. Lancet 2008;372:764–75.
[3] Bronfenbrenner V. The ecology of human development: Experiments by nature and design. Cambridge, MA: Harvard University Press; 1979.
[4] Garbarino J. Adolescent development: An ecological perspective. Columbus, OH: Charles E. Merrill; 1985.
[5] Krug EG, Dahlberg TT, Mercy JA, et al. eds. World report on violence and health. Geneva: World Health Organization; 2002.
[6] Dunkle KL, Khandekar RK, Brown HC, et al. Transactional sex among women in Soweto, South Africa: Prevalence, risk factors and association with HIV infection. Social Sci Med 2004;59:1581–92.
[7] Madise N, Zulu E, Ciera J. Is poverty a driver for risky sexual behaviour? Evidence from national surveys of adolescents in four African countries. Afr J Reprod Health 2007:83–98.
[8] Jewkes R, Morrell R. Sexuality and the limits of agency among South African teenage women: Theorising femininities and their connections to HIV risk practices. Social Sci Med 2012;74:1729–37.
[9] Pettifor A, Macphail C, Nguyen N, Rosenberg M. Can money prevent the spread of HIV? A review of cash payments for HIV prevention. AIDS Behav 2012;16:1729–38.
[10] Heise L, Lutz B, Ranganathan M, Watts C. Cash transfers for HIV prevention: Considering their potential. J Int AIDS Soc 2013;16:18615.
[11] de Walque D, Dow WH, Nathan R, et al. Incentivising safe sex: A randomised trial of conditional cash transfers for HIV and sexually transmitted infection prevention in rural Tanzania. BMJ Open 2012;2.
[12] Baird S, Garfein R, McIntosh C, Ozler B. Effect of a cash transfer programme for schooling on prevalence of HIV and herpes simplex type 2 in Malawi: A cluster randomised trial. Lancet 2012;379:1320–9.
[13] Creating "safe spaces" for adolescent girls 2011. New York, NY: Population Council; 2011.
[14] Glennerster R, Takavarasha K. Empowering young women: What do we know? Cambridge, MA: Abdul Lateef Jamal Poverty Action Lab, MIT; 2010.
[15] Browne E, Oddsdottir F. Safe spaces for girls: Six-country mapping (GSDRC Helpdesk Research Report 937). Birmingham, UK: GSDRC, University of Birmingham; 2013.
[16] Mmari K, Sabherwal S. A review of risk and protective factors for adolescent sexual and reproductive health in developing countries: An update. J Adolesc Health 2013;53:562–72.
[17] Grown C, Gupta G, Pande R. Taking action to improve women's health through gender equality and women's empowerment. Lancet 2005;365:541–3.
[18] Boyle MH, Racine Y, Georgiades K, et al. The influence of economic development level, household wealth and maternal education on child health in the developing world. Social Sci Med 2006;63:2242–54.
[19] Little AW, Green A. Successful globalisation, education and sustainable development. Int J Educ Dev 2009;29:166–74.

[20] Gakidou E, Cowling K, Lozano R, Murray CJ. Increased educational attainment and its effect on child mortality in 175 countries between 1970 and 2009: A systematic analysis. Lancet 2010;376:959–74.
[21] Hargreaves J, Boler T. Girl power–The impact of girls. Education on HIV and sexual behaviour'. London: ActionAid International. Available at: www.actionaid.org.uk/doc_lib/girl_power_2006.pdf; 2006. Accessed January 15, 2014.
[22] Catalyzing change: Improving youth sexual and reproductive health through DISHA, an integrated program in India. Washington, DC: International Center for Research on Women; 2008.
[23] Generating demand and community support for sexual and reproductive health services for young people: A review of literature and programmes. Geneva: Department of Child and Adolescent Health and Development, World Health Organization; 2009.
[24] Biddlecom A, Awusabo-Asare K, Bankole A. Role of parents in adolescent sexual activity and contraceptive use in four African countries. Int Perspect Sex Reprod Health 2009;35:72–81.
[25] Kesterton AJ, Cabral de Mello M. Generating demand and community support for sexual and reproductive health services for young people: A review of the literature and programs. Reprod Health 2010;7.
[26] Bastien S, Kajula LJ, Muhwezi WW. A review of studies of parent–child communication about sexuality and HIV/AIDS in sub-Saharan Africa. Reprod Health 2011;8:25.
[27] Shtarkshall RA, Santelli JS, Hirsch JS. Sex education and sexual socialization: Roles for educators and parents. Perspect Sex Reprod Health 2007; 39:116–9.
[28] Prado G, Pantin H, Briones E, et al. A randomized controlled trial of a parent-centered intervention in preventing substance use and HIV risk behaviors in Hispanic adolescents. J Consult Clin Psychol 2007;75:914–26.
[29] Villa-Torres L, Svanemyr J. Ensuring youth's right to participation and promotion of youth leadership in development of sexual and reproductive health policies and programs. J Adolesc Health 2015;56:S51–7.
[30] Beaman L, Chattopadhyay R, Duflo E, et al. Powerful women: Does exposure reduce bias? QJE 2009;124:1497–540.
[31] Population Council and UN Adolescent Girls Task Force. Girls' leadership and mentoring. Available at: http://www.popcouncil.org/pdfs/2012PGY_GirlsFirst_Leadership.pdf. Accessed February 1, 2014.
[32] Salem Rania, Ibrahim Barbara, Brady Martha. Negotiating leadership roles: Young women's experiences in rural Upper Egypt. Women's Stud Q 2003; 31:174–91.
[33] Denno DM, Hoopes AJ, Chandra-Mouli V. Effective Strategies to Provide Adolescent Sexual and Reproductive Health Services and to Increase Demand and Community Support. J Adolesc Health 2015;56:S22–41.
[34] Greene ME, Gary B. ¿Que tienen que ver los hombres con esto? Reflexiones sobre la inclusión de los hombres y las masculinidades en las políticas públicas para promover la equidad de género. In: Sadler M, Aguayo F, eds. Masculinidades y políticas públicas: Involucrando hombres en la equidad de género. Santiago: Universidad de Chile; 2011.
[35] Barker G, Ricardo C, Nascimento M. Engaging men and boys in changing gender-based inequity in health: Evidence from programme interventions. Geneva: World Health Organization–Promundo; 2007.
[36] Jensen R, Thornton R. Early female marriage in the developing world. Gend Development 2003;11:9–19.
[37] Mackie G. Effective rule of law requires construction of a social norm of legal obedience. University of Chicago Political Theory Workshop; 2012.
[38] The effectiveness of mass media in changing HIV/AIDS-related behaviour among young people in developing countries. Geneva: World Health Organization; 2006.
[39] Karei EM, Erulkar AS. Building programs to address child marriage: The Berhane Hewan experience in Ethiopia. Washington, DC: Population Council; 2010.
[40] Dunbar MS, Maternowska MC, Kang M-SJ, et al. Findings from SHAZ!: A feasibility study of a microcredit and life-skills HIV prevention intervention to reduce risk among adolescent female orphans in Zimbabwe. J Prev Intervention Community 2010;38:147–61.
[41] Erulkar AS, Muthengi E. Evaluation of Berhane Hewan: A program to delay child marriage in rural Ethiopia. Int Perspect Sex Reprod Health 2009;35: 6–14.
[42] From inception to large scale: The Geracão Biz in Mozambique. Geneva: World Health Organization–Pathfinder International; 2009.
[43] Jewkes R, Nduna M, Levin J, et al. A cluster randomized-controlled trial to determine the effectiveness of Stepping Stones in preventing HIV infections and promoting safer sexual behaviour amongst youth in the rural eastern cape, South Africa: Trial design, methods and baseline findings. Trop Med Int Health 2006;11:3–16.
[44] Khandekar S, Rokade M, Sarmalkar V, et al. Engaging the community to promote gender equity among young men: Experiences from 'Yari-Dosti' in Mumbai, India. In: Unterhalter E, Boler T, Aikman S, eds. Gender equality, HIV and AIDS: Challenges for the education sector. Oxford: Oxford Publishing; 2008.
[45] Molyneux M. 2008, 'Conditional cash transfers: A 'Pathway to Women's Empowerment'?' Pathways to Women's Empowerment Working Paper 5, Institute of Development Studies, Brighton Available at. Accessed, www.pathways-of-empowerment.org/resources_pathways.html; February 17, 2014.
[46] Peña R, Quintanilla M, Navarro K, et al. Evaluating a peer intervention strategy for the promotion of sexual health-related knowledge and skills in 10- to 14-year-old girls. Findings from the Entre Amigas project in Nicaragua. Am J Health Promotion 2008;22:275–81.
[47] Pulerwitz J, Barker G, Segundo M, et al. Promoting more gender-equitable norms and behaviors among young men as an HIV/AIDS prevention strategy. Washington, DC: Horizons & Instituto Promundo; 2006.
[48] Erulkar A, Bruce J, Dondo A, et al. Tap and Reposition Youth (TRY) providing social support, savings, and microcredit opportunities for young women in areas with high HIV prevalence. New York: Population Council; 2006.
[49] Solórzano I, Bank A, Peña R, et al. Catalyzing individual and social change around gender, sexuality, and HIV: Impact evaluation of Puntos de Encuentro's communication strategy in Nicaragua, Horizons final report. Washington DC: The Population Council; 2008.