



**INFLUENCING THE SEXUAL AND REPRODUCTIVE
HEALTH OF URBAN YOUTH THROUGH
SOCIAL AND BEHAVIOR CHANGE COMMUNICATION**

A LITERATURE REVIEW



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ACRONYMS

Acquired Immunodeficiency Syndrome	AIDS
Adolescent and Youth Sexual and Reproductive Health	AYSRH
Demographic and Health Surveys	DHS
Emergency Contraception	EC
Family Planning	FP
Gender-Based Violence	GBV
Human Immunodeficiency Virus	HIV
Interpersonal Communication	IPC
Lesbian, Gay, Bisexual or Transgender	LGBT
Life-Planning Skills	LPS
Men who have Sex with Men	MSM
Non-Governmental Organization	NGO
Randomized Controlled Trial	RCT
Reproductive Health	RH
Sexual and Reproductive Health	SRH
Sexually Transmitted Infection	STI
Short Message Service	SMS
Social and Behavior Change Communication	SBCC
Voluntary Counseling and Testing	VCT
World Health Organization	WHO

EXECUTIVE SUMMARY

Young people represent the world of tomorrow. They are the future actors on the political, social and economic stage, and account for approximately 20 percent of the world's population (Blum and Nelson-Mmari, 2004). The majority of these adolescents live in developing countries, with a continuously increasing number residing in cities, where unique challenges and



opportunities exist for pursuing healthy, fulfilled lives. Although young people share some similarities in their development and transition from adolescence to adulthood, the place where they live can have a significant impact on their lives.

While urban areas may have more infrastructure and services than rural areas, being geographically surrounded by such resources does not guarantee access to them, particularly for poor and marginalized young people. The social and cultural context surrounding young people growing up in urban areas is also different, in both positive and negative ways. Consequently, health behaviors and outcomes are affected.

Given that adolescence is a critical period in life, during which behaviors are formed that can impact on current and future health (Springer et al, 2006; Foulger et al, 2013), efforts are needed to find effective ways of supporting young people in making healthy choices and ensuring they grow into adulthood with the capacity to contribute to the health, productivity and development of future generations. Social and behavior change communication (SBCC) is a means of achieving such change through the strategic use of tested communication principles and methods to promote healthy patterns of decision-making and behavior tailored to audience needs.

The Health Communication Capacity Collaborative (HC3) conducted a review and program scan of peer-reviewed and grey literature on sexual and reproductive health (SRH) of adolescents and youth in urban areas to explore the behavioral drivers, barriers and contextual factors and identify SBCC interventions targeting the sexual health of urban youth. The findings highlight promising practices and synthesize lessons learned, and offer insight into the elements that may yield more positive results for behavior change among urban youth.

KEY FINDINGS

The SRH behaviors of young people are influenced by the context in which they live and by a range of protective and risk factors operating and interacting at multiple levels:

At the **individual level**, protective factors include education, ability to resist peer pressure, a strong desire to avoid pregnancy, fear of contracting a sexually transmitted infection (STI) and good knowledge of SRH matters. Counteracting these protective factors, the risks include alcohol and drug consumption, poor negotiating skills and little or no knowledge of SRH.

At the **family and peer network level**, factors that can protect urban youth from unhealthy sexual behaviors include living with at least one parent and open communication about sexual health with peers, family or partner(s). Common risk factors are living alone, having a sibling with a premarital pregnancy and poor communication on SRH matters with parents, peers or partner(s).

At the **community level**, access to reliable information on SRH and social connectedness has been proved to be protective, while access to misinformation, negative attitudes of service providers and social isolation has all been found to place youth at greater risk of unhealthy sexual behaviors.

At the **societal level**, supportive policies can help create an enabling environment for healthy choices. Although the review found little information about this, examples of supportive policies include youth-friendly services and easy access to contraception. Risks presented at the societal level relate to unequal gender roles, which affect young women's ability to negotiate safe sexual relations, and poverty, which marginalizes many young people and excludes them from the advantages afforded by cities.

In total, the review identified 29 SBCC interventions targeting behavior change for urban youth SRH, spanning across three continents: Africa, Asia and Latin America. The majority of the interventions were implemented in school and community settings, while four were set in informal settlements. There was little variation in the target groups, with most interventions limiting their audience segmentation to a specific age bracket, or to whether the youth were in or out of school. Four interventions specified they only targeted vulnerable young women.

The programs used a variety of approaches, including scripted sessions, peer education, use of positive role-models, a curriculum providing decision-making skills and a holistic approach addressing the broader factors that affect the sexual health of urban adolescents, such as poverty or excessive alcohol consumption.

Most of the interventions also provided evaluations and an assessment of the results, which helped identify the more promising approaches. However, intervention and evaluation methodologies varied considerably, making direct comparisons difficult.

RECOMMENDATIONS

Despite differences in program design and evaluation methodologies, a number of approaches in program design and implementation showed particular success in achieving positive behavior change. Based on these findings, key recommendations for program design and specific SBCC activities include:

Create an enabling environment: Evidence in the literature and in the interventions examined show that behavior change is more likely to occur in an enabling environment where protective factors are promoted and barriers removed. To achieve this, a multi-component approach is necessary and SBCC programmers should consider:

- Dedicating time to informal discussions and exchange, which can fuel reflection on dominant norms and lead to improved attitudes relating to SRH;
- Working with service providers, including health care staff, pharmacies and laboratories to improve their attitudes and communication skills towards youth on SRH topics, and to ensure their respect of patient confidentiality; and
- Engaging parents and leaders to change the dominant norms and support positive attitudes around youth sexual health.

Involve young people: Engaging youth from the design stage of an intervention through to implementation can ensure that the needs of the target group are addressed adequately.

Segment and diversify audiences: Young people are a diverse group with differing needs. The review revealed significant gaps in terms of audience segmentation, with the majority of interventions either targeting youth in school settings or grouping young people into one single category. The diversity of this audience is underestimated and a large number of young people are excluded from, or not specifically addressed by, current SBCC SRH programming. Efforts should be made to include frequently forgotten groups and their particular needs, such as youth out of school, married youth, youth with children, youth with disabilities and, where culturally (and legally) appropriate, youth who identify themselves as lesbian, gay, bisexual or transgender (LGBT).

Engage secondary audiences: Secondary audiences such as parents, community leaders, influential people in the community and admired community members can be effective in promoting social and behavior change. Interventions should recognize the importance of key secondary audiences and seek to identify them and devise ways of actively engaging them to promote the desired behaviors in the primary audience.

Address the broader aspects of the intended audience's lives that affect SRH determinants and behavior change: Framing SRH in the context of broader youth needs and including information and activities on SRH as part of more holistic programs, such as income generation and livelihoods interventions, can have positive outcomes. Poverty and substance abuse can also be risk factors for youth SRH and holistic interventions are needed to equip young people with the skills and knowledge to mitigate these negative forces.

Develop multi-component interventions that use a range of channels and activities to reinforce messages: Common features of successful multi-component interventions include community-based activities, the creation of enabling environments by working with service providers, and the engagement of community leaders and other influential community members.

Adapt interventions to the local cultural context: Cultural respect and contextual intervention adaptation is essential for program acceptability. Particularly when an intervention addresses SRH, the broader dimensions of culture that govern sexual behaviors also need to be examined.

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Message development: Well-developed messages and communication activities can play a critical role in affecting behavior change in adolescents, particularly in three key areas:

- ***Provide clear, accurate information:*** Clear, accurate and accessible information should be at the core of any SBCC intervention where knowledge levels need to be improved. Pre-testing messages with the audience group is important to ensure that information is received as intended.
- ***Emphasize the dangers associated with risky sexual behaviors:*** During adolescence, when behaviors are often motivated by curiosity and a sense of invulnerability, the need for protection becomes secondary, placing the young person at risk. There is scope, therefore, for SBCC programming to increase threat perception of certain behaviors among young people, in conjunction with messages and activities that increase individual self-efficacy and self-confidence to engage in protective behaviors.
- ***Create a positive image of condoms:*** Negative images frequently associated with condoms (e.g. that they demonstrate mistrust and infidelity) can lead to embarrassment and stigma, thus reducing the likelihood of young people using them for protection. SBCC interventions can create more positive images of condoms as representing feelings of love, care and protection.

Use TV, the Internet and social media for reaching youth: Young people cite mass media as a key source of information and access to television, mobile phone technology and the Internet is rapidly increasing, especially in urban areas. These communication media should be considered as important channels for reaching urban youth.

Make activities and messages fun and appealing for youth: Including entertainment and fun aspects in SBCC programming on SRH is an effective way of attracting young people and engaging their attention.

Use popular role models: The power of popular public figures, such as sports stars and singers, can have positive effects on behavior change. Interventions should seek ways of involving admired personalities who deliver activities directly to the young people or promote positive practices through their appearance in the media.

Ensure that peer education is a component of a wider behavior change strategy rather than a stand-alone intervention: Considerable evidence suggests that peer education alone does not succeed in the objective of achieving behavior change, but can be an important approach for sharing information, stimulating discussion and promoting attitudinal change. Avenues for improving peer education should be explored, such as the use of near-peers (those of similar, but slightly older ages than the target audience) or complementing peer education with other behavior change activities. Addressing skill-building, decision-making, the ability to deal with peer pressure, communication skills and

an understanding of the cultural values around sexuality are all needed to support positive SRH behavior change.

Build sustainability into program design: Find ways of integrating program activities in existing systems to increase the likelihood that activities will be delivered and sustained. Opportunities for mainstreaming can be found in the school curriculum, in community events and in other significant occasions that mark community or family life. Interventions should also plan follow-up phases whereby successful activities are delivered at regular intervals post-intervention to reinforce positive outcomes.

INTRODUCTION

The Health Communication Capacity Collaborative (HC3) is a five-year, global project funded by the United States Agency for International Development (USAID) and designed to strengthen the capacity of developing countries to develop and implement state-of-the-art health communication programs. Led by Johns Hopkins



Bloomberg School of Public Health Center for Communication Programs (JHU-CCP), HC3 addresses important health issues such as child survival, family planning (FP), maternal and newborn health, HIV/AIDS, malaria, TB and non-communicable diseases.

One area of focus for HC3 is the health of young people. Recognizing that youth and adolescents represent the world of tomorrow, investing in their health and well-being is critical to promoting growth and development. Further, their potential as positive influencers on behaviors across generations, and their capacity to be active agents of change within their communities, makes young people a powerful resource for the success of many public health agendas, including the Millennium Development Goals (Sawyer et al, 2012).

Adolescents represent 20 percent of the world's population, with more than 85 percent residing in developing countries (Blum and Nelson-Mmari, 2004). According to the World Health Organization (WHO), adolescence occurs between the ages of 10 and 19, while the term "youth" refers to those aged 15 to 24, and "young people" are those aged 10 to 24. For the purpose of this document, unless age ranges are specified, youth, young people and adolescents are discussed generally and in overlapping terms. This is because not all documents reviewed adhered to the WHO's definitions, and not all documents specified age cohorts specifically. To tease out such distinctions in the reviewed literature was not consistently possible.

Adolescence is an important phase in life, during which health behaviors, attitudes and lifestyles are established for current and future health (Springer et al, 2006; Foulger et al, 2013). Nearly two-thirds of premature deaths and one-third of the total burden of disease in adults are associated with behaviors and conditions that began in youth, including tobacco consumption and unprotected sexual intercourse (WHO, 2008; Gore et al, 2011). Investing in the promotion of healthy practices in young people has therefore the potential of contributing to the health, well-being and productivity of future generations.

The transition into adolescence is associated with a series of physical, emotional, cognitive and social changes that can bring about risky patterns of behavior. These new vulnerabilities affect young people everywhere, regardless of geographical location. Yet, the social and physical environments do play an influencing role on risks presented to

youth and their resulting behaviors. In an urban or city environment, while opportunities like jobs, better housing, education and health care might be more prevalent than in rural domains, these benefits are often unevenly distributed, and urban poor have limited or no access to many urban amenities (UNFPA, 2007). The lives of poor urban youth are therefore characterized by inadequate housing, high rates of unemployment, limited or no infrastructure, poor social services, violence and crime (UNFPA, 2007; Gutierrez et al, 2006; Ndugwa et al, 2010). While harmful traditional practices like early marriage may dissipate in the urban environment, protective traditional values, such as community-based relationships and accountability, can also give way to more individualized ways of thinking. Urban young people are exposed to greater sexual freedoms, more liberal ideas about sexual relationships and more occasions for engaging in unhealthy sexual behaviors. Cities also offer youth additional access to media and new technologies, which feed the exchange of ideas and behaviors acted upon by youth on a global scale.

For programmers, urban environments offer unique assets to reaching youth, such as increased access to media and technology, greater availability of infrastructures and a high population density. With this said, it is important that programs addressing the sexual and reproductive health of urban youth appreciate both the unique challenges *and* opportunities offered by an urban setting. One method of reaching city-based youth that can harness the structural benefits of the urban milieu is social and behavior change communication (SBCC). SBCC is a means of achieving behavior change through the strategic use of a combination of tested communication principles and methods to promote healthy patterns of decision-making and behavior.

To explore the key elements for successful SBCC programming addressing adolescent sexual and reproductive health (AYSRH) in urban areas in developing countries, HC3 undertook a program scan and literature review. The aim of the literature review was two-fold:

1. To explore the sexual and reproductive health drivers, barriers and contextual factors of urban youth and adolescents in developing countries
2. To identify sexual and reproductive health SBCC interventions targeting urban youth and adolescents in developing countries and synthesize lessons learned

The final report presented here is structured around the above two objectives. The first section presents an overview of youth and adolescent health with a particular focus on issues concerning urban young people. Emphasis is placed on behaviors affecting their sexual health, including risk and protective factors, as well as gender-related matters.

The second section aims to document evidence-based programming by analyzing specific SBCC interventions addressing AYSRH in cities. Examples of interventions within the last ten years, from 2003 to 2013, are provided to identify the key features associated with successful implementation such as approaches, target groups and results. Lessons learned, gaps in programming and recommendations are presented at the end.

METHODOLOGY

The literature search involved both peer-reviewed journals and grey literature, and addressed a range of factors, including AYSRH behaviors, contraceptive practice, condom use, unwanted pregnancy, sexually transmitted infections and HIV/AIDS, while also paying attention to gender dynamics. The peer review search focused on documentation over the last 10 years and queried the following three databases: PubMed, Scopus and POPLINE.

The grey literature search was conducted using the following websites: WHO, UNFPA, UNICEF, The World Bank, The Communication Initiative, Population Council, Interagency Youth Working Group, The Urban Reproductive Health Initiative and The Guttmacher Institute.

To address the two objectives of the review, two separate searches were carried out in the peer-reviewed journals.

The first search looked at drivers of SRH behaviors among urban young people and used the following search terms: determinant, condom use, family planning, media, knowledge, attitude, practice, pregnancy, behavior, sex, education, peer and family. Connection terms used were “and” and “or,” and each search included words relating to the setting (“urban,” “city,” “peri-urban,” “suburban,” “metropolitan”), as well as words relating to the target group (“youth,” “young people,” “adolescent,” “teenager”).

The second search identified potentially relevant SBCC interventions addressing SRH in urban youth and adolescents and included the following search terms: sex, pregnancy, contraception, family planning, HIV, reproductive, intervention, behavior change, outcome, indicator, communication and community. This search also included words to help define the setting and to define the target group.

The grey literature review limited the searches to urban youth, but was more flexible with regard to other terms to allow capturing as much relevant information as possible.

In total, the two searches yielded over 200 results. After abstract review, a total of 155 articles were retained and 29 relevant SBCC interventions targeting urban youth were identified.

STUDY LIMITATIONS

Although every effort was made to collect and review interventions addressing AYSRH in urban settings in developing and transition countries, it is recognized that many may have been missed due to limited documentation about the intervention or no information regarding location. Among those retrieved and reviewed, in some cases information on the intervention setting was unclear, meaning that it could not be categorized as an urban intervention. In other instances, although an intervention was addressing urban AYSRH, the literature available was too scarce to fully understand it and it was not included in this analysis. Further, excluding citations from western countries, though necessary for focus of the study, may have limited exploring domestic successes that could be applied to a developing context.

KEY FINDINGS: SECTION 1: BEHAVIORAL DETERMINANTS

A GLOBAL PERSPECTIVE ON THE HEALTH AND WELL-BEING OF YOUNG PEOPLE

Adolescence is a transitional period from childhood to adulthood, characterized by biological, physical, psychological, emotional and social changes. It is a critical time in a person's life during which patterns of behavior are established that contribute to future health and well-being (O-Prastertsawat and Petchum, 2004; Springer et al, 2006). In particular, sexual maturation, coupled with curiosity and a sense of invulnerability, can lead to unhealthy sexual practices (Senderowitz et al, 2002) with potentially devastating consequences on morbidity and mortality. The high prevalence of sexually transmitted infections (STIs) in young people for example, including human immunodeficiency virus (HIV), is of paramount concern.

In 2007, youth aged 15 to 24 accounted for 45 percent of all new HIV infections worldwide (WHO, 2008), while 111 million of the 333 million new STIs recorded globally each year



occur in young people below the age of 25 (Blum and Nelson-Mmari, 2004). Furthermore, pregnancies and childbearing in teenage years are associated with significant health risks for adolescent women, especially in low- and middle-income countries, where related complications are the leading cause of death among girls aged 15 to 19 (WHO, 2012). Of equal worry is the incidence of

unsafe abortions, which in developing countries is estimated to range between 1 million and 4.4 million a year among women under 20 years (Blum and Nelson-Mmari, 2004).

In addition, over the last twenty years, a number of political, economic and social factors have altered young people's lifestyles and the landscape in which health behaviors occur. Today, young people grow up in a context of rapid urbanization and globalization, increased school enrollment, high-speed travel, instantaneous communication, easy access to information, more non-conventional ideas, and social challenges that can lead to unemployment, violence, frustration and disaffection. These global forces affect the circumstances in which young people's behaviors are formed and their impact on longer-term health outcomes, in both positive and negative ways.

YOUNG PEOPLE AND THE URBAN ENVIRONMENT

Cities have traditionally attracted people in search of a better future, whether in terms of economic or educational opportunities, or simply to escape poverty and, in some cases, conflict or natural disaster (UNICEF, 2012). Since the 1970s, rural-to-urban migration has

accelerated (Glover et al, 2007; Luke, 2005), and at the beginning of the 21st century, approximately 50 percent of the world's population was living in urban settings, compared to 30 percent in the 1980s (Blum and Nelson-Mmari, 2004).

One trend that has been observed and that will continue to intensify over the coming decades is an ever-growing number of adolescents living in urban areas. In 2009, approximately 50 percent of the world's adolescents lived in cities, and it is expected that this share will rise to 70 percent by 2050, with the strongest growth occurring in developing countries (UNICEF, 2011).

Cities typically generate wealth, jobs and investment, and are therefore associated with economic development. Urban youth are often better off than their rural counterparts, enjoying higher standards of health, protection, education and sanitation (Baker, 2008, UNICEF, 2012). However, these comparisons rely on aggregate figures and do not address that urban advances have been uneven, and a large proportion of urban youth remain marginalized and excluded from the benefits granted by cities.

Where disaggregated data are available, they uncover wide urban disparities in health and education between wealthy and poor youth, deriving from unequal access to services and amenities (UNFPA, 2007; UNICEF, 2012). Poor urban youth are faced with greater unemployment than adults, and, if they work, they are more likely than wealthier youth to be in the informal sector, where there is risk of exploitation and abuse (UNFPA, 2007).

Poor urban youth engage in riskier sexual behaviors (Adedimeji, 2008; UNFPA, 2007; Gutierrez et al, 2006), report higher morbidity and mortality from HIV and other diseases (Baker, 2008), and are more affected by violence, prostitution and substance abuse (Blum and Nelson-Mmari, 2004, Ndugwa et al, 2010) than their wealthier peers. HIV prevalence in cities in Sub-Saharan Africa is higher than in rural settings (Voeten et al, 2004), with prevalence exceeding 50 percent in some cities (Baker, 2008), and, globally, national surveys provide serological evidence that HIV is more prevalent in urban centers (UNAIDS, 2004).

An increasingly urban world is also contributing to a rise in communicable and non-communicable diseases linked to health behaviors (UNICEF, 2012) and young people around the globe are now battling with tobacco-related morbidities, excessive alcohol and drug consumption, violence and unintentional injuries, and infectious diseases such as STIs and HIV/AIDS.

A particularly vulnerable group is young migrants, who increasingly relocate to cities in search of work and better education opportunities. Although the majority of young internal migrants move with their families or caregivers (Van de Glind, 2010; UNICEF, 2012), significant numbers also move independently. A World Bank analysis of census and household data from 12 countries found that half of migrants aged 14 to 17 moved on their own (McKenzie, 2007).

Young, unaccompanied migrants are more vulnerable than those who move with their families and more likely to live in poverty, be unemployed or work in the informal sector, lack access to adequate social services, and be affected by violence and crime (Ndugwa et

al, 2010; Gutierrez et al, 2006). Migrant girls, who in many countries are more numerous than migrant boys (Temin et al, 2013), are also likely to suffer from social isolation. In Ethiopia for example, 40 percent of recent migrant girls reported having no friends versus 17 percent of migrant boys (Erulkar, 2012).

Furthermore, the fast pace of urbanization has denied affordable and proper housing to many impoverished people, whether internal migrants or not, who have resorted to renting or erecting illegal dwellings on vacant land. These informal settlements house large numbers of young people (Viener et al, 2012) and are characterized by one or more of the following criteria that jeopardize the health and well-being of their dwellers: no access to improved water, no access to improved sanitation, no security of tenure, no durability of housing and insufficient living space (UN-HABITAT, 2006).

Other than suffering from the negative health and social outcomes associated with the limited infrastructures in these settlements, young people living in informal settlements are also more likely than their rural peers and wealthier city counterparts to live on their own or with friends, thus lacking any formal parental control on their behaviors, which can expose them to greater risks. In Nairobi informal settlements, 44 percent of young people do not live with their biological parent (Ngom et al, 2003), and in Ethiopia, 30 percent of urban girls age 10 to 4 live on their own (Erulkar and Ferede, 2009).

Despite these challenges, urban areas also offer potential for young people. Compared to their rural peers, young urban residents are generally more likely to be enrolled in school and attain higher levels of education (Voeten et al, 2004, Darj et al, 2010), though this is not always true of poorer urban dwellers (Kabiru et al, 2011; Ngom et al, 2003; Mabala, 2006). Urban youth also tend to demonstrate more knowledge of contraception and other reproductive health matters than their rural counterparts (Gupta et al, 2003), and they have access to a wider range of information sources and media (Foulger et al, 2013; Mohammadi et al, 2006).

In summary, urban youth are not a homogenous group and are differentiated by wide disparities. Although many have access to better amenities, health facilities, education and communication sources, the lives of poor urban young people are typically characterized by inadequate housing, limited access to appropriate health and social services, independent living, and informal or hazardous work.

SEXUAL BEHAVIORS OF URBAN YOUNG PEOPLE

Urbanization and modernization expose young people to new ideas and new behaviors. While harmful traditional practices like early marriage and sexual initiation rites (e.g., female genital mutilation) erode, so, too, do protective social networks and traditional controls on sexuality, particularly for women. This leads to increased sexual freedoms and new forms of romantic relationships (Zabin, 2009). Several studies have highlighted that urban youth have a tendency to engage in riskier sexual behaviors than their rural counterparts. In a review of Demographic and Health Surveys (DHS) data on urban-rural differences from 28 sub-Saharan African countries, Voeten et al (2004) noted that the proportion of young men and women engaging in high-risk sex and having multiple partners was higher in urban areas for all 28 countries.

In El Salvador, young urban males are more likely to report initiating sex at an earlier age than their peers in rural areas (Springer et al, 2006); and in urban Cameroon, as much as 29 percent of young males and 16 percent of young females report having initiated sex before the age of 15 (Meekers et al, 2003). In Chinese cities, adolescents are increasingly having more liberal views about dating and are more likely to engage in premarital sexual relationships than their rural peers (Wang et al, 2005; Zabin et al 2009). In Ho Chi Minh City, Vietnam, an increasing number of young people consider sex before marriage acceptable (Vinh et al, 2003).

Urban areas also offer a higher concentration of “meeting venues” such as bars, nightclubs and brothels. The nightlife, coupled with opportunities for commercial sex, less restrictive cultural rules around sexuality, and the individualism and anonymity that cities offer, facilitates casual sexual encounters (Voeten et al, 2004; Yamanis et al, 2010). In Burkina Faso and Cameroon, studies suggest that new and multiple partnerships, as well as commercial sex, are more frequent in urban areas (Khan et al, 2006; Meekers et al, 2003).

For poor urban youth, sexual health is additionally compromised by the conditions of extreme deprivation and poverty in which they live. Data from Nairobi informal settlements indicate earlier sexual initiation, higher rates of premarital intercourse and lower levels of condom use among their young residents (Ngom et al, 2003; Kabiru et al, 2011) compared to their wealthier peers. Rates of adolescent pregnancy are higher in Nairobi informal settlement residents (2.5 percent) than among those living elsewhere (0.9

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percent) (Ngom et al, 2003), and in southwest Nigeria, risky sexual activity common to poor young urban dwellers includes early sexual initiation, multiple partners and not using a condom at last intercourse (Adedimeji et al, 2008).

Poverty also increases the likelihood of young people engaging in transactional sex. Transactional sex, or sexual exchange, can be defined as a relationship in

which material goods are exchanged for sexual acts (Pettifor et al, 2004; Magnja et al, 2007), and it appears to be a frequent practice among youth in developing countries. In a review of studies from Africa, Luke and Kurtz (2002) found that the prevalence of youth engaging in transactional sex was as high as 80 percent among 14- to 19-year-old girls in Tanzania, and 90 percent among 15- to 19-year-old girls in Uganda. Another synthesis of studies on transactional sex in 12 African countries revealed that between 2 percent and 26.6 percent of young women aged 15 to 19 years had engaged in transactional sex, and between 10.3 percent and 48.4 percent of men in the same age range reported having provided money or goods in exchange for sex (Chatterji et al, 2004).

Although transactional sex is common, it has not been predominantly associated with urban settings, and Darj et al (2010) found that in Uganda, the phenomenon is more common among rural than urban women. Nevertheless, poverty, which affects many urban youth, is a driver for transactional sex, and poor urban adolescent girls appear to be particularly at risk as poverty pushes many to commercial or transactional sex and exposes them to higher incidence of sexual exploitation and abuse (Hallman, 2004). Transactional

sex has been associated with limited ability to negotiate protected sex (Maganja et al, 2007), unsafe sexual practices and lower levels of condom use (Luke, 2005; Bankole et al, 2007). In urban western Africa, transactional sex has been associated with poor condom use (Boileau et al, 2009).

Generalizations can be made about urban youth engaging in riskier sexual practices than their rural peers. However, as seen earlier, urban youth are a heterogeneous group and some studies caution that differences exist between youth categories in the same cities (Speizer et al, 2013), which need to be taken into account in policies and programming. Zabin and colleagues (2009) analyzed sexual behaviors in young people of different age groups in three Asian cities and noted a significant difference between the sexual behaviors of younger and older adolescents. In that region, those aged 15 to 19, who are growing up at a time of particularly rapid national change, are more affected by the influences of modernization and more likely to engage in sexual behaviors than youth aged 20 to 24 who reached puberty before the economic transition. In Ghana, a study observed differences in risky sexual practices in different youth social groups, with young people in apprenticeship programs (carpenters, masons, etc.) and unaffiliated youth (street vendors or cart pushers, for example) being significantly more sexually active than youth in school. Moreover, unaffiliated young people were the most accepting of dominant gender norms that condone violence toward women (Glover et al, 2003).

Despite the numerous opportunities in cities for engaging in risky sexual behaviors, there is evidence that urban youth also have more knowledge of protective behaviors and, in particular, of modern contraception. Urban young people tend to be better educated than their rural counterparts (Voeten et al, 2006) and several studies have demonstrated that they are better informed on sexual health matters, including the menstrual cycle, contraception and STIs, and that they have higher rates of contraceptive use. Young urban Nigerian women for example, have been found to have higher levels of knowledge and awareness of reproductive health and of modern contraceptives compared to rural women (Ozumba et al, 2005).

In Uganda, young, educated women living in cities reported greater use of contraceptives than women in rural areas (Gupta, 2003), while the rate of contraceptive use among urban youth in Ethiopia was found to be 35 percent compared to 2 percent among rural youth (Seifu et al, 2006). In South Africa, young women were almost twice as likely to use condoms than their rural peers (Katz, 2006), and the partners of urban women in Nigeria had more positive attitudes towards modern contraception than the partners of rural women (Ozumba et al, 2005). In Asian cities such as Ho Chi Minh and Beijing, the use of condoms appears to be on the rise among young people (Vinh, 2003).

Unfortunately, the positive signs that urban youth are able to lead healthy sexual lives are not being witnessed among poor urban residents, and particularly among residents in informal settlements (Kabiru et al, 2011; Ngom et al, 2003). Gaps between rich and poor youth exist in cities, with adolescents living in poverty being disadvantaged and excluded from higher education, health services, social amenities and other benefits enjoyed by their affluent peers (UNICEF, 2012). As a result, poor urban youth are at greater risk of mortality and morbidity from a range of diseases, including HIV (Baker, 2008) and injuries

(Sverdlik, 2011), and are more likely to engage in risky behaviors that compromise their health. This indicates the importance of the environmental setting and context where young people live, which, combined with individual attributes, generate risk or protective factors for specific behaviors.

INFLUENCES ON THE SEXUAL BEHAVIORS OF URBAN YOUNG PEOPLE: RISK AND PROTECTIVE FACTORS

Behavior is a complex phenomenon, shaped by forces that operate at different levels. The interplay between personal, situational and socio-cultural factors that combine to influence behavior can be understood through an ecological framework. The basic premise of ecological thinking is that behaviors, their outcomes and their determinants are all interrelated (Crosby et al, 2011).

The Ecological Framework (**Figure 1**) organizes risk and protective factors across four domains, acknowledging that all are interconnected and blend to affect behavior:

Individual: This includes biological and personal history attributes, such as knowledge, skills, beliefs and values, emotions, perceived norms, and notions of self-efficacy and perceived risk.

Family and Peer Networks: This refers to the individual's close social circle and the relationships in his or her life. It includes peer influence, spousal communication, partner and family influences, and social support.

Community: This relates to the situational context in which an individual lives and in which social relationships are nested. The characteristics of the setting are associated with risk and protective factors and these include leadership, access to information, social capital and collective efficacy.

Societal and Structural: This includes the larger, macro-level environment that can promote or deter certain behaviors such as leadership, resources and services, policies, guidance and protocols, religious and cultural values, gender norms, media and technology, and income equity.

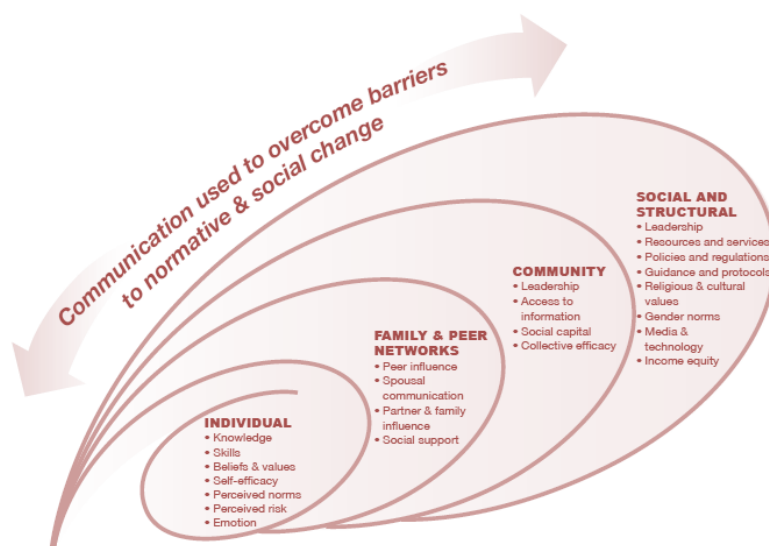


FIGURE 1: Ecological Framework

The risk and protective factors relating to the sexual health of urban adolescents and youth can be divided among the elements included in this framework. In the literature reviewed, the main AYSRH behaviors examined include: sexual initiation and ever having had sex, condom and contraceptive use, number of sexual partners, pregnancy and childbearing, and STIs and HIV. Although many of the risk and protective factors described here can be the same for rural adolescents too, the information has mostly been taken from studies focusing on urban youth, and only the elements most relevant to young urban residents are discussed. Table 1 provides a summary of the main protective factors and risk factors for AYSRH identified in the literature and arranged according to the ecological framework.

TABLE 1: Main Risk and Protective Factors for AYSRH

Ecological Framework	Protective Factors	Risk Factors
Individual Level	<ul style="list-style-type: none"> • Education and educational attainment. • High aspirations (e.g. finishing secondary school, career). • Ability to resist peer pressure. • Desire to avoid pregnancy. • High risk perception of contracting HIV. • Use of condom at first sex. • Good SRH knowledge. 	<ul style="list-style-type: none"> • Alcohol, drug and cigarette consumption. • Younger age. • Poor negotiating skills. • Poor or no knowledge of SRH matters.
Family and Peer Networks	<ul style="list-style-type: none"> • Living with at least one parent and closeness to at 	<ul style="list-style-type: none"> • Not living with parents. • Having a sibling with a

	<ul style="list-style-type: none"> least one parent. Supportive parents around SRH matters. Open communication about sexual health with parents and/or partner, and/or peer. 	<ul style="list-style-type: none"> premarital pregnancy. Living alone. Orphan status. Poor communication on SRH matters with parents and/or partner.
Community	<ul style="list-style-type: none"> Access to reliable information on RH matters. Social connectedness. 	<ul style="list-style-type: none"> Exposure to misinformation via the Internet / satellite TV. Negative attitude of service providers. Social isolation.
Societal and Structural	<ul style="list-style-type: none"> Supportive policies. 	<ul style="list-style-type: none"> Negative gender norms. Poverty / income inequity.

INDIVIDUAL LEVEL RISK AND PROTECTIVE FACTORS

At the individual level, factors noted as influencing the sexual behaviors of urban youth in either a positive or negative way include age, employment status, gender, education, risk perception, alcohol and drug use, and SRH knowledge. Urban residency itself has been associated with riskier sexual behaviors (Diop-Sidibé, 2005; Foulger et al, 2013; Zabin et al, 2009; Springer et al, 2006), although studies have also highlighted how urban youth are more knowledgeable of SRH matters and more likely to use modern contraceptives, including condoms (Bankole et al, 2007; Robinson and Seiber, 2008; Ozumba et al, 2005; Gupta, 2003).

Education

Probably the most consistently reported protective factor in the literature is education. Numerous studies refer to the protective influences of being in school and of higher educational attainment. Studies in such diverse settings as cities in western Africa, Mexico, Brazil and Kenya, found that being in school was consistently associated with delayed sexual initiation (Boileau et al, 2008; Meekers et al, 2003; Gutierrez et al, 2006; Juarez and Castro Martin, 2006; Erulkar, 2004).

In Cameroonian cities, higher levels of education were also correlated to condom use among males, especially with casual partners (Meekers et al 2003). In Mexico, Gutierrez and colleagues (2006) noted that higher levels of education and a higher economic status increased the probability of poor young residents in informal settlements using condoms. Similarly, the odds of using condoms consistently among youth who had at least secondary education in Ghana, Burkina Faso, Uganda and Malawi were almost twice as high as the odds for those who had less than secondary education (Bankole et al, 2007).

Correlations have also been found between competence and sexual outcomes. Competence has been described as the development of knowledge and skills across the

physical, social, cognitive and emotional domains, and the application of those skills (Pittman et al, 2003). In a review of studies assessing competence as an influence of sexual behaviors, House and colleagues (2010) found 11 longitudinal studies demonstrating that academic achievement is protective for sexual debut and four studies providing evidence to support the correlation between academic achievement and contraceptive use.

Although spending longer in school is associated with delayed age of marriage and therefore greater opportunities for engaging in premarital sex and the associated potential risks, a review of risk and protective factors for AYSRH in developing countries noted that being in school was protective for several reproductive health outcomes, including sexual initiation, condom and contraceptive use, and number of partners (Mmari and Sabherwal, 2013). By the same account, the protective attributes of education are lost when young people drop out of school and not being enrolled in school has been associated with riskier sexual behaviors (Glover et al, 2003; Mmari and Sabherwal, 2013; Speizer et al, 2013).

Age

Individual attributes such as age have also been studied in relation to reproductive health outcomes. Some studies have found an association between younger age and lower levels of condom use (Mohammad, 2007; Boileau et al, 2008; Boileau et al, 2009). Early adolescence is a critical time when vulnerability, especially for girls, is consolidated (Bruce, 2007).

Personal Attributes, Skills and Perceptions

The ability to resist peer pressure and personal aspirations has been found to be protective for a range of problem behaviors, including those linked to reproductive health (Ndugwa et al, 2010). Perceived risk of contracting HIV and the desire to avoid a pregnancy have been associated with higher condom use in cities in Ghana (Glover et al, 2003), Brazil (Juarez and LeGrand, 2005) and Nigeria (Adedimeji et al 2008). Interestingly however, although young people frequently recognize that HIV poses a threat for them in their communities, many find it difficult to perceive themselves as at risk. A study in informal settlements in Recife, Brazil found this perception can vary depending of the type of relationship in which a young person is involved. The symbolic meaning of condoms can shift according to the context of each particular relationship, with the degree of emotional involvement shaping an individual's evaluation of risk and need for protection. Individual characteristics such as shyness and embarrassment among youth has also been shown to be a barrier to purchasing condoms (Glover et al, 2003; Ozumba et al, 2005; Zellner et al, 2006; Tu et al, 2007).

Knowledge

The level of SRH knowledge is also an important influencing factor in AYSRH behaviors, and research points both to the detrimental effects of misinformation and to the positive associations between levels of correct information and healthy sexual behaviors. In Nairobi informal settlements, misconceptions about condoms, whereby young people label them as "ineffective," "liable to burst," "laced with HIV," or either "too big" or "too small," have

been identified as a barrier to condom use (Ngom et al, 2003). In Nigeria, the odds of using modern contraceptives were lower in women who had little or incorrect information around contraception (Ozumba et al, 2005), while a review of 244 studies on risk and protective factors of AYSRH in developing countries found knowledge to be a key protective factor for condom and contraceptive use (Mmari and Sabherwal, 2013).

Exposure to SRH Messages

SBCC campaigns can play a successful role in changing behaviors around contraception by providing correct and accessible information. In Uganda, reported exposure to messages on family planning was strongly associated with current use of modern contraceptives and with the intention to use a modern contraceptive. Moreover, a dose-response effect between message exposure and both use and intention to use modern contraceptives was observed (Gupta et al, 2003). In Swaziland, condom use among urban youth was positively associated with mass media exposure, in particular television (Katz, 2006), and in a multi-country study, exposure to radio and print media messages on sexual health emerged as a predictor of consistent condom use among young people (Bankole, 2007).

Use of Alcohol and Drugs

A final individual factor documented as influencing AYSRH behaviors is the use of alcohol, drugs and cigarettes, which has been positively associated with risker sexual behaviors in numerous studies. In Rwanda, Mexico and Tehran, alcohol, cigarette and drug use have been linked to increased sexual contact (Michielsen et al, 2012; Gutierrez et al, 2006; Mohammadi et al 2006; Perez and Dabis, 2003), while in Uganda, adolescents who drink alcohol are less likely to use condoms (Twa-Twa et al, 2008). A multi-country review of protective factors for AYSRH revealed that alcohol consumption was a risk factor for multiple partners and lower contraceptive use in countries in Asia, Latin America and the Caribbean (Mmari and Sabherwal, 2013).

Although individual factors have the potential to influence AYSRH outcomes in a beneficial or harmful way, adolescent and youth sexual decision-making and behavior does not happen in isolation, but rather in a complex context of relational, social and structural determinants. The following section will look at risk and protective factors of AYSRH behaviors at the other levels of the Ecological Framework.

FAMILY AND PEER NETWORK-LEVEL RISK AND PROTECTIVE FACTORS



In the social environment, potential positive and negative influences on the behaviors of young people abound. Friends, partners, family, community attitudes and structural factors all combine to support or discourage particular behaviors. In terms of AYSRH decision-making, the literature focuses mostly on the influences of peers, siblings and parents.

Peers

As adolescents become more independent, their social circle broadens and peer relationships emerge as more influential on behavior. The perception of peers being sexually active for example, is associated with sexual activity, (Mohammad et al, 2007), while the perception that peers are abstinent is predictive of sexual abstinence (Underwood et al, 2006). Similarly, peers' attitudes towards condom and contraceptive use have been seen to influence individual behaviors. For example, in Nigerian informal settlements, perceived peer support for condom use was associated with higher levels of condom use (Adedimeji et al, 2008). However, in Bamako, young people reporting peer norms in favor of condom use were more likely to report multiple partnerships (Boileau et al, 2009).

Siblings

An element of Social Learning Theory postulates that people learn behaviors by observing others and the rewards received from engaging in different patterns of behavior (Nutbeam and Harris, 2002). Close individuals in young people's lives who can act as role models include siblings and parents. In families around the world, older children, particularly sisters, often look after their younger siblings. In such families, an older child can therefore play a substantial role in influencing younger siblings through his or her own behavior. In three cities in Cote d'Ivoire, the probability of urban youth abstaining from sex was generally lower in those who had at least one sibling with a premarital birth and this likelihood was particularly marked in male adolescents (Diop-Sidibé, 2005). Similarly, in a review of over 200 studies on AYSRH behavioral determinants, having a sister with a premarital pregnancy fared as a significant risk factor for ever having had sex (Mmari and Sabherwal, 2013).

Parents

Sibling influence demonstrates that although adolescents transition from dependent children to young adults who function autonomously and whose behaviors are progressively influenced by external factors, parents and family remain constant elements in their lives and continue to exert a prominent effect on their behaviors (Viner et al, 2012; Ngom et al, 2003; Schwandt and Underwood, 2013).

Over the past years, research has increasingly assessed parental attributes as determinants of adolescent risk behaviors. Significant influencing factors identified by the research include: parent-adolescent communication, parental monitoring and control, parental education, perception that parents are caring and supportive, and living with at least one parent (Alves-Peres et al, 2008; Sanchez et al 2010; Erulkar et al, 2004; Adedijemeni et al, 2008). Strong parent-child communication ties, high parental expectations and parental presence in the home have been observed to provide protection from high risk-taking behaviors, including those related to sexual health (Ngom et al, 2003; Meekers et al, 2003; Twa-Twa et al, 2008).

In Nairobi, Kenya and Santiago, Chile, studies revealed that living with the father was protective for reproductive health outcomes of young women (Ngom et al, 2003; Sanchez

et al, 2010). When the father is present in the household, unmarried adolescent girls in Nairobi informal settlements are 42 percent less likely to ever have had sex, 59 percent less likely to have ever experienced an unwanted pregnancy and 45 percent less likely to have been sexually active in the four weeks preceding the study (Ngom et al, 2003). In Sao Paulo, Brazil, living with both parents has been found to be the most protective factor for adolescent sexual risk-taking, followed by living with one parent.

On the other hand, living with no parents was associated with greater sexual risk-taking and was defined as a significant risk factor (Peres et al, 2008). Similarly, in Nairobi, living alone was linked to unhealthy sexual practices (Ndugwa et al, 2010), and in Tehran, young males who did not reside with their parents or whose father had died, were more likely to report being sexually active (Mohammadi et al, 2006). Several studies have also documented how orphan status presents an added risk for unsafe sexual practices (Mmari and Sabherwal, 2013; Mabala, 2006; Hallman, 2004).

The type of relationship that one has with a parent is important and family connectedness is one of the most prominent factors found to protect against negative health outcomes in adolescence (Viner et al, 2012; Ngom et al, 2003; Karim et al, 2003; Hutchinson et al, 2012). In South Africa and Thailand, parent-child closeness has been associated with sexual delay (Robinson and Seiber, 2008; Fongkaew et al, 2012), and in Brazil, sustained supportive parental involvement has been linked to later sexual initiation and increased condom use for boys (Juarez and LeGrand, 2005). In Cameroon, parental support was a significant predictor for condom use among sexually active adolescents (Meekers et al, 2003; Twa-Twa et al, 2008).

Unsurprisingly therefore, family connectedness and support from parents are seen as crucial to the development of resilience among adolescents in harsh environments (WHO, 1999), though the mechanisms that trigger this have still to be understood. By the same token, lack of support from parents and a dysfunctional relationship can act as risk factors. In Mali, poor communication with parents on matters concerning reproductive health was a significant predictor of adolescents having multiple partners (Boileau et al, 2009), and in Chile, youth who perceived their families as dysfunctional were more likely to engage in sexual relationships (Sanchez et al, 2010).

The level of parental control over their children can also influence sexual behaviors. However, findings from the research provide contradictory results. In some cases, parental monitoring has been associated with lower levels of delinquent behaviors, greater schooling performance, lower levels of sexual activity and increased likelihood of condom use (Kumi-Kyereme, 2007; Ndugwa et al, 2010; Wight and Fullerton, 2013), while in other studies, young people whose parents imposed sexually restrictive norms were found to be less likely to protect themselves from unhealthy sexual activity and to be at greater risk of early sexual debut (Boileau et al, 2008). What seems to be important is the way in which parental control occurs. Without a supportive environment to discuss sex-related issues with parents, monitoring seems to be unable to achieve the intended objective. Active enforcement by parents can therefore be counter-productive if not done within an atmosphere of support (Kumi-Kyereme, 2007; Wight and Fullerton, 2013).

Despite the evidence of the critical role played by parents in influencing young people's health behaviors, many parents continue to express their anxiety and perceived inability to discuss sexual health matters with their children. Parents report being confused, feeling embarrassed, and lacking the necessary knowledge and skills to discuss sexuality with their children (Cherie et al, 2005). But they also convey the desire to learn how to communicate about sexuality with their children and to be equipped with developmentally appropriate strategies to discuss sexual behaviors and their consequences (Fongkaew et al, 2012).

Communication

Relationships with parents, siblings and partners are characterized by communication, which can take different forms. Studies have analyzed the effects of communication on AYSRH outcomes and found that open communication about sex-related matters with peers, family members and partners can be protective. The odds of condom use for example, are higher if a male has spoken to a friend or a relative about HIV/AIDS or sexuality (Maticka-Tyndale and Tenkorang, 2010; Kabiru et al, 2011).

Similarly, open communication with a partner about condoms and contraception has been positively associated with condom use (Adedimeji et al, 2008; Mmari-and Sabherwal, 2013). On the other hand, poor communication with peers, parents or partners is predictive of reduced likelihood of condom use (Robinson and Seiber, 2008; Hutchinson et al, 2012; Boileau et al, 2009; Bankole, 2007).

COMMUNITY-LEVEL RISK AND PROTECTIVE FACTORS

At the community-level, factors such as social connectedness and community cohesion have been found to counteract the influence of other risk factors. Studies describe the complex environment within which behaviors are formed and there is growing support for the hypothesis that some risks can be mitigated by positive community and social forces (Kaufman et al, 2004; Montgomery and Hewett, 2005; Campbell et al, 2005).

Robinson and Seiber (2008) noted how in South Africa, the broader social effects of the neighborhood environment operate to reduce other risk factors within the larger community, while Erulkar and Ferede (2009) describe how social connectedness contributes to healthier behaviors in adolescents. In contrast, social isolation has been reported as a risk factor for early sexual debut among boys and girls (Mabala, 2006), and for coercive sexual encounters for young women (Erulkar et al, 2004). Although little is still known about which particular neighborhood and community effects influence AYSRH outcomes in young people, exploring these mechanisms in urban settings can provide helpful insight for tailoring effective SBCC interventions.

At the community-level, factors such as social connectedness and community cohesion have been found to counteract the influence of other risk factors.

Availability of Information

The availability of information at the community level has been linked to both positive and negative outcomes for AYSRH. Research indicates that youth constantly cite mass media as

an important source of sexual information (Strasburger et al, 2009; Bankole et al, 2007) and a study across three Asian cities showed that the impact of media on sex-related knowledge and attitudes among young people is stronger than that of peers, family and school (Lao et al, 2012). Youth in urban settings are more likely than their rural peers to have access to television and the Internet, and there is evidence to suggest that permissive attitudes toward sexual behaviors among urban Nepalese adolescents could be associated with exposure to western TV channels (Regmi et al, 2008).

Similarly in Tehran, young people accessing both the Internet and satellite TV were more likely to have had sexual experiences (Mohammadi et al, 2006) and in Bangkok, using the Internet for information about sex, including pornography, was associated with increased sexual activity (O-Prastertsawat and Petchum, 2004). A qualitative study in Hanoi noted that young people use the Internet as a vehicle for expressing sexual identities and desires (Ngo et al, 2008), and research from three Asian cities (Taipei, Hanoi and Shanghai) found that the majority of respondents had learned about sex from the Internet (Lou et al, 2012).

The Internet is a promising source of SRH information in developing countries and is likely to increase in popularity over the coming years (Biddlecom et al, 2007). A study of 12- to 18-year-old secondary school students in Uganda showed both the desire and use of the Internet for information about HIV/AIDS and other sexual health topics (Yabarra, et al, 2006). Although Internet access has been related to increased sexual activity, it has also been linked to condom use (Mohammad et al, 2007), indicating the need and potential for credible, informative and easily accessible sources on SRH matters for young people.

Provider Attitudes

A frequently mentioned barrier to adolescent healthy sexual behaviors is provider attitude. The judgmental, critical or negative stance of service providers, as well as young people's fear about lack of confidentiality have been documented as causing embarrassment in young people and deterring them from buying condoms, seeking sexual health services and discussing SRH matters with adults (Senderowitz et al, 2003; Glover et al, 2003; Ozumba et al, 2005; Adedimeji et al, 2008; Tu et al, 2007).

SOCIETAL AND STRUCTURAL-LEVEL RISK AND PROTECTIVE FACTORS

Policy

The policy context can help create an enabling environment for healthy behaviors. With regard to AYSRH, successful policy initiatives include youth-friendly reproductive health services, which have been linked to increases in demand and quality of adolescent care (UNFPA website), and policies that make emergency contraception (EC) readily available to young people. Access to EC helps reduce unintended pregnancies and abortions and, when provided with counseling and advice, can support young women in understanding the importance of modern contraceptive methods (In Focus, 1998). Another example of promising structural policies is the 100% Condom Use Program, implemented in Cambodia and Thailand, which has been credited with reducing HIV among sex workers in the 1990s and 2000s (UNAIDS, 2011). Despite these illustrations of successful structural and societal approaches, this review found no information on policies specifically addressing the SRH of urban youth and the related behavioral outcomes.

Poverty

At the societal level, poverty and income level have been cited as determinants of health. In the 1990s, a World Bank study of 72 countries showed that high rates of HIV infection were associated with low national income and unequal distribution of wealth (World Bank, 1997). Urban poor face deprivations such as limited access to income and employment, poor infrastructure and services, inadequate living conditions and greater vulnerabilities to health risks and natural disasters (Baker, 2008). Although adults and youth alike are affected by these challenges, young people are particularly vulnerable and more likely to engage in behaviors that negatively impact their health, such as substance abuse and delinquency (O'Higgins, 2002), as a result of their poverty. The greater vulnerabilities of poor urban youth versus their wealthier counterparts have been well documented, with poor youth having less access to schooling and other social services, and being more likely to engage in unhealthy sexual behaviors (Kabiru et al, 2011; Ngom et al, 2003; Mabala, 2006; Speizer et al, 2013).

Gender

Gender discriminatory behaviors can disempower women and impact their ability to protect themselves from negative outcomes of sexual activity. In particular, poor urban girls are more likely than their wealthier peers to experience earlier sexual debut, have multiple sex partners, have lower chances of condom use at last sex, increased likelihood of coerced first sex and a higher odds ratio of having engaged in transactional sex (Hallman, 2004). Further, the social norms governing premarital romantic relationships are often stricter for females than males (Jaya and Hindin, 2009) potentially shaping young women's ability to make informed decisions.

Several studies have reported that females consistently demonstrate lower negotiation skills and lower levels of condom and contraceptive use, and this is particularly true of younger women (Ngom et al, 2003; Erulkar, 2004; Robinson and Seiber, 2008). Males on the other hand, are more in control of their sexual lives (Boileau et al, 2008) and have greater condom self-efficacy (Adedimeji et al, 2008), suggesting embedded social norms around gender and decision-making.

The gendered context in which young people live means that even protective factors affect boys and girls differently. Education has been cited as protective; however girls' school attendance is significantly lower. Primary school completion rates are below 50 percent in most poor countries, and in 19 African countries, secondary school completion rate for adolescent girls is below 5 percent (Lloyd, 2009). Similarly, the documented association between knowledge of SRH matters and protective sexual behaviors is less evident among poor urban girls than poor urban boys. Erulkar et al (2004), for example, found that fewer young women living in low-income areas of Addis Ababa were exposed to HIV information than their male peers.

Amid such cultural and social beliefs fostering gender, young women are less able to refuse sex or negotiate safe sex, increasing their vulnerability to negative sexual health outcomes inequality (Jewkes et al, 2010; Bermudez, 2010). Although this can be true for

both rural and urban girls, social isolation puts poor urban girls at greater risk (Erulkar et al, 2012; Hallman, 2004; Mabala, 2006).

Summary of Risk and Protective Factors

The risk and protective factors examined here underline the complex context in which young people make choices regarding their SRH behaviors. Individual behavior is affected by personal characteristics that interact with the family context, peers, community and broader structural elements that promote or deter protective behaviors. It is the combination of these multiple factors that can mitigate or enhance risk, and lead to behavioral outcomes. Needs, behavioral determinants, risk and protective factors differ for different groups of youth, and AYSRH interventions need to acknowledge the heterogeneity of young people and the specificity of the context within which they live.

KEY FINDINGS: SECTION 2:

SBCC INTERVENTIONS ADDRESSING URBAN AYSRH

The second objective of the literature review was to identify SBCC interventions addressing AYSRH in urban settings in developing countries. It was hoped that examining existing programs could result in ascertaining promising practices, as well as help highlight any existing gaps in AYSRH SBCC programming.

For an intervention to be selected, it had to specifically address AYSRH in an urban or peri-urban setting. Although a vast amount of literature was found on AYSRH, many interventions did not target urban adolescents and youth in particular. Some were aimed at rural young people, while others provided little or no information regarding the location of their target group, whether rural or urban. As a result, 29 interventions specifically targeting urban youth were included in the review.



There were considerable variations in the information provided about each individual intervention, with some being described in detail and others only providing an outline of activities; some interventions were evaluated following rigorous procedures, while others were assessed using less strict methodologies. These differences make direct comparisons between interventions difficult, however, as can be seen in the following sections, general observations are made about key elements and approaches that can yield more positive results.

Detailed descriptions of the interventions, including activity overview, evaluation methodology, results and observations, can be seen in Appendix 1, while Table 3 provides a summarized version.

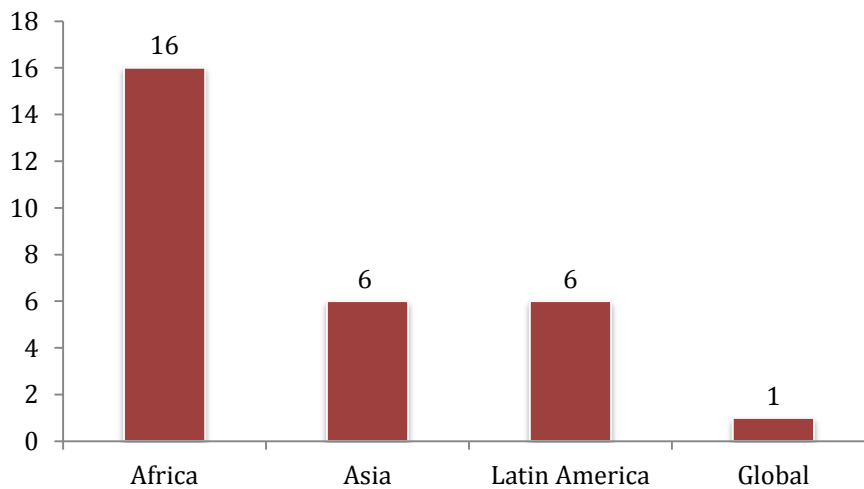
After scanning the literature, some interesting interventions were found that did not strictly correspond to the selection criteria, but that employed potentially beneficial components that can help inform AYSRH programming for urban adolescents and youth. The *Fataki Campaign*, for example, is not directed exclusively at youth, but offers an interesting perspective on how to address intergenerational sex. The *Go Girls! Initiative* was implemented in rural areas; however it provides interesting insights into how to engage parents in contributing to their children's sexual well-being. *Scrutinize* and *FEMINA HIP* target young people, but are not limited to the urban context. **Appendix 3** provides a list of interventions that were thought to include approaches that can be useful for AYSRH programming for urban youth, but did not meet the inclusion criteria for the literature review.

OVERVIEW OF STRATEGIES AND APPROACHES

GEOGRAPHICAL LOCATION

The interventions identified spanned three continents: Africa, Asia and Latin America. Sixteen were implemented in Africa, six in Asia and six in Latin America. One program, *TeenWeb*, was delivered both in Brazil and in Africa, and is considered in this report as two separate interventions geographically, but not programmatically. One intervention was global and is treated as one intervention both geographically and programmatically, with results being reported from cities in South America, Africa and Asia. **Figure 2** gives a graphic representation of the geographical distribution of the interventions and highlights the preponderance of interventions occurring on the African continent.

FIGURE 2: Geographical Location of Interventions



INTERVENTION SETTING

Thirteen interventions took place in a school setting and an additional study was carried out in the university setting. Seven interventions were located in the community, three of which were implemented in informal settlements, while two were set both in schools and in the community. Although most interventions used some form of mass media, such as radio or print media, for four interventions, mass media was the main medium of communication. One intervention exclusively used mobile phone technology. Figure 3 gives a visual summary of this information, showing how programs in schools dominate over interventions in other settings (at 45 percent).

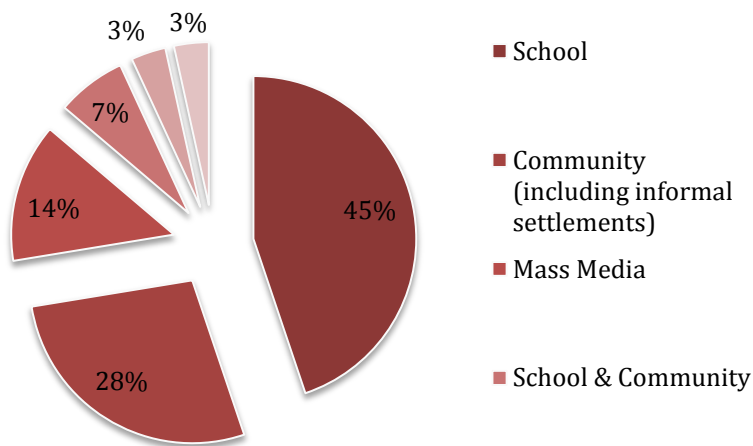


FIGURE 3: Intervention Settings

TARGET GROUPS

Youth in school were the most heavily targeted group. A large number of interventions targeted youth in general (in and out of school), while four interventions – *Biruh Tesfa* in Ethiopia, the *CARE Livelihood & Reproductive Health Initiative* in India, the *Filles Evelliées* program in Burkina Faso and the *TRY* project in Kenya – specifically targeted vulnerable young women. The community-based interventions also targeted young people in and out of school, between the ages of 10 to 30 years. Two of the community-based interventions specified that their audience was unmarried youth. The mass media interventions tended to target young people of diverse age ranges and four interventions targeted youth in general without specifying age or audience segment. In total, the target groups could be divided into three broad categories of young people: students, youth in general (regardless of school enrollment) and vulnerable young women. **Table 2** below shows the prevalence of interventions targeting each of the three youth categories.

TABLE 2: Percentage of Youth Category Targeted by the Interventions

Youth Category	Number	Percentage
Students (school, college and university)	13	45%
Youth in general (in and out of school)	12	41%
Vulnerable young women (migrant domestic workers, informal settlement residents)	4	14%

Although 12 interventions included youth in general, no intervention specifically targeted youth out of school. Of those 12 interventions, five specified an age range and two specified that they were targeting unmarried youth, but no intervention explicitly mentioned inclusion of married young people.

TABLE 3: Summary of SBCC Interventions Targeting Urban Youth

Name of the Intervention	City	Country	Target Group	Setting	Objectives	Brief Description of the Intervention and results
A Team Against AIDS (Givaudan et al, 2008)	Toluca	Mexico	10 th grade students	School	<ol style="list-style-type: none"> 1. Improve knowledge, attitudes and norms around sexual health; 2. Increase self-efficacy for HIV-protective behaviors; 3. Increase self-esteem; 4. Improve decision-making and communication skills; and 5. Improve behavioral intent for HIV-protective behaviors. 	<p>Teachers were trained to become sexuality educators in their school. In the training, teachers learned how to conduct an interactive AIDS-focused sexuality education program aimed at developing life-skills. Teachers received a manual to support them in delivering the intervention. 10th grade students then received the 30-hour program, divided into two-hour sessions per week over one semester. The comprehensive AIDS and sexual health education curriculum also provides students the opportunity to practice the skills they learn.</p> <p><u>Results:</u></p> <ul style="list-style-type: none"> • Improvements were recorded in all outcome variables, including knowledge, attitudes, perceived self-efficacy, decision-making skills and behavioral intent. • Over time, the effects of the intervention faded; however, they remained higher than at baseline and compared to the control groups.
Biruh Tefsa – Bright Future (Erulkar et al, 2011; Erulkar et al, 2012)	17 cities. Results provided from Addis Ababa	Ethiopia	10- to 19-year-old out-of-school girls	Community (informal settlements)	Address social isolation of out-of-school girls by building their social capital, providing access to literacy and increasing knowledge of HIV, RH and gender-based violence (GBV).	<p>Trained mentors meet with the girls in safe community spaces where they deliver curriculum that includes life skills, HIV/AIDS, RH, GBV and basic literacy. Eligible girls are identified directly by the mentors through house-to-house visits. Due to the extreme poverty in which they live, girls are also supplied with soap and sanitary towels to cater for their needs. Girls are also given vouchers to access health services for free.</p> <p><u>Results:</u></p> <ul style="list-style-type: none"> • Increase in percentage of girls reporting having “many friends,” from 29 percent to 35 percent two years after baseline. • Increase in girls reporting having a safe space to go to, from 7 percent to 25 percent.

Name of the Intervention	City	Country	Target Group	Setting	Objectives	Brief Description of the Intervention and results
						<ul style="list-style-type: none"> • Girls in intervention were more likely than girls in the control group to have undergone HIV voluntary counseling and testing (VCT).
CARE Livelihood & Reproductive Health Initiative (Sebastian et al, 2005)	Allahabad, Uttar Pradesh	India	Adolescent girls in informal settlement (14 to 19 years)	Community (informal settlements)	Improve reproductive health and self-efficacy of young adolescent girls.	19-month long intervention, integrating livelihood activities for girls aged 14 to 19 years into CARE-India's existing reproductive health program for informal settlement residents. Group sessions on reproductive health held weekly for 7-10 weeks followed by vocational training, offering 19 different vocational courses lasting 1-2 weeks each. <u>Results:</u> <ul style="list-style-type: none"> • Greater knowledge of safe places where unmarried girls can congregate. • Greater knowledge of SRH matters. • Improved social skills.
The China Youth Reproductive Health Project (Educational Research Institute of Harbin, 2005)	Harbin	China	Young people in & out of school (10- to 14-years-old) (Data reported from school-based program only)	School and Community	<ol style="list-style-type: none"> 1. Increase adolescents' self-esteem, awareness of positive gender and human rights values, and safer sexual practices; 2. Increase adolescents' access to and utilization of high-quality sexual and reproductive health services and counseling; 3. Create a supportive environment for programming at national, community and school levels; and 4. Improve national-level response to ASRH issues by building capacity of agencies to advocate for, plan, implement and evaluate innovative ASRH activities. 	Provision of holistic Life-Planning Skills (LPS) developed in partnership with community leaders and government representatives, and accompanied by IEC materials. Schoolteachers were trained in delivering the program and each school developed an implementation plan for LPS training in identified classes. <u>Results:</u> <ul style="list-style-type: none"> • Increased knowledge of contraception (though this had decreased at three months post-intervention). • Improved knowledge on how to use condoms correctly. • Increased knowledge of HIV/AIDS. • Improved attitudes towards condoms.

Name of the Intervention	City	Country	Target Group	Setting	Objectives	Brief Description of the Intervention and results
Comprehensive Sex Education Program (Wang et al, 2005)	Songjiang (suburban Shanghai)	China	Unmarried youth – in and out of school (15 to 24 years)	Community	1.Delay sexual activity; 2.Increase contraceptive use in sexually active young people; 3.Reduce likelihood of youth being involved in sexual coercion; and 4.Decrease unwanted pregnancies.	Community-based comprehensive sex education program providing information about abstinence, contraception and healthy sexual behaviors through six types of activities: (1) distribution of educational reading materials; (2) screening of educational videos; (3) lectures; (4) peer group discussions; (5) provision of reproductive health services; and (6) counseling. <u>Results</u> <ul style="list-style-type: none"> • Increase in condom use in the intervention group, with 89 percent of participants reporting condom use most or all of the time, compared to 45 percent in the control group. • More than twice the amount of young women in the intervention group reported using emergency contraception. • Reports of having coerced someone into sex were lower in the intervention group (3 percent compared to 9 percent). • Reports of being coerced into unwanted sexual activity were lower in the intervention group (3 percent vs 6 percent). • No differences were identified in sexual debut between the two groups.
Filles Eveillées – Girls Awakened (Engebretsen, 2012)	Bobo Dioulasso	Burkina Faso	Migrant young women in domestic work (11 to 18 years)	Community	1.Increase girls' social capital; 2.Build girls' skills in health, including SRH, life skills and financial capabilities; and 3.Link girls to services.	8-month, 30-sessions safe-space intervention, where girls meet with trained female mentor once a week on Sundays for 2 hours. Interactive discussions, personal stories, exercises, and role-plays used to address girl specific competencies in life skills, health and hygiene, sexual and reproductive health, and financial education. <u>Results:</u> <ul style="list-style-type: none"> • Reduced feelings of isolation. • Increased number of friends. • Increased feelings of self-confidence. • Increased knowledge of SHR issues. • Increased knowledge of where to go in case of rape.
Flying Youthood (Lou et al, 2006)	Shanghai	China	High school and college	Two high schools and	Provide sex and reproductive health education for young people through the	Specifically designed, password-protected website offering sexual and reproductive health knowledge and service information, ten

Name of the Intervention	City	Country	Target Group	Setting	Objectives	Brief Description of the Intervention and results
			students	four colleges	Internet.	<p>educational videos, professional counseling through email, and a bulletin board for group discussions and exchange of information and experiences.</p> <p><u>Results:</u></p> <ul style="list-style-type: none"> • Increased knowledge of reproduction, STIs, condoms and contraceptives in the intervention group. • Improved attitudes towards condoms in the intervention group. • No differences in sexual behaviors between the intervention and control groups.
Grassroot Soccer (Clark et al, 2006)	Bulawayo	Zimbabwe	12- to 14-year-olds	School	Improve knowledge, attitudes and intended behaviors relating to HIV/AIDS.	<p>Based on Social Cognitive Theory, professional soccer players who were trained in HIV/AIDS and sexual health, delivered four two-hour sessions over two weeks during school time. There were four soccer players per approximately 40 students. Sessions were interactive and covered: basic knowledge about HIV transmission and ways to protect oneself, understanding personal risk, AIDS stigma and ways to facilitate peer-to-peer education. At the end of the two-week intervention, a graduation ceremony was held.</p> <p><u>Results:</u></p> <ul style="list-style-type: none"> • Immediately post-intervention, those receiving the activity registered significantly higher levels of belief in condom effectiveness, social support and awareness of HIV prevention services, and a reduction in stigma. • At five months post-interventions, most results were sustained though there was a slight decrease in belief in condom effectiveness and in social support.
HEART: Helping Each other Act Responsibly Together (Underwood et al, 2006)	Intervention was country-wide but only data from cities is reported here.	Zambia	13- to 19-year-olds	Mass media	<p>Overall aim was to provide a social context in which prevailing social norms could be discussed, questioned and reassessed. Specific objectives include:</p> <p>1. Influencing knowledge, attitudes and social norms; and</p>	<p>Guided by stage theory of behavior change, the HEART campaign is a multi-media campaign using television, public service announcements, radio spots, music and music videos, billboards and other print materials. Young people have been involved from conceptualization through to realization of the campaign and a Youth Advisory Group was established with 35 young people.</p>

Name of the Intervention	City	Country	Target Group	Setting	Objectives	Brief Description of the Intervention and results
					2. Enhancing self-efficacy by upholding abstinence and condom use as the only viable alternatives.	<p><u>Results:</u></p> <ul style="list-style-type: none"> • Talking to others about the ads. • Intention to abstain from sex. • Intention to use condoms. • Higher reported condom use at last sex.
<p>HIV Prevention in Mexican Schools (Walker et al, 2006)</p>	Morelos State	Mexico	First year high school students	High school	Improve knowledge, attitudes and access to condoms and emergency contraception.	<p>Teachers participating in the intervention received 40 hours training and delivered a total of 30 hours (15 weeks) sessions to the students. Topics included: the consequences of unprotected sex and how to avoid it; dealing with social pressures that influence sexual behavior (peer pressure, cultural values); communication skills (including practicing those skills); and negotiation and refusal skills.</p> <p><u>Results:</u></p> <ul style="list-style-type: none"> • Increase in the proportion of men reporting condom use with a casual partner or sex worker at first follow-up. • Greater proportion of girls reporting using emergency contraception. • Increased knowledge of HIV and risky sexual behaviors.
<p>HIV Workshop plus Condom Kiosk (Martinez-Donate et al, 2004)</p>	Tijuana	Mexico	10 th to 12 th grade students (average age 17.6 years)	School	<ol style="list-style-type: none"> 1. Improve sexual practices; 2. Increase condom use and access; 3. Improve self-efficacy regarding HIV prevention; and 4. Improve condom-related attitudes. 	<p>Two-phased intervention. First phase consisting of a one-off three-hour workshop covering seven elements lasting 15 to 40 minutes each: (1) HIV-related attitudes and risk behaviors; (2) Effects of AIDS on health and family; (3) Facts about HIV/AIDS; (4) Transmission of HIV; (5) Living with HIV; (6) Myths about HIV/AIDS; and (7) Condom use and negotiation skills. Second phase was introduced three months later and involved setting up a kiosk in the school distributing free condoms and HIV information.</p> <p><u>Results:</u></p> <ul style="list-style-type: none"> • Slower increase in sexual initiation. • Significant increase in students buying condoms. • No effects found on students' self-efficacy to engage in HIV-protective behaviors.

Name of the Intervention	City	Country	Target Group	Setting	Objectives	Brief Description of the Intervention and results
Hoy Toka (PSI Research & Metrics, 2011)	Chetumal	Mexico	15 to 24 year olds	Community, schools and mass media	Promote sexual and reproductive health of young people aged 15 to 24 years.	<p>Weekly radio program providing information on sexual and reproductive health, and promoting positive social norms around abstinence and the use of condoms and modern contraceptives. Complemented by peer educators running face-to-face discussions in public places where young people meet, and in schools on sexual and reproductive health using communication materials from the campaign.</p> <p><u>Results:</u></p> <ul style="list-style-type: none"> • Increased knowledge of modern contraceptives. • Reported improved ability to abstain, negotiate condom use and use modern contraceptives. • Increase in young people carrying condoms, though this did not result in increased condom use at last intercourse.
Jongo Love – part of Tupange Campaign (Urban Reproductive Health)	Nairobi, Mombasa and Kisumu	Kenya	Young people	Radio	<ol style="list-style-type: none"> 1. Dispel myths and misconceptions about modern contraception; 2. Improve partner communication; and 3. Support young people in setting short and long-term goals. 	<p>Educational radio drama series taking place in a fictitious informal settlement in Nairobi called Jongo. It is the story of a young, ambitious girl named Amani whose dreams of getting ahead are thwarted by an unwanted pregnancy. Life in Nairobi is difficult and challenging for a young person with no skills, but through sheer determination and hard work, Amani, with the help of some good friends and sound advice, manages to get her life back on track. Socio-cultural issues, misinformation and rumors are woven into the storyline. Episodes last 15 minutes each and are aired by seven community radios in the three cities. Listener groups followed by discussion are organized for those who do not have access to the radio. Jongo Love is part of a national campaign on AYSRH called Tupange and is complemented by information leaflets, a comic book and a TV program discussing key AYSRH topics.</p> <p><u>Results:</u></p> <ul style="list-style-type: none"> • A mid-term survey asking questions about exposure to specific communication activities and behavior found an increase in the use of modern contraceptive by women aged 15 to 19 years.

Name of the Intervention	City	Country	Target Group	Setting	Objectives	Brief Description of the Intervention and results
Journey of Love (Cho and Witte, 2005 and Belete et al, 2003)	Addis Ababa, Amhara, Oromia, Tigray, SNNPR	Ethiopia	15- to 30-year-olds	Mass media	<ol style="list-style-type: none"> 1. To educate listeners about the type of FP available and the benefits of FP. 2. To dispel myths and rumors about FP. 3. To motivate the audience to understand that FP is the most important way they can improve their own lives and the lives of their families. 4. To educate the audience about the seriousness of HIV/AIDS and that everyone can be vulnerable to the HIV/AIDS virus. 5. To persuade the audience that they can and must protect themselves and others from HIV/AIDS. 6. To motivate the audience to take the necessary steps to protect themselves. 7. To encourage the audience to treat people living with HIV/AIDS with compassion and respect. 	<p>Radio soap opera based on the Extended Parallel Processing Model. Twenty-six episodes, lasting 20 minutes each, were aired weekly over a period of six months. Messages about HIV/AIDS and FP were weaved into the storyline of Aksale and her husband's lives in their neighborhood. The radio show is complemented by listening groups in the community which are supported by a facilitators guide to stimulate discussions around the topics raised by the radio show.</p> <p><u>Results:</u></p> <ul style="list-style-type: none"> • The majority of respondents agreed that after listening to the radio show they wanted to change their lives for the better. • 95 percent of listeners agreed that Journey of Love influenced them to protect themselves from HIV/AIDS. • 91 percent of respondents reported that the radio show influenced them to use FP methods
Kesho Ilyo Njeme – For A Better Tomorrow (Madeni et al, 2011)	Dar es Salaam	Tanzania	School pupils (11 to 16 years)	School	<ol style="list-style-type: none"> 1. Teach and provide basic knowledge of the changes that occur in adolescence; and 2. Provide opportunity for students to think about decisions they may make in the future. 	<p>A one-off, 45-minute session using a picture drama and reproductive health materials including visual aids such as blackboard and posters. The 45-minute session was followed by a discussion to make adolescents aware of puberty, pregnancy, peer pressure and outcomes of unprotected sex.</p> <p><u>Results:</u></p> <ul style="list-style-type: none"> • Increased knowledge for both boys and girls. • No change in terms of attitude.
m4RH (FHI 360, 2013)	Country-wide in cities with mobile phone network	Rwanda	Young people	Mobile phone technology (SMS service)	Improve young people's access to sexual and reproductive health information.	Provision of SRH information on five topics: puberty, sex and pregnancy, pregnancy prevention (information about contraceptives), HIV and STIs. Stories of young role models will also be incorporated and shared via text messages.

Name of the Intervention	City	Country	Target Group	Setting	Objectives	Brief Description of the Intervention and results
						<p><u>Results:</u> No evaluation was carried out in Rwanda at the time of writing, however, evaluations of pilot interventions in Tanzania and Kenya indicate that</p> <ul style="list-style-type: none"> • Adolescents and young adults up to the age of 29 years were the most frequent users of the service. • Between 39 percent and 44 percent of users were men.
<p>MTV's "Staying Alive" Campaign (Geary et al, 2007)</p>	<p>Global: results here reported from:</p> <ul style="list-style-type: none"> • Sao Paulo • Katmandu • Dakar 	<p>Global: results here reported from:</p> <ul style="list-style-type: none"> • Brazil • Nepal • Senegal 	<p>16- to 25-year-olds</p>	<p>Mass media</p>	<p>To promote HIV prevention through greater interpersonal communication about HIV/AIDS and improved beliefs about HIV prevention behaviors.</p>	<p>Global campaign through MTV with Public Service Announcements lasting 30 seconds each.</p> <p><u>Results:</u></p> <ul style="list-style-type: none"> • Increased likelihood of having talked with someone about HIV, in particular siblings and friends. • More positive beliefs about HIV prevention behaviors.
<p>Nigerian Urban Reproductive Health Initiative (MLE, 2013)</p>	<p>Abuja, Kaduna, Ilorin, Ibadan, Zaria and Benin City</p>	<p>Nigeria</p>	<p>18- to 30-year-olds</p>	<p>Community</p>	<ol style="list-style-type: none"> 1. Increase correct knowledge on FP and reduce misconceptions; 2. Increase knowledge on how to access FP services; 3. Increase male approval and support for FP; 4. Increase general acceptance of FP; 5. Develop effective feedback mechanism for FP issues; 6. Enhance community capacity to access FP; 7. Increase community positive perception of FP; and 8. Strengthen referral system. 	<p>Strategic combination of advocacy, social mobilization, interpersonal communication and media campaigns. The intervention aims to use mobile phone technology and Facebook as well, though this element had not started at the time of writing. Activities are linked into significant life events such as naming ceremonies, graduation, Christmas and Eid celebrations, and weddings. A multi-media campaign called "Know, Talk, Go" reinforces messages.</p> <p><u>Results:</u> At the time of writing no evaluation of the program was available.</p>
<p>Nyeri Youth Health Project (Erulkar et al, 2004)</p>	<p>Nyeri Municipality</p>	<p>Kenya</p>	<p>Unmarried youth (10 to 24 years)</p>	<p>Community</p>	<ol style="list-style-type: none"> 1. Delay the onset of sexual activity among youth who were not yet sexually active; 2. Prevent sexually experienced youth from suffering negative consequences of sexual activity; and 	<p>Thirty-six-month long, culturally appropriate, community-based project resulting from a year-long research to understand youth's needs, parents and community leaders' views, and service provider attitudes. Adult counselors, called "Friends of Youths," were assigned to each community of approx. 300 youth and trained for one month</p>

Name of the Intervention	City	Country	Target Group	Setting	Objectives	Brief Description of the Intervention and results
					3. Create a reproductive health information and service environment that is responsive to the needs of young people.	<p>on: community, family and individual values; adolescent development; sexuality; gender roles, pregnancy; STIs, HIV/AIDS; harmful traditional practices; substance abuse; planning for the future; children's rights; and advocacy. Activities with youth in the community included discussions, role-plays, lectures and drama. Counselors were paid a monthly honorarium of \$25. Local doctors, pharmacists and service providers were trained in delivering youth friendly services.</p> <p><u>Results:</u></p> <ul style="list-style-type: none"> • Reduction in males and females initiating sex or having more than three sexual partners. • Increase in males and females reporting using condoms, abstaining from sex and discussing SRH matters with an adult.
Peer Education vs Single-Session Lectures (Ergene et al, 2005)	Ankara	Turkey	University students	University	<ol style="list-style-type: none"> 1. Increase knowledge of HIV/AIDS; 2. Clarify misconceptions regarding transmission; 3. Appraise transmission risks, prejudice and discrimination; and 4. Foster positive beliefs, self-efficacy and intent regarding condom use. 	<p>Peer educators were trained for a total of 24 hours and were then required to provide HIV/AIDS education in their social circles in university, organize small educational activities and respond to questions by participants. Average level of contact in peer education interventions was 25 to 40 minutes. Single-session lectures were delivered by a medical professional and students only attended one, one-hour session on HIV/AIDS.</p> <p><u>Results:</u></p> <ul style="list-style-type: none"> • HIV-related knowledge was higher in both the peer education and the single session lecture groups than the control group. • Attitudes toward SRH matters were better in the two intervention groups than the control group. • The peer education group had better attitudes than the single lecture group. • The single lecture group had greater knowledge than the peer education group.
Project Light – adapted (Kinsler et	Belize City	Belize	School pupils (13 to 17 years)	Primary and secondary	<ol style="list-style-type: none"> 1. Increase HIV/AIDS related knowledge; and 2. Impact attitudes toward condoms, self- 	<p>Based on Social Cognitive Theory and Theory of Reasoned Action. Twelve peer educators trained for four days (32 hours), six months</p>

Name of the Intervention	City	Country	Target Group	Setting	Objectives	Brief Description of the Intervention and results
al, 2004)				school	efficacy, and peer norms regarding sex and condoms, communication skills, intention to use condoms and condom use.	<p>prior to the intervention. Training addressed facts on HIV/AIDS, communication strategies, role-playing, skills building, public speaking, and psychological and social aspects of HIV. Three months prior to the intervention, peer educators met on biweekly basis with program coordinator to practice and review program. Four peer educators (two boys and two girls) were assigned to each school to facilitate a total of seven weekly two-hour sessions in a classroom setting.</p> <p><u>Results:</u></p> <ul style="list-style-type: none"> • Increased knowledge. • Greater intention to use condoms. • More positive attitudes towards condoms. • No differences identified in peer norms, self-efficacy and communication around SRH.
Responsible Sexuality Education Program (Martiniuk et al, 2003)	Belize City	Belize	High school and university students	High school	<ol style="list-style-type: none"> 1. Improve young people's knowledge of sex and sexuality; and 2. Improve attitudes and behavioral intent concerning sex and sexuality. 	<p>Based on Bandura's Social Learning Theory. Three-hour scripted responsible sexuality education intervention providing a framework for decision-making in relationships and unbiased information about sex and sexuality.</p> <p><u>Results:</u></p> <ul style="list-style-type: none"> • Increased knowledge. • No changes observed in the attitudes or the behavioral domains.
Rutang (Mason-Jones et al, 2011)	Western Cape	South Africa	15- and 16-year-olds	School	<ol style="list-style-type: none"> 1. Delay sexual debut; and 2. For those who had already initiated sex, increase condom use. 	<p>This was a peer educator-led intervention, where peer educators received training on issues relating to relationships, sexual health and well-being, and confidence building. The peer educators delivered a mixture of taught weekly classroom sessions conducted during "life orientation" lessons with a standard curriculum, impromptu conversations with fellow students and referral of students whom the peer educators identified as requiring further support.</p> <p><u>Results:</u></p> <ul style="list-style-type: none"> • Students were 1.54 times more likely to have had sexual

Name of the Intervention	City	Country	Target Group	Setting	Objectives	Brief Description of the Intervention and results
						intercourse. <ul style="list-style-type: none"> No differences were registered in terms of condom use and in the age of sexual debut.
Rwanda Red Cross Anti-AIDS Club (Michielsen et al, 2012)	Bugesera	Rwanda	Secondary school pupils	High school	Reduce sexual risk behaviors and promote sexual and reproductive health in secondary school communities.	Based on Theory of Reasoned Action, Social Learning Theory, Diffusion of Innovations Theory and the Health Belief Model. Using participatory learning techniques and adapted from various peer education manuals (UN Interagency Group of Young People's Health, 2003 ¹ ; Save the Children, 2004 ² ; FHI-YouthNet, 2006 ³). Initial six-day training for five students (peer educators) in each participating school and one teacher per school to support the peer educators. Training content included facts about HIV/AIDS, STIs, family planning and pregnancy, the role of a peer educator and teaching methods. Teaching methodologies used by peer educators include individual counseling, group discussions, drama performances and songs. <u>Results:</u> <ul style="list-style-type: none"> Decrease in enacted stigma. Increase in HIV-specific knowledge. Increase of sexually active students.
School-based Risk Reduction Program (Jemmott et al, 2010)	Mdantsane and Beril, Eastern Cape Province	South Africa	Sixth-grade students (average age, 12 years)	School (14 urban schools and four rural schools)	<ol style="list-style-type: none"> Increase students' knowledge of ways to reduce HIV and STI risks; Increase students' appreciation of the importance of using condoms and postponing sex; Improve young people's ability to use condoms and talk with their partner about 	Two-hour sessions for six consecutive school days. Interactive exercises, games, brainstorming, role-playing and group discussions addressing ways to reduce HIV and STI risks, appreciation of the importance of using condoms and postponing sex, skills around condom use and around talking to a partner about abstinence and condom use, sexuality, sexual maturation, appropriate sex roles and rape myths.

¹ UN Interagency Group on Young People's Health. Peer Education Training of Trainers Manual. New York: UNFPA/UNICEF, 2003

² Save the Children. Effective Peer Education: Working with Children and Young People on Sexual and Reproductive Health. London, Save the Children, 2004

³ FHI-YouthNet. Youth Peer Education in Reproductive Health and HIV/AIDS: Progress, Process and Programming for the Future. Arlington, USA, FHI, 2006

Name of the Intervention	City	Country	Target Group	Setting	Objectives	Brief Description of the Intervention and results
					abstinence and condom use; 4. Understand young women's vulnerability to rape and other acts of male domination; and 5. Understand appropriate sex roles and myths around rape.	<u>Results:</u> <ul style="list-style-type: none"> • Decreased likelihood of reporting having engaged in unprotected sexual intercourse. • Decreased likelihood of reporting having had multiple partners in the last three months.
SmartChoice (PSI, Liberia)	Monrovia	Liberia	Young people	Radio and community	To encourage youth to make smart choices on reproductive health issues.	Multi-component intervention: (1) half-hour radio show called "Let's Talk About Sex", aired twice a week. Radio show also acts as community outreach tool with out-of-studio live shows, listening events, blogs and newsletters; (2) promotion of "Star Condoms" through peer educators and events in nightclubs; (3) iLEAD program to mentor and empower girls to make and promote smart choices and decrease incidence of cross-generational and transactional sex; and (4) development of youth friendly health centers. (NB. Components three and four had not been launched at time of writing). <u>Results:</u> No evaluation was available at the time of writing.
TeenWeb (Halpern et al, 2008)	Nairobi Rio de Janeiro	Kenya Brazil	Secondary school students	School	1. Better understand the educational and sexual health needs of urban secondary school students; 2. Share this knowledge to improve policy and services for youth; 3. Test the Internet as a modality to collect health data over time; and 4. Test the Internet as a modality for health education.	Five web-based modules accessible through unique user ID. Each module took between six and eight weeks to complete. On completion of each module, students had at least 30 minutes access to the Internet. New modules were released when at least 80 percent of students had finished the previous one. Content changed over time to reflect topics queried in the web-based questionnaire modules. Topics addressed include: substance use, sexuality, contraception, voluntary HIV counseling and testing, abortion law and intimate partner violence. Youth in each country participated in the web page design. <u>Results:</u> In Nairobi: <ul style="list-style-type: none"> • Intervention students were more likely to disagree that

Name of the Intervention	City	Country	Target Group	Setting	Objectives	Brief Description of the Intervention and results
						<p>condoms break often, but less likely to disagree that they are too expensive or too embarrassing to talk about.</p> <ul style="list-style-type: none"> • Boys in the web schools were more likely to perceive that condoms were effective for preventing HIV/AIDS, but girls were not. • Girls in control schools were more likely to know the timeframe for taking EC, but boys in the web schools were more knowledgeable about EC. • Girls in the intervention schools had better knowledge of abortion laws. <p>In Rio de Janeiro</p> <ul style="list-style-type: none"> • Students in the web schools were less likely to disagree that condoms are difficult to use or break easily, but less likely to disagree that condoms are embarrassing to use. • Attitudes towards condoms improved in the web groups. • No differences were noted in EC knowledge for girls, while, surprisingly, boys in the web schools showed lower levels of EC knowledge than boys in the control schools. • No effects were found on students' self-efficacy to engage in HIV-protective behaviors.
<p>TRY: Tap & Reposition Youth (Erulkar et al, 2006)</p>	Nairobi	Kenya	Young women in informal settlement (16 to 22 years)	Community (informal settlements)	Reduce adolescents' vulnerabilities to adverse social and reproductive health outcomes, including HIV infection, by improving their livelihoods options.	<p>Microfinance model with social component. Groups of five young women initially receive a six-day training on business management and planning skills, entrepreneurial skills, life skills and gender roles. Groups meet on a weekly basis with each woman contributing savings to a group account for future microloans. Credit officers lead the groups with support from mentors who address social issues faced by the girls. Mentors provide social support and counseling, and organize events, seminars, day trips and referrals when needed. They organize seminars with guest speakers on topics chosen by the young women, such as HIV/AIDS, domestic violence and gender-based violence, women's rights, drug and alcohol abuse, male-</p>

Name of the Intervention	City	Country	Target Group	Setting	Objectives	Brief Description of the Intervention and results
						<p>female relationships and family planning. The girls also deposit their savings with the treasurer and thus have access to a savings account.</p> <p><u>Results:</u></p> <ul style="list-style-type: none"> • Increase in individual income. • Increase in savings. • Increase in material assets. • Increased mobility and exposure to non-familial social networks (which can be protective for young, vulnerable women). • Improved ability to gain control over sexual relations, including negotiating safer sex.
<p>Youth Health Promotion (Balaji et al, 2011)</p>	<p>Goa (+ rural settings, but only results from the urban activities reported here)</p>	<p>India</p>	<p>School pupils (16 to 24 years)</p>	<p>School</p>	<p>Improve overall health outcomes for young people.</p>	<p>One-year long, multi-component school-based intervention offering three elements: (1) peer educators delivering educational sessions and street plays; (2) teacher training to improve teacher-student relations and teachers' ability to identify and manage common problems faced by young people; and (3) distribution of health information materials.</p> <p><u>Results:</u></p> <ul style="list-style-type: none"> • Reduction in suicidal behaviors, perpetration of physical violence and substance use. • Significant reduction in sexual abuse. • Increased knowledge of sexual health matters.

APPROACHES USED BY THE INTERVENTIONS



As can be seen in **Table 4**, the 28 interventions used a variety of approaches to change sexual and reproductive health behaviors of urban youth. Some were explicitly based on one or more theoretical framework(s), including Social Learning Theory, the Theory of Reasoned Action, Diffusion of Innovations Theory, the Health Belief Model, the Extended Parallel Processing Model and the Stages of Change Theory,

while others provided no information regarding theoretical guidance. Approaches utilized also varied and upon reviewing the available literature for each intervention, 12 different approaches or program elements, described below, could be distinguished. Some interventions adopted several different approaches, while others only included one or two. The approaches used by each intervention are described below, and presented in a visual summary in Figure 3.

SCRIPTED ACTIVITIES

Interventions comprising this approach followed specific scripted programs and curricula, often using manuals or guides that were adapted from a different country context. They tended to involve lesson-type activities, which were delivered either by teachers or by peer educators, and, in one case, by professional soccer players, most frequently in the school setting.

DECISION-MAKING AND NEGOTIATION SKILLS

Interventions using this approach openly stated the inclusion of skills-building activities or lessons to improve decision-making and negotiation skills.

TEACHER-LED INTERVENTIONS

Interventions with this component were either led by teachers or involved teachers heavily in their implementation.

PEER EDUCATOR INTERVENTIONS

Peer educator-led interventions were either implemented directly by peer educators or had components that made use of peer educators in school or in the community.

MEDIA CHANNELS

These were activities that used one or more forms of mass media to impart information and affect behavior change. The media channels employed include television, radio, music videos, billboards, print materials, the Internet and mobile phone technology. Some interventions reinforced messages at multiple levels by utilizing a variety of communication channels, while others, like the *MTV Staying Alive* campaign or *m4RH*

program, only used one media channel: television in the case of the former and mobile phone technology in the case of the latter.

DIRECT INVOLVEMENT OF YOUNG PEOPLE

These were interventions that specifically described involving young people at the conceptualization stage and/or throughout implementation, to ensure activities would respond adequately to the needs of the target group.

INVOLVEMENT OF PARENTS AND LEADERS

These were interventions that clearly sought the opinion of parents and community leaders, either at the ideation stage or during implementation. No intervention reported here however, included components aimed at parents in particular to actively involve them in supporting their children's sexual behavior change.

CULTURAL APPROPRIATENESS

These were interventions overtly stating that cultural adaptation occurred, taking into consideration local traditions, customs and needs.

ONE-OFF INTERVENTIONS

Such interventions consisted of a one-off activity, lasting between one and three hours.

HOLISTIC APPROACH

In this context, *holistic* refers to the inclusion of activities that take into account social and economic factors affecting a young person's life and behaviors. In particular, some of the interventions examined here tackled the broader issues of poverty by incorporating livelihood, microcredit or income generation activities. Other programs included components addressing alcohol and substance abuse.

USE OF POSITIVE ROLE MODELS

Interventions with this component made an effort to involve popular personalities to act as positive role models for the young people. Such personalities include singers, pop artists and soccer players.

MULTIPLE COMPONENTS

These are interventions using a multi-faceted approach by delivering activities through different channels and across different levels of the ecological framework. For example, interventions may include peer education in school, condom distribution, community leader involvement and strengthening of youth friendly services.

Table 4 summarizes the different program elements used by each individual intervention and Figure 4 below provides a visual representation of the prevalence of each approach used by the interventions reviewed.

TABLE 4: Approaches / Program Elements Used by Each Intervention

Intervention	Approaches / Program Elements											
	Scripted Sessions	Decision-Making Skills	Teacher Involvement	Peer Educator Involvement	Multiple Components	Media Channels	Youth Involvement	Involvement of Parents / Leaders	Culturally Appropriate	One-off Intervention	Holistic Approach	Positive Role Models
A Team Against AIDS												
Biruh Tesfa												
CARE Livelihood & RH Program												
The China Youth RH Project												
Comprehensive Sex Education in Shanghai												
Filles Eveillées / Girls Awakened												
Flying Youthhood						*						
Grassroot Soccer												
HEART												
HIV Prevention in Mexican Schools												

* Although Flying Youthhood was Internet-based, it also offered private counseling on RH matters online and a discussion forum for users.

Approaches / Program Elements

Intervention	Scripted Sessions	Decision-Making Skills	Teacher-Led	Peer Educator-Led	Multiple Components	Media Channels	Youth Involvement	Involvement of Parents / Leaders	Culturally Appropriate	One-off Intervention	Holistic Approach	Positive Role Models
HIV Workshop plus Condom Kiosk												
Hoy Toka												
Jongo Love												
Journey of Life												
Kesho Ilyo Njeme (For a Better Tomorrow)												
m4RH												
MTV's "Staying Alive" Campaign												
NURHI												
Nyeri Youth Health Project												
Peer Education vs Single Session Lectures												

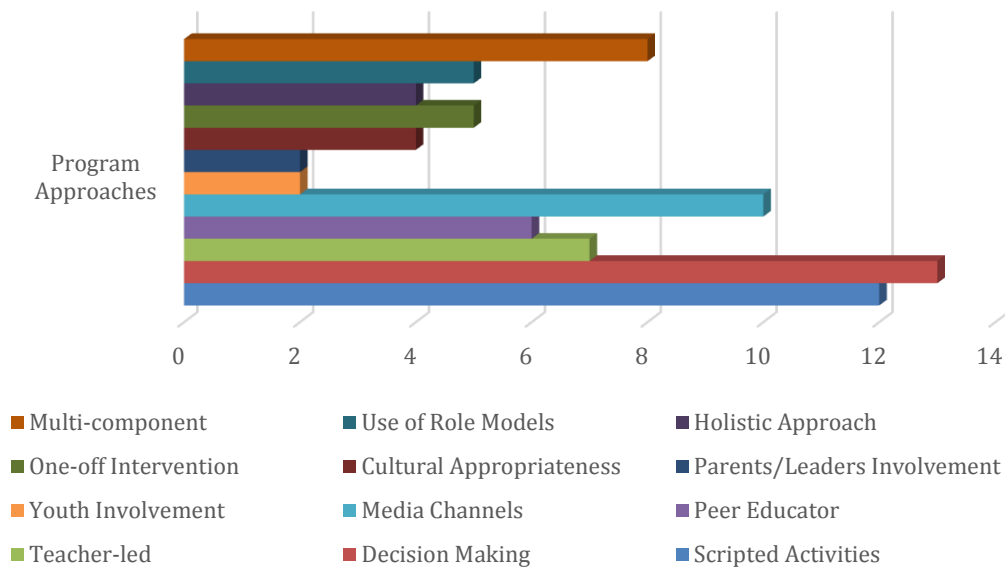
Approaches / Program Elements

Intervention	Scripted Sessions	Decision-Making Skills	Teacher-Led	Peer Educator-Led	Multiple Components	Media Channels	Youth Involvement	Involvement of Parents / Leaders	Culturally Appropriate	One-off Intervention	Holistic Approach	Positive Role Models
Project Light												
Responsible Sexuality Education Program												
Rutang												
Rwandan Red Cross Anti-AIDS Club				**								
School-based Risk Reduction Program												
SmartChoice												
TeenWeb												
TRY					***							
Youth Health Promotion												

**Peer educator led with support from one teacher

*** Provision of counseling and referrals when needed

FIGURE 4: Prevalence of Different Program Approaches



INTERVENTIONS: OUTCOMES AND LIMITATIONS

Most of the interventions examined provided data on evaluation and outcomes. Some were assessed using rigorous methodologies, while others used less strict approaches. The evaluation methods employed include: RCTs, non-randomized controlled trials, cluster randomized controlled trials, cross-sectional population based surveys, and pre- and post-intervention questionnaires. Three of the 29 interventions did not have evaluation data: *m4RH* in Rwanda and *NURHI* in Nigeria had not yet been evaluated at the time of writing, while *SmartChoice* in Liberia did not provide data on evaluation or program results.

Appendix 2 offers a summary of the evaluation methodologies used by each intervention together with key results. For a more global overview of each activity, outcomes and observations, please refer to **Appendix 1**.

The interventions were assessed on the basis of a range of outcomes; however, the following were the most frequently measured:

- Knowledge
- Attitudes (including stigma)
- Communication about SRH matters
- Behavioral intent
- Behavior change (condom / contraceptive use; use of emergency contraception; number of partners; sexual initiation; abstinence)

Some interventions with specific objectives looked at broader outcomes. For example, programs targeting vulnerable young women also measured their ability to identify safe places and the presence of non-familial social networks in their lives. One intervention, the

Comprehensive Sex Education Program in suburban Shanghai, also assessed experience of coercing or being coerced into unwanted sexual activity.

Knowledge

Out of the 27 interventions that provided evaluation results, all demonstrated an increase in knowledge. Depending on the focus of the intervention, improved knowledge occurred in the domains of reproductive health, contraceptives and condoms, risky sexual behaviors and their consequences, and STIs and HIV/AIDS. Few interventions measured knowledge levels in the longer-term and those that did, like the *China Youth Reproductive Health Project* and *A Team Against AIDS* in Mexico, noted a slight fall in knowledge levels at follow-up. Single-session lectures appeared to be particularly effective in increasing knowledge among university students in Turkey, indicating that this methodology may be recommended for university students who are used to didactic learning.

The *Comprehensive Sex Education Program* and *Grassroot Soccer* were among the few interventions that recorded longitudinal outcomes. The *Comprehensive Sex Education Program* in suburban Shanghai carried out a follow-up evaluation 48 months after the baseline data was collected and found that knowledge in the intervention group had decreased, but remained higher than that of the control group. In terms of

...could be a positive consequence of using popular role models, in this case professional soccer players, to educate young people and inspire them to do the same.

contraceptive practice, the positive outcomes recorded immediately post-intervention were limited in the long run to the withdrawal method which was used less frequently by youth in the intervention group. At five months follow-up, *Grassroot Soccer* in Zimbabwe found that, although there was a slight decrease in the belief that condoms are effective for preventing HIV, overall knowledge was sustained, and, interestingly, students in the control classrooms also improved their knowledge over time. This was attributed to youth in the intervention groups sharing the newfound information with peers, and could be a positive consequence of using popular role models, in this case professional soccer players, to educate young people and inspire them to do the same.

Attitudes

Improved attitudes were observed mostly in interventions that dedicated time to informal discussions and exchange. An interesting finding in this respect comes from the comparison study in two Turkish universities where the peer education program achieved greater attitudinal change than the single-lecture program, which did not include a discussion element. Similarly, *Project Light*, *Flying Youthhood*, *Grassroot Soccer*, and the *China Youth Reproductive Health Project*, all reported improved attitudes towards condoms, while the *Rwanda Red Cross Anti-AIDS Clubs* reported a reduction in enacted stigma. The small group discussion component of these interventions may account for altered attitudes through confrontation and exchange, which can challenge dominant norms. *Journey of Love*, a radio-based program, measured increased perceived risk and self-efficacy to engage in protective behaviors. Even *Flying Youthhood*, which was an Internet-based intervention, promoted exchange of ideas through its online discussion forum.

Communication

The media campaigns, *HEART* in Zambia and the global *MTV's Staying Alive* campaign, were both effective at stimulating conversation around HIV- and SRH-related topics among youth and creating more positive beliefs about HIV prevention. The *Nyeri Youth Health Project*, a community-based intervention, recorded increased reports of discussing sexual health matters with an adult. The community-based component of the *Nyeri Youth Health Project* and the *Comprehensive Sex Education Program* in China not only contributes to improving knowledge of SRH issues, but it also promotes a responsive environment where such matters can be discussed openly.

Behavioral intent

Behavioral intent was measured by the *HEART* campaign in Zambia, by *Project Light* in Belize and by the *Journey of Love* radio show in Ethiopia. *HEART* and *Project Light* recorded greater intention to use condoms, and *HEART* also noted increased intention to abstain from sexual intercourse. The majority of the listeners of the *Journey of Love* radio show agreed or strongly agreed that they wanted to protect themselves from HIV/AIDS after listening to the program.

Behavior change

Interventions assessing behavior change relied on self-reports. Despite the limitations and potential bias associated with this approach, some programs obtained promising results. The *Youth Health Promotion Project* in India recorded a reduction in sexual abuse; the *HIV Prevention Program* in Mexican schools observed an increase in the use of emergency contraception and condom use with casual partners or sex workers, though this had fallen at three-months follow-up; the *School-Based Risk-Reduction Program* in South Africa found a decreased likelihood of students who reported engaging in unprotected sex or having had multiple partners in the three months prior to evaluation. Commonalities of these three interventions include the school setting and a varied curriculum. The project in India used peer educators and teachers to address a range of health and psycho-social issues affecting young people, while the Mexican and South African projects both emphasized skill-building, dealing with peer pressure, improving communication and understanding cultural values related to sexual activity.



HEART in Zambia registered increased levels of reported condom use at last sex. The campaign found that advertisement recall was directly related to positive outcomes. The more ads a person would recall, the more likely were they to report positive outcomes. This indicates the importance of reach and exposure in any communication intervention.

Further, *HEART* mentioned television as a popular communication channel for reaching urban youth, who were almost twice as

likely to have viewed the ads. The campaign also documented that young women were as likely as young men to have viewed the TV ads. Unlike their older peers, who have little access to TV (Underwood et al, 2006), young urban women seem to have overcome this gender barrier, and television can be an effective means for reaching them, too.

Hoy Toka, *Jongo Love* and *Journey of Love* were predominantly radio campaigns. *Hoy Toka* resulted in improved ability to abstain from sex and negotiate condom use. More young people also started carrying condoms, though this was not associated with increased condom use. *Jongo Love*, through a mid-term evaluation, found an increase in the use of modern contraceptives among 15- to 19-year-old females. All three radio campaigns were accompanied by community activities, such as peer education in *Hoy Toka* and listening groups followed by discussion in *Jongo Love* and *Journey of Love*.

An important element of the media campaigns was the fun aspect that attracted youth and engaged their interest. *HEART* and *Staying Alive* used music and music videos, while *Jongo Love* recounted the entertaining adventures of a young women living in a fictitious Nairobi informal settlement.

The *Nyeri Youth Health Project*, a community-based intervention, recorded a reduction in youth initiating sex or having more than three sexual partners, and an increase in the number of young people abstaining from sex. None of the changes observed in the intervention community were seen among controls. The *Comprehensive Sex Education Program* in China reported an increase in contraceptive use most or all of the time, an increase in the use of emergency contraception, and a decrease in the number of young people reporting having coerced someone or being coerced into unwanted sexual activity. In the long term, two years post-intervention, the intervention group remained more knowledgeable and had more positive attitudes towards contraception than the controls, though to a lesser extent. Similarly, the positive effects on contraceptive practice decreased, but were still higher than at baseline. The common features of these two interventions include the community setting, the creation of enabling environments by working with service providers, and the engagement of community leaders and other important community members.

The *Nyeri Youth Health Project* also took into consideration the broader issues affecting young people's behaviors such as alcohol and substance abuse, thus tackling sexual behavior change in a holistic manner. Its particular strengths lie in having respected and adapted the program to the local Kikuyu culture, having engaged community leaders, having used locally elected parents to become educators and having capitalized on existing structures rather than creating new ones.

Four of the interventions that targeted young, vulnerable women also attempted to frame sexual health behaviors as part of the broader challenges in those women's lives. *Biruh Tesfa* in Ethiopia, *Filles Eveillées* in Burkina Faso, *TRY* in Kenya and the *CARE Livelihood & Reproductive Health Initiative* in India, combined SRH information with income generating activities, livelihoods, health service vouchers and the creation of supportive social networks. With regards to these wider outcomes, all three interventions reported positive results, such as a reduction in feelings of isolation, increased mobility, increased individual

income, savings and material assets, and greater exposure to non-familial social circles. Although significant impact on AYSRH outcomes was not observed, the activities led to some protective behaviors. Girls participating in *Filles Eveillées* became aware of where to go in case of rape, and those in the *CARE Initiative* increased their knowledge of safe places where unmarried young women can gather. Changes that directly relate to sexual health were noted in the TRY and Biruh Tesfa. Girls participating in the former improved their ability to gain control over their sexual relations and to negotiate safer sex, while girls attending the latter increased their likelihood to get tested for HIV.

LIMITATIONS

Despite many successful results, some limitations were identified in the interventions. The *China Youth Reproductive Health Project*, for example, noticed improvements in knowledge, but also reported misconceptions and incorrect information about some key aspects like HIV/AIDS, modes of transmission and condoms. This shortcoming may be linked to the fact that the beneficiaries, young people themselves, appear not to have been consulted at any stage during the development and implementation of the program. Perhaps, more youth involvement may have highlighted areas for improvement in terms of how the information was presented. The *HEART* campaign offers a useful lesson here through its engagement of young people from the stage of conceptualization through to execution with the establishment of a Youth Advisory Group to monitor outputs and ensure needs of the target group were being met.

Just as the *Nyeri Youth Health Project* was praised for its ability to integrate the local Kikuyu culture, the limitations of *Project Light* in Belize lie in the fact that it was taken from a US program and little adaptation occurred. Social norms and values around sexuality, which govern gender roles and sexual behaviors, were not examined and the project had no impact on peer norms and self-efficacy with regards to sexual practices, suggesting that longer-term behavior change is unlikely.

One interesting limitation was cited by the *Goa Health Promotion Project* that required teachers and peer educators to deliver health promotion activities during school hours. Due to competing demands, both teachers and peer educators were unable to dedicate the necessary time to their health promotion duties despite their commitment and enthusiasm for the intervention.

The interventions that measured outcomes in the longer term all found that improvements observed at endline were not sustained at follow-up, though some interventions, like *A Team Against AIDS*, the *Comprehensive Sex Education Program* and *Grassroot Soccer*, stressed that changes were minimal. In general, however, this denotes the need for behavior change programming to maintain some level of activities even post-intervention, for example, by echoing messages through different media channels or through regular community events.

Except for the *HIV Workshop plus Condom Kiosk* intervention in Mexico and the *Nyeri Youth Health* project, most evaluations reported no effect on initiating sexual activity, with intervention and comparison groups both reporting the same levels of sexual debut. Justification for this may not be linked to limitations in the intervention itself, but rather to

the life stage of the target group, which is marked by sexual maturation and curiosity that can push young people to experiment with sexual activity.

Finally, interventions that relied exclusively on peer education yielded less positive results than may be expected. Peer education is used to affect change at the individual level and has been effective in a variety of health areas (Ergene et al, 2005); however the peer-led interventions examined here provide weak evidence of their effectiveness in achieving behavior change. The *Rwandan Red Cross Anti-AIDS Clubs*, the *Responsible Sexuality Education* program in Belize, *Rutang* in South Africa and the *HIV Prevention* program in Mexican schools reported some increased knowledge, reduced stigma and improved attitudes towards sexual health issues, but no behavioral outcome. This finding is substantiated by the conclusions of a systematic review of peer education interventions in AYSRH that found that peer education alone does not completely succeed in its main objective of reducing sexual risk behaviors (Kim and Free, 2008). Young people may feel inadequately prepared to deal with the questions and demands they receive from their peers and this denotes a need for proper training and for ensuring the presence of a support system should a peer educator be unable to respond to a specific request. Further, Mason-Jones et al (2011) and Michielsen et al (2012) suggest three reasons why peer education may not be as effective for sexual behavior change. First, it may be unrealistic to

Young people may feel inadequately prepared to deal with the questions and demands they receive from their peers...

expect young people, who are themselves going through physical, emotional and sexual changes, to guide and inform others on such a private, sensitive and often taboo topic. Secondly, peer education often refers to people of the same age, which does not necessarily

mean the same background, interests, values or norms. Messages may therefore not be received as expected if target audiences do not see peer educators as true “peers.” Thirdly, social factors represent a strong influence in young people’s behaviors and isolated peer-led interventions may not be enough to shape behaviors. Rather, peer education could be more effective if combined with other activities as part of a larger, comprehensive behavior change strategy.

GAPS IN PROGRAMMING FOR AYSRH IN URBAN YOUTH

The interventions reviewed in this document provide some insight into the necessary features for more effective programming addressing the sexual health of urban adolescents and youth. At the same time, they also highlight some significant gaps. The majority of the interventions targeted young people in school and, although some projects were aimed at young people in general, none specifically addressed out-of-school youth and adolescents. Other than the distinction between youth in school and youth in general, and gender in the case of only three interventions aimed at vulnerable young women, no other category of young person was taken into account by the interventions examined. Young people who are married, those who have children, those who identify themselves as LGBT, those who live with a disability or other possible subsets are not specifically targeted by any of the interventions mentioned. Although available literature on men who have sex with men (MSM) is increasing but still limited, relevant literature on

the other groups of youth was not found. This denotes a gap in both programming and research, and the likelihood that numerous young people are excluded from current AYSRH activities or that SBCC programs are too generic for the specific behavioral determinants and life contexts of these sub-populations.

The information reviewed also pointed to the critical influence that parents can have on their children's sexual behaviors. Unfortunately, no interventions were found targeting parents as a vehicle for changing their children's behaviors. The *Nyeri Youth Health Project* is the only one that mentioned parents, but, although they were actively involved, this was to become educators in their communities rather than specifically supporting their own children to engage in protective practices. Some studies highlighted the parental desire to be equipped with the knowledge and skills necessary for supporting their children's sexual health, indicating that parents can be a promising, untapped resource for effective youth SRH programming.

SOURCES FOR REACHING URBAN YOUNG PEOPLE WITH SRH INFORMATION

The literature appraised in this review also offers useful insight regarding the most appropriate information sources for reaching urban youth.

The *HEART* and *Staying Alive* Campaigns highlighted how urban youth respond positively to television messages. Viewership is significantly higher in urban than rural areas and a clear association between exposure and positive behavioral outcomes was found. Television also offers entertainment and a well-developed, creative advertisement or public service announcement can engage and attract the attention of young people. The potential of television for reaching urban youth has been reported by several studies, with television and mass media being the information source of choice for young people in Nigeria, Ethiopia, Mali, Vietnam and Iran (Ozumba et al, 2005; Cherie et al, 2005; Bankole et al, 2007; Vinh et al, 2003; Mohammadi et al, 2006).

Flying Youthhood was an innovative program using only the Internet to improve knowledge and behaviors relating to sexual health in young Shanghai residents. The intervention yielded some positive results and participating youth stated their appreciation for this private, confidential and convenient means of obtaining SRH information. Another Internet-only activity, *TeenWeb*, on the other hand, did not yield promising results with regard to knowledge, attitudes or practice. The only difference identified between these two interventions was that *Flying Youthhood* incorporated an interactive element through a discussion forum and online-counseling, while *TeenWeb* was based more on content delivery through online modules. This suggests that Internet-based activities should consider ways of ensuring continuous user participation and interaction. *Flying Youthhood* was implemented in China, and *TeenWeb* in Brazil and Kenya, and the contrasting results may also be attributable to differing Internet connection speeds and access in the three countries.

Social media presents another opportunity for engaging young people through the Internet. Although literature on the use of social media for SRH information in developing

countries is limited, studies in western countries highlight how social technologies and social media are increasingly being incorporated into the romantic and sexual relationships of young people (Veinot et al, 2011). Further, a pre-intervention assessment of the *Jongo Love* radio show emphasized opportunities for reaching urban youth with newer social media channels, including YouTube and Facebook. There is a clear potential for exploring the possibilities that these communication channels offer for AYSRH programming targeting urban youth in developing countries, however, studies from western countries caution that many young people are weary of the reliability of information provided by the Internet (Jones and Biddlecom, 2011) and efforts should thus be made to ensure that interventions using this channel also promote trustworthiness.

The confidential and private aspect of gaining information through the Internet can be replicated by using mobile phone technology. *m4RH* uses SMS to provide young people with key, pre-tested messages on SRH and to share stories of positive role models to inspire behavior change. Unfortunately, at the time of writing, the intervention had not yet been evaluated in its Rwanda implementation sites, but results from pilot studies in Tanzania and Kenya demonstrate that this communication channel is popular among young people, with the majority of users being below the age of 29.

Finally, *Grassroot Soccer* pointed to the potential of using popular personalities as vehicles for behavior change. Professional soccer players were employed to deliver sex education activities and results were promising, advocating for the use of well-known role models to inspire young people. Together with traditional information sources, such as printed materials, peer educators, health professionals and teachers, modern technology and popular role models can contribute to engaging urban young people and reinforcing messages through new creative avenues.

RECOMMENDATIONS

This literature review has important implications for programming and further research. An appraisal of the prevailing determinants of SRH among urban youth and adolescents, and examination of existing interventions has highlighted some recommendations, which are listed below, including recommendations for program design and those for specific SBCC activities.

RECOMMENDATIONS FOR PROGRAM DESIGN

Create an enabling environment: There is evidence from the literature and the examined interventions that behavior change is more likely to occur in an enabling environment, where protective factors are promoted and barriers removed. To achieve this, a multi-component approach is necessary and SBCC programming should consider:

- **Promoting conversation around sexual health matters:** communication about sexual health matters among peers, partners and within the family has been cited as protective (Maticka-Tyndale and Tenkorang, 2010; Kabiru et al, 2011; Adedimeji et al, 2008; Mmari-and Sabherwal, 2010). Efforts should be made to create an environment where AYSRH is discussed openly. This can be done through a variety of approaches such as interpersonal communication (IPC) and small discussion groups, the involvement of community leaders, peer education and mass media.
- **Working with service providers:** interventions should engage service providers, including health centers, pharmacies and laboratories, and focus on improving their attitudes towards AYSRH, improving their client-provider communication skills, ensuring confidentiality and thus increasing service utilization among young users.
- **Engaging parents and leaders:** support from parents and community leaders for an intervention is necessary for changing dominant norms and developing supportive attitudes for healthy sexual behaviors.

Involve young people: Ensuring that youth are involved from the ideation stage of an intervention through to its implementation and execution can ensure that the needs of the target group are addressed adequately. Involvement of young people should not be tokenistic, but rather participatory and actively seeking their input and feedback.

Segment and diversify audiences: Young people are a diverse group with differing needs. This review has revealed significant gaps in terms of audiences, with the majority of interventions either targeting youth in school or grouping young people into one single category. The diversity of this audience is underestimated and a large number of young people are excluded from current SBCC



AYSRH programming. As such, messaging aimed at youth in general is unlikely to reach specific segments of that population. Efforts should be made to include frequently forgotten groups who have their particular needs such as youth out of school, married youth, youth with children, youth with disabilities and, where culturally (and legally) appropriate, youth who identify themselves as LGBT.

Engage secondary audiences: Secondary audiences such as parents, community leaders, influential people in the community and admired community members can be effective in promoting behavior change. Family members in particular have been seen to play a critical role in their children's engagement in protective or risky behaviors (Mohammadi et al, 2007; Adedimeji et al, 2008; Boileau et al, 2009; Diop-Sidibé, 2005; Schwandt and Underwood, 2013), however, none of the interventions reviewed expressly targeted parents or siblings as a vehicle for youth behavior change. Interventions should recognize the importance of key secondary audiences and seek to identify them and devise ways of actively engaging them to promote the desired behaviors in the primary audience. Lessons can be learned from other interventions that do not necessarily have an urban focus. *The Go Girls! Initiative*, for example, which was implemented in Botswana, Mozambique and Malawi, provides an insightful example as to how parents can be engaged effectively for their children's behavior change.

Develop ways for mainstreaming activities: The limitations of some interventions was linked to implementation relying on community members, peer educators or teachers who did not have time to execute the activities as required due to competing demands on their time. Finding ways of integrating program activities in existing systems will not only increase the likelihood that activities will be delivered, but it will also contribute to sustainability of an intervention. Opportunities for mainstreaming can be found in the school curriculum, in community events and in other significant occasions that mark community or family life.

Adapt intervention to local cultural context in relation to sexual health behaviors: Cultural adaptation is essential for program acceptability, however, when an intervention addresses SRH, the broader dimensions of culture which govern sexual behaviors need to be examined. *Project Light* for example adapted its facilitation manuals from a US curriculum, but did not consider the local norms around sexuality. It is important therefore that SBCC programming unveils the social and cultural norms around sexuality, gender roles and acceptable versus non-acceptable behaviors to ensure that implementation is well-received and effective.

Consider the broader aspects that affect youth sexual behaviors: Poverty and alcohol and drug abuse have been seen to act as risk factors for youth SRH (Michielsen et al, 2012; Guittierrez et al, 2006; Mohammadi et al 2006; Peres et al, 2006; Twa-Twa et al, 2008; Mmari and Sabherwal, 2013). Interventions need to find ways of addressing these broader issues and equipping young people with the necessary knowledge and life and decision-making skills to counteract negative forces.

Sustain behavior change messages: Many interventions reviewed did not sustain the changes measured at endline. This denotes a need for some form of behavior change

activity to continue, albeit with lesser intensity. Interventions should plan follow-up phases whereby successful activities are delivered at regular intervals post-intervention to reinforce positive outcomes.

RECOMMENDATIONS FOR SPECIFIC ACTIVITIES

Message development: Well-developed messages and communication activities can play a critical role in affecting behavior change in adolescents. This review has revealed three features in this respect:

- **Provide clear, accurate information:** Misinformation and misconception around modern contraceptives and condoms have been cited as significant barriers to behavior change (Ngom et al, 2003; Ozumba et al 2005). By the same account, correct knowledge has been linked to protective behaviors (Katz, 2006; Ngupta et al 2003; Mmari and Sabherwal, 2013). Clear, accurate and accessible information therefore should be at the core of any SBCC intervention where knowledge levels need to be improved. This is especially important among young people who often obtain information about sexual health from potentially unreliable sources such as peers, siblings and the Internet, and then shape lasting behaviors or attitudes based on this misinformation. Pre-testing messages with the audience group is important to ensure that information is received as hoped, and to avoid misconceptions and misunderstandings as witnessed by the *China Youth Reproductive Health Project*.
- **Emphasize the dangers associated with risky sexual behaviors:** A high risk perception of HIV and the fear of an unwanted pregnancy have been correlated to higher levels of condom use (Glover et al, 2003; Juarez and Castro Martin, 2006; Adedimeji et al, 2008). Nonetheless, especially during adolescence when behaviors are often motivated by curiosity and a sense of invulnerability, many young people recognize the risks of HIV in their community, but do not feel directly affected by this threat (Juarez and LeGrand, 2005; Cho and Witte, 2005). There is significant scope therefore for SBCC programming to increase risk perception among young people. Importantly however, as exemplified by the *Journey of Love* radio show, increasing perceived threat needs to be accompanied by messages and activities that increase the individual's self-efficacy and self-confidence to engage in protective behaviors. Cho and Witte (2005) provide information on a helpful five-step formative evaluation process to support development of behavior change messages using this approach.
- **Create a positive image of condoms:** Some studies highlighted how condoms are associated with infidelity, mistrust and promiscuity (Juarez and Castro Martin, 2006; Glover et al, 2003; Ozumba et al, 2005). Young people, especially young women, may feel embarrassed and not want to carry or use condoms due to the negative images associated with them (Zellner et al, 2006; Tu et al, 2007). SBCC interventions can contribute to creating more positive images of condoms as representing feelings of love, care and protection.

Use TV, the Internet and social media to reach youth: Young people cite mass media as a key source of information (Strasburger et al, 2009; Bankole et al, 2009). In most countries, urban youth have regular access to television, and the number of young Internet users is growing steadily (Halpern et al, 2008; Jones and Biddlecom, 2011). The *HEART* and *Staying Alive* campaigns have demonstrated the potential for television as a medium to encourage discussion and affect behavioral intent. The Internet has been less explored for this purpose but offers promising potential. Creative, visually appealing and interactive approaches should be developed to impart and share information via the Internet. The interaction element seems to be important for knowledge retention and attitudinal change, however, broadband connection needs to be suitable before embarking on this type of activity. Further, if the Internet is to be used as an information source, efforts should be made to promote its trustworthiness among its young users.

Mobile phone technology also appears to be an effective channel to reach youth as it provides information in a confidential, private way. Where technology allows, imparting behavior change messages through the mobile phone network can be effective in increasing knowledge and promoting desired behaviors.

...the power of popular figures can have positive effects on behavior change.

Use popular role models: Based on the theory of social learning, the power of popular public figures can have positive effects on behavior change. Interventions should seek ways of involving admired personalities who deliver activities directly to the young people or promote positive practices through their appearance in the media.

Ensure that peer education is a component of a wider behavior change strategy rather than a stand-alone intervention: There is considerable evidence to suggest that peer education alone does not succeed in the objective of achieving behavior change. Several reasons have been hypothesized for this limitation, including the fact that peers are generally people of the same age but not necessarily of the same background and values. Moreover, developing adolescents may not be the best placed to talk to their peers about personal issues that they are just beginning to discover themselves, such as puberty and sexuality. Nevertheless peer education is an important instrument for imparting information, stimulating discussion and promoting attitudinal change, and avenues for improving peer education should therefore be explored. The use of near peers or the complementation of peer education with other activities could be possible options. Near peers are people who are close to the target group's social and professional level, and who are respected and admired by the target group. They are not necessarily of the same age and they can be effective in communicating about sexual health and promoting behavior change.

When using peer educators, this should be as part of a more comprehensive behavior change strategy and the peer educators need to be properly trained and feel confident to discuss sexual health matters with their peers. A support system should also be in place for referral should the peer or near peer educators be unable to answer specific questions or demands.

CONCLUSION

Adolescence is a critical life-stage characterized by unique needs, concerns, vulnerabilities and potential, during which patterns for future behavior are formed. In recognition of the fact that young people living in cities are faced with distinct challenges and opportunities for enhancing or deteriorating their health, this literature review set out to identify evidence-based findings that can contribute to improving SBCC programming addressing the sexual health of urban adolescents and youth in particular.

Young people's behaviors are influenced by a multitude of factors along the social ecological framework. Parents, siblings, peers, community members, service providers and policies combine to enable or deter young people's healthy behaviors. In cities, it is especially the poor urban adolescents and youth who are at greater risk of unhealthy practices, and it has been noted that many protective factors do not apply to the urban poor. Programming therefore needs to take a holistic approach and address the broader environmental issues affecting the lives of urban young people, striving to understand the barriers and opportunities to behavior change for each unique target group.

Among the interventions reviewed, the features of those that seemed to yield more positive results include a holistic, multi-component approach; use of positive role models as agents of change; entertaining and fun activities; and youth involvement. In particular, the interaction element of an intervention seemed to be especially effective, and even interventions that predominantly used one communication channel only, increased their success rate by incorporating an IPC component and thus providing young people with the opportunity to explore dominant norms and challenge their own thinking.

Despite the considerable number of interventions reviewed and the variation in geographical location, they were all very similar in terms of target group. Only three youth categories were identified, youth in school, youth in general and vulnerable young women, indicating a serious gap in audience segmentation for AYSRH programming. This review revealed that many groups of young people are excluded both from AYSRH programming and from research, signaling a need for research and activities to address the concerns of frequently excluded groups.

Cities offer both challenges and opportunities for program implementers, and this review highlighted how new technology is increasingly being incorporated into young people's lives and SBCC activities. Where feasible, the Internet, social media, television and mobile phone technology can offer private and confidential channels for reaching young people with key behavior change methods and accurate information.



As the urban landscape changes for young people, with increasing rates of rural-to-urban migration, rapid modernization and globalization, increased school enrollment,

instantaneous communication and social challenges that can lead to unemployment, violence and disaffection, urban adolescents and youth are progressively exposed to greater opportunities for engaging in risky sexual behaviors. It is the responsibility of SBCC programming to ensure that young people who have already initiated sexual activity are adequately equipped to avoid the negative consequences of sexuality and lead healthy, fulfilling and responsible sexual lives.

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APPENDICES

APPENDIX 1: SEXUAL AND REPRODUCTIVE HEALTH INTERVENTIONS TARGETING URBAN ADOLESCENTS AND YOUTH: ACTIVITIES, EVALUATION AND RESULTS

The Social and Behavior Change Communication interventions targeting urban young people described in this report used a variety of approaches, ranging from one-off educational lectures to longer-term, multi-component programs using several communication channels and addressing the broader issues affecting young people's behaviors.

Details of each individual intervention are provided here, including evaluation methodology, results and key observations that can inform programming.

Name:	A Team Against AIDS
City:	Toluca
Country:	Mexico
Target Group:	School students

This intervention was aimed at younger adolescents, most of whom were not yet sexually active. The aim was to improve knowledge, attitudes and norms around sexual health issues, and to increase self-efficacy, decision-making skills and communication skills for HIV-protective behaviors. The intervention was teacher-led and teachers were trained on how to conduct an interactive AIDS-focused sexuality education program aimed at developing life skills. Teachers received a manual to support them in delivering activities and students then received the 30-hour program, divided into two-hour sessions per week, over one semester. The teaching methodologies used also provided students with the opportunity of practicing the skills they learned.

A quasi-experimental design was used to evaluate the intervention with four schools in Toluca being divided into pairs, one school in each pair was then assigned to the intervention and the other acted as a comparison school. The comparison school received general health and sex education, which was not interactive. A self-completed questionnaire was administered at baseline, end line, and then at six and twelve months post-intervention to assess longer term effects.

Improvements were recorded in all outcome variables, including knowledge, attitudes, perceived self-efficacy, decision-making skills and behavioral intent.

Over time, the effects of the intervention faded; however, they remained higher than at baseline and compared to the control groups.

This intervention purposely targeted younger teenagers who were more likely to not yet be sexually active. Although effects of the intervention faded after time, they remained higher than at baseline and higher than the control groups.

Name:	Biruh Tesfa (Bright Future)
City:	Addis Ababa, Bahir Dar, Gondar
Country:	Ethiopia
Target Group:	10- to 19-year-old, out-of-school girls

Biruh Tesfa, which means “bright future” in Amharic, is a holistic program that aims to address the social isolation of vulnerable out-of-school girls aged 10 to 19 years by building their social capital and providing them with life-skills training, HIV/AIDS and reproductive health information, including GBV. The project is implemented the Bureaus of Youth and Sports with technical support being provided by the Population Council.

Adult female mentors are trained for one week and are then responsible for identifying the eligible girls through house-to-house visits. Once the girls have been selected, they are organized into groups and meet with their mentor three times a week for two hours in spaces within the community. During the meetings, topics relating to life-skills, HIV/AIDS, RH and GBV are discussed.



Baseline surveys were conducted in the intervention area and in an experimental community, with follow-up surveys taking place two years later. Key findings include:

- Increase in girls reporting having “many friends,” from 29 percent to 35 percent, while no change was identified in the control area.
- Increase in girls reporting having a “safe space” in their community, from 7 percent to 25 percent.
- Greater likelihood for girls in the intervention site to have undergone HIV VCT compared to the girls in the control community.

This holistic intervention primarily addressed the target group’s vulnerabilities, recognizing that incorrect information about RH and that lack of skills associated with refusal or negotiation of safe sex are influenced by broader aspects.

Name:	CARE Livelihood and Reproductive Health Initiative
City:	Allahabad, Uttar Pradesh
Country:	India
Target Group:	Girls aged 14 to 19 living in urban informal settlements

Like the *TRY* project, this initiative took into consideration the broader aspects affecting the lives of young female residents of informal settlements and integrated livelihoods

activities into an existing reproductive health program. The RH sessions took place on a weekly basis, were followed by vocational training classes offering 19 different vocational courses and each lasted between one and two weeks.

Evaluation was carried out through a quasi-experimental design whereby nine slums in the control area received the RH component only, while five informal settlements in the intervention area received the RH component followed by livelihood activities. Baseline and end line surveys were conducted in both areas and the following outcomes were observed in the intervention groups:

- Greater knowledge of safe places where unmarried girls can congregate.
- Greater knowledge of SRH matters.
- Improved social skills.

Despite improvements in social skills, this did not result in improved self-esteem, meaning that the young girls' ability to negotiate safer sex may continue to be compromised. Nonetheless, this intervention, like the *TRY* and the *Filles Eveillées* projects, represents a holistic approach to reproductive health, framing it as part of the broader issues that influence young women's sexual behaviors.

Name:	The China Youth Reproductive Health Project
City:	Harbin
Country:	China
Target Group:	10- to 14-year-olds*

**although the intervention targeted young people in and out of school, only results from the school-based program targeting students are reported here.*

This project was developed in partnership with community leaders and government representatives. It provides holistic life-planning skills (LPS) accompanied by educational materials. Schoolteachers were trained in delivering the program and were then required to develop an implementation plan for LPS in selected classes. Evaluation took place through the collection of qualitative data, including focus group discussions, stakeholder interviews, document reviews and observational visits. Furthermore, three surveys were conducted in four intervention schools and two control schools to assess knowledge, attitudes and practice before the intervention, shortly after and at three months post-intervention. Improvements were observed in the intervention groups as follows:

- Increased knowledge of contraception (though this had decreased at three months post-intervention).
- Improved knowledge on how to use condoms correctly.
- Increased knowledge of HIV/AIDS.
- Improved attitudes towards condoms.

Despite these improvements, some misconceptions remained around contraception, gender roles and modes of transmission of HIV/AIDS, denoting a need for improving content and delivery of the program. Involvement of political and community stakeholders in the development of the intervention may have contributed to building a

supportive environment for change; however, it appears that young people themselves were not engaged in the ideation and realization phase of the program. This may account for some shortcomings in terms of key information being misunderstood by the target group and highlight the importance of actively involving young people from the conceptualization stage of an ASRH program.

Name:	Comprehensive Sex Education Program
City:	Songjiang (suburban Shanghai)
Country:	China
Target Group:	Unmarried youth aged 15 to 24 years

This was a community-based, multi-component intervention targeting 15- to 24-year-olds and providing information on abstinence, contraception and healthy sexual behaviors through the following six different activities: (1) distribution of educational reading materials; (2) screening of educational videos; (3) public lectures; (4) peer group discussions; (5) provision of reproductive health services; and (6) counseling. Participation in each of the activities was open and young people could choose which components to attend and how often. A total of 1,220 young people were surveyed and enrolled in the program, while 1,007 youth were surveyed in a control town where no program was available. Post-intervention surveys were administered at the end of the intervention to reveal the following findings:

- Increase in condom use in the intervention group, with 89 percent of participants reporting condom use most or all of the time, compared to 45 percent in the control group. Prior to the intervention no difference was noted in condom use between sexually active participants in the two groups.
- More than twice the amount of young women in the intervention group reported using emergency contraception.
- Reports of having coerced someone into sex were lower in the intervention group (3 percent compared to 9 percent).
- Reports of being coerced into unwanted sexual activity were lower in the intervention group (3 percent vs 6 percent).
- No differences were identified in sexual debut between the two groups.

Similar to the *Red Cross Anti-AIDS Club* in Rwanda, this intervention appeared to have no effect on delaying sexual initiation. Again, this may be linked to life-stage, which is often characterized by sexual initiation. The important result of this *Comprehensive Sex Education Program* is that young people appeared to improve their sexual practices and become better able to protect themselves, including coercing or being coerced into unwanted sexual activity. Although the evaluation did not assess the success of each individual component of the intervention, it was clear that the more components young people attended, the more likely they were to engage in protective behaviors. This finding provides strong evidence for the effectiveness of multi-component SBCC interventions in achieving behavior change.

Name:	Filles Eveillées / Girls Awakened
City:	Bobo Dioulasso
Country:	Burkina Faso
Target Group:	Migrant girls in domestic service aged 11 to 18 years

Filles Eveillées is an eight-month, safe-space intervention, consisting of 30 weekly sessions where the girls meet with a trained female mentor on a Sunday for two hours. Interactive discussions, personal stories, exercises and role-plays are used to address girl-specific competencies in life skills, health and hygiene, sexual and reproductive health, and financial education. Evaluation took the form of a pre- and post-test design, with questionnaires being administered by a trained female surveyor. At endline, the following results were observed in the participants:

- Reduced feelings of isolation.
- Increased number of friends.
- Increased feelings of self-confidence.
- Increased knowledge of SHR issues.
- Increased knowledge of where to go in case of rape.

The evaluation did not measure behavior change, however, like the *TRY* project, *Filles Eveillées* is an attempt to address the broader aspects affecting the lives of poor young urban women and thus empowering them to make healthier choices.

Name:	Flying Youthood
City:	Shanghai
Country:	China
Target Group:	High school and college students

The *Flying Youthood* program was an Internet-based intervention offering a password-protected website providing information on sexual and reproductive health and related services. Information was provided through web pages and through ten educational videos. To make the intervention more comprehensive, professional counseling was available online, as was a discussion forum where young people could share doubts, questions and experiences. The website was initially tested for ten months through a non-randomized controlled trial, where an intervention group had access to the website in school and a comparison group received general SRH information during lesson time. Baseline and endline surveys were conducted to capture SRH knowledge, attitudes towards contraception and sexual behaviors. Results include:

- Increased knowledge of reproduction, STIs, condoms and contraceptives in the intervention group.
- Improved attitudes towards condoms in the intervention group, with more young people agreeing with the provision of condoms in school.
- No differences in sexual behaviors between the intervention and control groups.

Following the pilot phase, the website was launched publicly and the number of youth accessing it and seeking counseling increased rapidly. Although no changes in behavior were identified, possibly due to the short timeframe of the intervention, this vehicle was considered convenient, private and user-friendly by young people, indicating its potential for reaching youth with SRH information and key behavior change messages.

Name:	Grassroot Soccer
City:	Bulawayo
Country:	Zimbabwe
Target Group:	12- to 14-year-olds in school

This pilot intervention was based on Social Cognitive Theory and used professional female and male soccer players to educate 12- to 14-year-olds on HIV prevention during school time. Five soccer players were trained to deliver a total of four two-hour sessions over a two-week period using interactive and fun methodologies to cover the following topics: basic knowledge about HIV transmission and ways to protect oneself, understanding personal risk, AIDS stigma and ways to facilitate peer-to-peer education. There were four soccer players to approximately 40 children. At the end of the two-week intervention, a graduation ceremony was held.

Evaluation was through quasi-experimental design with four schools participating. In each school, one class would receive the intervention and one class would act as control receiving general HIV/AIDS information and health education in the classroom setting. Qualitative surveys were administered at baseline, immediately after the intervention and at five months post-intervention. The following results were observed:

- Immediately post-intervention, those receiving the activity registered significantly higher levels of belief in condom effectiveness, social support and awareness of HIV prevention services, and a reduction in stigma.
- At five months post-intervention, most results were sustained though there was a slight decrease in belief in condom effectiveness and in social support.
- An interesting finding was that, five months post-intervention youth in the control groups had also improved their knowledge and attitudes.

It is suggested that the improvements in knowledge and attitudes observed in the control participants were due to pupils participating in the intervention sharing what they had learned. In some cases, the pupils who participated in the intervention set up Anti-AIDS clubs spontaneously with no support from teachers or the *Grassroot Soccer* team. This could be the result of the curriculum comprising a section on communication with peers or it could be the result of using popular role models who can inspire young people to share their new-found knowledge to imitate their role models.

Name:	HEART: Helping Each other Act Responsibly
City:	Nation-wide, but only data from cities is reported here
Country:	Zambia
Target Group:	13- to 19-year-olds

The *HEART* campaign was a multi-media campaign guided by the stage theory of behavior change and used television, public service announcements, radio spots, music and music videos, billboards and print materials. Young people were involved from the conceptualization of the project through to realization and a Youth Advisory Group was established with 35 young people to ensure that the needs of the target group were at the center of the campaign. Although the campaign was national and did not target urban youth in particular, the results provided by the literature reported here refer exclusively to the television component of the intervention, which was especially common in urban areas. Evaluation consisted of a quasi-experimental, separate sample, baseline and follow-up design, with follow-up occurring 12 months after the start of the campaign. A significant association was found between campaign recall and positive outcomes related to HIV reduction, including:

- Talking to others about the ads.
- Intention to abstain from sex.
- Intention to use condoms.
- Higher reported condom use at last sex.

An interesting finding from this campaign was that young women were as likely as young men to have viewed the ads. Although in the past women had little access to TV (Underwood et al, 2006), this gender barrier seems to have been overcome and television has become an effective means for reaching both young men and women. Further, urban youth were almost twice as likely to have viewed the ads as rural youth indicating the potential for television as a communication channel for young urban residents.

Name:	HIV Prevention in Mexican Schools
City:	Morelos State
Country:	Mexico
Target Group:	First year high school students

This intervention was entirely teacher-led. Following a 40-hour training, teachers delivered a total of 30 hours of sessions over a 15-week period to their first year students. Lessons covered the following topics: consequences of unprotected sex and how to avoid them, dealing with social pressures that influence sexual behavior (peer pressure, cultural values), communication skills, and negotiation and refusal skills. Two different interventions were delivered: one focused on HIV education and condom use, while the other focused on HIV education, condom use and emergency contraception.

Evaluation took the form of a cluster randomized controlled trial where 15 randomly selected schools received the HIV education and condom use intervention, 15 received the HIV education, condom use and emergency contraception intervention, and 10 schools acted as control continuing with standard sex education during biology classes. A total of 10,954 students participated, completing a baseline questionnaire, one immediately after the intervention and a third one 12 months later. The following results were observed:

- Increase in the proportion of men in the HIV education and condom use intervention reporting condom use with a casual partner or sex worker at first follow-up. This difference was not observed at second follow-up, one year later.
- Greater proportion of girls in the HIV education, condom use and emergency contraception group reporting using emergency contraception than in the other two groups.
- Increased knowledge of HIV and risky sexual behaviors in both intervention groups.

Despite the increase in knowledge observed in both intervention groups, neither intervention affected condom use in the longer term. Like with other school-based interventions, significant changes in behavior and practice were not registered. Combining school-based interventions with other community-based activities and improved service provision may support behavior change more effectively as seen in other multi-component interventions mentioned here.

Name:	HIV Workshop plus Condom Kiosk
City:	Tijuana
Country:	Mexico
Target Group:	10 th to 12 th grade students (average age of 17.6 years)

This intervention consisted of two phases. The first phase involved the delivery of a one-off, three-hour workshop addressing seven HIV-related topics, each lasting between 15 and 40 minutes: (1) HIV-related attitudes and risk behaviors; (2) effects of AIDS on health and family; (3) facts about HIV/AIDS; (4) transmission of HIV; (5) living with HIV; (6) myths about HIV/AIDS; and (7) condom use and negotiation skills. The second phase was introduced three months after the intervention and consisted of setting up a kiosk in school to distribute free condoms and provide HIV information.

A quasi-experimental design was used to evaluate the intervention with face-to-face interviews being carried out at baseline, three months post-intervention and then again at six months. Results obtained include:

- Slower increase in sexual initiation in the intervention groups (both after the workshop only condition and after the workshop plus condom kiosk condition).
- Significant increase in students in the intervention groups buying condoms (102 percent increase) compared to students in control groups (5.4 percent increase). However, this seemed to have no effect on condom use.
- No significant differences between experimental and control groups in the likelihood of having had unprotected sex at three and six-months follow-up.
- No effects found on students' self-efficacy to engage in HIV-protective behaviors.

Unlike other interventions, this *HIV Workshop plus Condom Kiosk* seemed to slow down the rate of sexual initiation. It also had a significant effect on buying accessing condoms, but this did not result in increased use or improved sexual behaviors. Interestingly, the condom kiosk component on its own was not sufficient to increase the number of youth

accessing condoms, indicating that condom availability needs to be compensated with an educational element. Overall, this intervention yielded some promising results, however longer-term activities could have better supported behavior change.

Name:	Hoy Toka
City:	Chetumal
Country:	Mexico
Target Group:	15- to 24-year-olds

The dominant component in the *Hoy Toka* project is a radio program providing information on SRH and promoting positive social norms around abstinence, and the use of condoms and modern contraceptives. It is complemented by a peer education component through which discussions supported by communication materials take place in social setting where young people gather and in schools. A total of 1,295 questionnaires were administered pre-intervention in 2009 and post-intervention in 2011, yielding the following results:

- Increased knowledge of modern contraceptives.
- Reported improved ability to abstain, negotiate condom use and use modern contraceptives.
- Increase in young people carrying condoms though this did not result in increased condom use at last intercourse.

Interestingly, the increase in knowledge on modern contraceptives resulted in some behavior change, such as carrying condoms, but did not affect levels of condom use, indicating that other components may be necessary to create more supportive environment for change.

Name:	Jongo Love
City:	Nairobi, Mombasa, Kisumu
Country:	Kenya
Target Group:	Young people

Jongo Love is part of the Kenya Reproductive Health Initiative, called Tupange. Although Tupange targets youth and adults, *Jongo Love*, a radio drama series, specifically targets urban youth. The drama takes place in a fictitious Nairobi informal settlement called Jongo and recounts the story of a young, ambitious girl named Amani, whose dreams of getting ahead are thwarted by an unwanted pregnancy. Although life in Nairobi is challenging for a young person with no skills, through sheer determination and hard work, and with the help of some good friends and sound advice, Amani manages to get her life back on track. Social-cultural issues, as well as misinformation and rumors are woven into the storyline to improve knowledge of SRH. Each episode of *Jongo Love* lasts 15 minutes and is aired on a weekly basis by seven community radios in the cities of Nairobi, Mombasa and Kisumu. In these cities, listener groups, followed by discussion, are also organized for young people who do not have access to the radio. *Jongo Love* is complemented by information leaflets, a comic book and a TV program discussing ASRH topics.

A mid-term survey asking questions about exposure to specific communication activities and behavior found an increase in the use of modern contraceptive by women aged 15 to 19 years.

Name:	Journey of Love
City:	Addis Ababa, Amhara, Oromia, Tigray, SNNPR
Country:	Ethiopia
Target Group:	15- and 16-year-olds in school

This entertainment-education intervention was based on the Extended Parallel Processing Model. This model acknowledges the interaction between the perceived threat linked to a current behaviors and the efficacy of engaging in an alternative behavior. Therefore behavior change is motivated by fear; however, whether or not the individual engages in the corrective action is determined by his or her self-efficacy, that is, the self-confidence to effectively reduce the threat.

Following formative research guided by this theoretical principle, a radio soap opera developed to improve the behaviors of young people aged 15 to 30 around HIV/AIDS and family planning. The soap opera consisted of 26 episodes lasting 20 minutes each aired one a week over a six month period. Family planning and HIV/AIDS issues were weaved into the storyline of Aksale and her husband's lives in their neighborhood. The radio show is complemented by listening groups in the community which are supported by a facilitators guide to stimulate discussions around the topics raised by the radio show.

Evaluation took place through a panel design, whereby the same group of respondents was interviewed via a face-to-face survey, prior to the intervention and then again two years post-intervention. Key findings include:

- The majority of respondents agreed that after listening to the radio show they wanted to change their lives for the better.
- 95 percent of listeners agreed that Journey of Love influenced them to protect themselves from HIV/AIDS.
- 91 percent of respondents reported that the radio show influenced them to use FP methods

Name:	Kesho Ilyo Njeme / For a Better Tomorrow
City:	Dar es Salaam
Country:	Tanzania
Target Group:	School pupils aged 11 to 16 years

This one-off, 45-minute session followed by a 45-minute discussion used interactive methods such as picture drama and visual aids to increase SRH-related knowledge in a classroom setting. Evaluation was done through a pre- and post-test assessing knowledge, attitudes and behaviors of participating students. The following results were found:

- Increased knowledge for both boys and girls.
- No change in terms of attitude.

Although the intervention appeared to improve knowledge, the evaluation took place immediately after the activity, meaning that retention of information could not be assessed.

Name:	m4RH
City:	Cities across the country where phone network is available
Country:	Rwanda
Target Group:	Young people

m4RH uses mobile technology to impart SRH information and promote positive behaviors. In Tanzania and Kenya, *m4RH* targets all people of reproductive age. However, in Rwanda the intervention was launched specifically for young people. Although the intervention is country-wide, it is mostly city residents who access the technology, which is why the intervention has been reported here.

m4RH in Rwanda provides information via text messages on five SRH related topics: puberty, sex and pregnancy, pregnancy prevention, HIV and STIs. Further, stories of young role models are also shared via short message service (SMS) to promote positive behaviors. Although no evaluation was carried out in Rwanda at the time of writing, evaluations of pilot interventions in Tanzania and Kenya yielded promising results. In particular, adolescents and young adults up to the age of 29 years were the most frequent users of the service and between 39 percent and 44 percent of users were men. These findings indicate that mobile phone technology can be an effective way of reaching youth as well as men who are often harder to reach with health related information.

Name:	MTV's "Staying Alive" Campaign
City:	São Paulo; Dakar; Katmandu
Country:	Brazil; Senegal; Nepal
Target Group:	16- to 25-year-olds

This global campaign started at the end of the 1990s and aims to fight HIV in smart and creative ways. The music television channel produces original HIV prevention messaging targeting young people. The results reported here refer to a series of 30 seconds public service announcements aired in Sao Paulo, Dakar and Katmandu. Evaluation took the form of a cross-sectional, population-based, face-to-face pre- and post-campaign survey through multi-stage probability sampling procedures. Results indicated that exposure was associated with the following outcomes:

- Increased likelihood of having talked with someone about HIV, in particular siblings and friends.
- More positive beliefs about HIV prevention behaviors.

Again, television seems to be an effective channel for reaching urban adolescents and youth and, like in the *HEART* campaign in Zambia, it stimulates discussion among young people, a behavior that has been identified as protective (Maticka-Tyndale and Tenkorang, 2010; Kabiru et al, 2011; Adedimeji et al, 2008; Mmari-and Sabherwal, 2010) and that can contribute to creating a supportive environment for change.

Name:	Nigerian Urban Reproductive Health Initiative (NURHI)
City:	Abjua, Kaduna, Ilorin, Ibadan, Zaria and Benin City
Country:	Nigeria
Target Group:	18- to 30-year-olds

The overall aim of the *NURHI* project is to increase contraceptive use among sexually active people. It targets 15 to 59 year olds, though it has a component targeting younger adults aged 15 to 30 years. Specific objectives of the intervention include: (1) increasing correct knowledge of FP and reduce misconceptions; (2) increasing knowledge on how to access FP services; (3) increasing male approval and support for FP; (4) increasing general acceptance of FP; (5) developing effective feedback mechanism for FP issues; (6) enhancing community capacity to access FP; (7) increasing community positive perception of FP; and (8) strengthening the referral system. To achieve this, *NURHI* uses a mixture of advocacy, social mobilization, inter-personal communication and multi-media approaches. Of particular interest is *NURHI's* attempt to integrate key messages into significant life events such as naming ceremonies, graduation, Christmas and Eid celebrations, and weddings. Unfortunately, at the time of writing no evaluation was available for the youth component of this intervention.

Name:	Nyeri Youth Health Project
City:	Nyeri
Country:	Kenya
Target Group:	Unmarried young people aged 10 to 24 years

The *Nyeri Youth Health Project* is a locally designed, culturally consistent project addressing ASRH. Following a year-long formative research process with young people, parents and community leaders, the project employed respected parents from the community, referred to as "Friends of Youths" and nominated by community members themselves, to give young people SRH information and to promote an enabling environment for sexual behavior change. Each "Friend of Youth" was assigned to a community of approximately 300 young people and received a one-month training addressing topics such as community, family and individual values, adolescent development, sexuality, gender roles, pregnancy, STIs, HIV/AIDS, harmful traditional practices, substance abuse, planning for the future, children's rights and advocacy. The project was consistent with the local Kikuyu culture whereby parents traditionally ask adults to provide SRH information to their children as they undergo puberty rites. Further, the intervention included a component addressing service provision, through which providers, including health centers, pharmacies and laboratories, were trained in youth-friendly delivery, and young people were given coupons entitling them to subsidized services.



The intervention lasted from 1997 to 2001 and was evaluated using a quasi-experimental research design in which baseline and endline surveys were conducted in Nyeri and in a comparable control community (Nyahururu) at 100 km from the intervention site. Results reported include:

- Reduction in males and females in the intervention community initiating sex or having more than three sexual partners.
- Increase in males and females in the intervention community reporting using condoms, abstaining from sex and discussing SRH matters with an adult.
- None of these changes were reported in the control community.

Like the *Comprehensive Sex Education Program* in China, the *Nyeri Youth Health Project* was a multi-component intervention, using different channels to reinforce messages. The community-based education component not only contributed to improving knowledge of SRH issues, but it also created a responsive environment where such matters could be discussed openly. Working with service providers to deliver youth-friendly services further contributed to creating an enabling environment for behavior change, and addressing broader issues in the young people's lives, such as alcohol and substance abuse, provided a holistic approach addressing other factors that can lead to unhealthy sexual behaviors. The strength of the *Nyeri Project* lies in its multi-component approach, its consultation with the community and young people to ensure cultural acceptance, and on its ability to capitalize on existing structures rather than creating new ones.

Name:	Peer Education vs Single-Session Lectures
City:	Ankara
Country:	Turkey
Target Group:	University students

This intervention was based in two Turkish universities. The aim was to assess whether peer education was more effective than single-session lectures in increasing knowledge about SRH and improve intent to practice healthy sexual behaviors among university students. Peer educators were trained for a total of 24 hours to deliver informational sessions in a social setting with a randomly selected group of their university colleagues. Another randomly selected group attended a one-off lecture on HIV and SRH delivered by a medical professional, while a third group was kept on a waiting list and did not receive any intervention. Evaluation was carried out through post-intervention tests only and revealed the following results:

- HIV-related knowledge was higher in both the peer education and the single session lecture groups than the control group.
- Attitudes toward SRH matters were better in the two intervention groups than the control group.
- The peer education group had better attitudes than the single lecture group.
- The single lecture group had greater knowledge than the peer education group.

The discussion and interactive format of peer education may have contributed to the better results in terms of attitude. Interestingly, single-session lectures seemed to be more

effective at increasing knowledge with this target group, indicating that this methodology can be suitable and interesting for university students who are used to this type of learning.

Name:	Project Light
City:	Belize City
Country:	Belize
Target Group:	13- to 17-year-olds

In this intervention, which was adapted from a U.S. program, peer educators were trained to deliver a total of seven weekly two-hour sessions on SRH matters in a classroom setting. The intervention was assessed using a quasi-experimental design, with three control and three intervention schools. Surveys were administered at the beginning and at the end of the activities and following results were reported in the intervention groups:

- Increased knowledge.
- Greater intention to use condoms.
- More positive attitudes towards condoms.
- No differences identified in peer norms, self-efficacy and communication around SRH.

Project Light appeared to have some effect on behavioral intent, but not on behaviors that have been linked to healthier sexual lives such as improved communication about SRH matters, self-efficacy and peer norms. The intervention was adapted from a US program but did not analyze the social, cultural, economic and political forces that affect young people's behaviors in Belize. This lack of cultural analysis may account for the limited effects on behavior, as issues such as gender norms, social norms, poverty and local sexual expression need to be understood and taken into consideration when developing and adapting programs to ensure cultural relevance and local acceptance.

Name:	Responsible Sexuality Education Program
City:	Belize City
Country:	Belize
Target Group:	High school and university students

This intervention consisted of a one-off scripted sex education program lasting three hours, delivering unbiased information about sex and providing a framework for decision-making in relationships, including negotiation skills. Through a cluster-randomized controlled trial (RCT), pre- and post-intervention surveys were administered to 11 control classrooms and eight intervention classrooms across seven schools. The following results were reported:

- Increased knowledge in the intervention groups.
- No changes observed in the attitudes or the behavioral domains.

These results are in line with previously conducted RCTs that show improved knowledge through sex education but little or no improvements in attitudes or behavioral intent

regarding delayed sexual intercourse or use of contraceptives (DiCenso et al, 2002). Further, feedback from young people participating in the program indicates that the intervention should emphasize more negotiation skills and communication in sexual relationships.

Name:	Rutang
City:	Western Cape
Country:	South Africa
Target Group:	15- and 16-year-olds in school

This was a peer educator-led intervention, where peer educators received training on issues relating to relationships, sexual health and well-being and confidence building. The peer educators delivered a mixture of taught weekly classroom sessions conducted during "life orientation" lessons with a standard curriculum; impromptu conversations with fellow students; and referral of students whom the peer educators identified as requiring further support. The two main objectives of the intervention were to delay sexual debut and to increase condom use among those students who were already sexually active. Evaluation took the form of a non-randomized controlled trial, where 15 schools were selected to receive the intervention and 15 were matched to act as controls. Self-completed questionnaires were delivered to all participating students at baseline and at follow-up 18 months later.

- Students in the intervention schools were 1.54 times more likely to have had sexual intercourse.
- No differences were registered in terms of condom use and in the age of sexual debut.

Like with other interventions that solely rely on peer education, effects of *Rutang* are questionable, calling for a need to integrate peer education within a more comprehensive behavior change strategy.

- The perception of risk increased and 66 percent of listeners agreed that they were susceptible to HIV infection
- The majority of listeners (96 percent) said that Journey of Love made them feel that they can do something to protect themselves from HIV/AIDS.

The intervention appears to have been successful in increasing both perceived fear and self-efficacy, increasing therefore the likelihood for individual to engage in the desired behaviors.

Name:	Rwanda Red Cross Anti-AIDS Club
City:	Bugesera
Country:	Rwanda
Target Group:	High school students

This school-based intervention consisted of peer educators delivering participatory sessions on HIV-related matters to their fellow pupils in after-school clubs. The peer

educators received a six-day training to enable them to facilitate the educational sessions and they could access support of one teacher in each school. Participation in the Anti-AIDS clubs was voluntary and topics addressed during the sessions include: facts about HIV/AIDS, STIs, family planning and pregnancy. A non-randomized, longitudinal controlled trial was used to assess knowledge, attitudes and behaviors of students at baseline, at six and 18 months in eight intervention schools and six control schools. Key outcomes include:

- Decrease in enacted stigma in the intervention groups.
- Increase in HIV-specific knowledge in the intervention groups.
- Increase of sexually active students in both intervention and control groups.

Despite some promising results in terms of improved knowledge and reduced stigma, it is important to note that participation in the Anti-AIDS clubs was voluntary, meaning that only interested individuals benefitted. Such interventions should seek ways of reaching all students, even those who are not interested, with key messages. Further, like with the *Responsible Sexuality Education Project* in Belize, this intervention resulted in improved knowledge, but not in behavioral change. This finding is supported by the conclusions of a systematic review of peer education interventions in ASRH that found that peer education on its own does not completely succeed in its main objective of reducing sexual risk behaviors (Kim and Free, 2008). Peer education seems successful in contributing to the creation of a more positive, less stigmatizing climate and to knowledge increase; however, for behavior change to occur, peer education is more effective if combined with other activities such as youth-friendly services, condom distribution, community engagement and structural changes.

It is interesting to observe that the number of sexually active students increased in both groups. This may be linked to the life-stage of the participants, as during adolescence young people may be pushed by sexual development and curiosity to experiment with their sexuality. The role of SBCC interventions is to ensure that those youth who engage in sexual activity are able and prepared to protect themselves from related, unwanted consequences.

Name:	School-Based Risk-Reduction Program
City:	Mdantsane and Beril, Eastern Cape Province
Country:	South Africa
Target Group:	Sixth grade students

This intervention was delivered in a school setting and lasted six consecutive days. Over the six-day period, interactive and participatory methods such as games, role-plays, group discussions and brainstorming, were used to impart information on a range of topics related to RH. The topics addressed included: ways to reduce HIV and STI risk, appreciation of the importance of using condoms and postponing sex, skills around condom use and around talking to a partner about abstinence and condom use, sexuality, sexual maturation, appropriate sex roles and rape myths. Evaluation entailed randomly selecting seven pairs of urban schools and two pairs of rural schools, with one school in each pair being randomized into the intervention and the other acting as control and only receiving

general health promotion information. A total of 1,057 youth participated completing pre- and post-intervention questionnaires at baseline, and at three, six and 12 months post-intervention. The following results were observed in the intervention group:

- Decreased likelihood of reporting having engaged in unprotected sexual intercourse.
- Decreased likelihood of reporting having had multiple partners in the last three months.

Name:	SmartChoice
City:	Monrovia
Country:	Liberia
Target Group:	Young people

This multi-component intervention uses radio, community activities, peer education and service delivery to change behaviors around SRH. The first component consists of a half-hour radio show called “Let’s Talk About Sex” which is aired twice a week. The radio show is also used as a community outreach tool by doing out-of-studio live shows, organizing listening events, and publishing blogs and newsletters. The second component of the intervention involves the promotion of the subsidized “Star Condoms” through peer educators and events in nightclubs. The third component is known as the iLEAD program, which aims to mentor and empower young women to make and promote smart choices and decrease the incidence of cross-generational and transactional sex. The fourth and final component targets service delivery and involves the development of youth friendly health centers. At the time of writing, components three and four had not yet been launched, and no evaluation results for any of the components were available. Although *SmartChoice* covers the whole of Liberia, including rural areas, through its radio shows, it was selected for this report because the large concentration of activities occurs in the capital city. Unfortunately, no results are available for the intervention; however the multi-component approach, using multiple channels to reinforce messages, fun activities that attract young people and promoting supportive environments through condom promotion and youth friendly services, holds promising prospects for behavior change.

Like with the *SmartChoice* program in Liberia, using entertaining activities that attract young people can be successful in engaging youth and affecting behavior change. Further, a pre-intervention assessment highlighted the opportunities for reaching urban youth through other more modern communication channels such as social media like YouTube and Facebook.

Name:	TeenWeb
City:	Nairobi and Rio de Janeiro
Country:	Kenya and Brazil
Target Group:	Secondary school students

This web-based intervention consisted of six online modules that secondary school pupils could complete during class time and addressing SRH topics. Each module took between

six and eight weeks to complete and new modules would be introduced only when 80 percent of the pupils had completed the previous one. Evaluation took the form of a quasi-experimental study, where three intervention and three control schools were selected in both cities. A baseline questionnaire was completed online at the start and end of the intervention. Gender differences were noticed in the results, however differences between the web schools and the comparisons schools were not as positive as expected.

In Nairobi:

- Intervention students were more likely to disagree that condoms break often, but less likely to disagree that they are too expensive or too embarrassing to talk about.
- Boys in the web schools were more likely to perceive that condoms were effective for preventing HIV/AIDS, but girls were not.
- Girls in control schools were more likely to know the timeframe for taking Emergency Contraception (EC), but boys in the web schools were more knowledgeable about EC.
- Girls in the intervention schools had better knowledge of abortion laws.

In Rio de Janeiro

- Students in the web schools were more likely to disagree that condoms are difficult to use or break easily, but less likely to disagree that condoms are embarrassing to use.
- Attitudes towards condoms improved in the web groups.
- No differences were noted in EC knowledge for girls, while, surprisingly, boys in the web schools showed lower levels of EC knowledge than boys in the control schools.
- No effects were found on students' self-efficacy to engage in HIV-protective behaviors.

Overall, only half of the measured outcomes in both Nairobi and Rio de Janeiro were in the desired direction. Where differences between the web schools and comparison schools were in the right direction, the magnitude of the difference was small and overall, knowledge remained low, raising doubts over the effectiveness of this intervention.

In Nairobi, the website was simple due to the slow Internet connection. In Rio de Janeiro, the website was more interactive and more visually appealing. However, this did not seem to lead to significantly improved results. Although the Internet can be an effective means of reaching youth with health information, the availability of a good connection and easy access for youth needs to be evaluated.

Name:	TRY: Tap and Reposition Youth
City:	Nairobi
Country:	Kenya
Target Group:	Young women living in urban informal settlements

This intervention started as a microfinance project for young women living in Nairobi informal settlements. After an initial assessment, it became apparent that other social issues affected the young women’s lives and a social component was subsequently added to the intervention. Groups of five young women were initially trained for six days on business management and planning skills, entrepreneurial skills, life skills and gender roles. Groups would meet on a weekly basis and each woman would contribute savings to a group account for future microloans. Credit officers would support the women on the economic side, while trained mentors, in most cases with a social-work background, would address the social issues faced by the young women. Support provided by the mentors included counseling, organizing social events and providing referrals to professional services if necessary. Particular focus was placed on sexual health matters including HIV/AIDS, sexual and gender-based violence, women’s rights, male-female relationships and family planning.

...it became apparent that other social issues affected the young women’s lives and a social component was subsequently added to the intervention.

Evaluation consisted in a pre- and post-intervention survey conducted with the participants and with controls selected on the basis of their similarity to the participants in terms of age, residence, education, work, and marital and childbearing status. The following statistically significant results were recorded in the intervention groups:

- Increase in individual income.
- Increase in savings.
- Increase in material assets.
- Increased mobility and exposure to non-familial social networks (which can be protective for young, vulnerable women).
- Improved ability to gain control over sexual relations, including negotiating safer sex.

Although these results seem encouraging, they need to be viewed with caution as response rate at endline was only 68 percent. Nonetheless, the *TRY* project offers a promising approach to behavior change, as it evolved from a simple micro-financing group to taking into account the broader needs of adolescent girls in deprived urban areas. This type of holistic programming can contribute to building the necessary skills and capacity for improved sexual health behaviors.

Name:	Youth Health Promotion
City:	Goa
Country:	India
Target Group:	16- to 24-year-olds

This intervention was a general health promotion program aimed at improving the overall health of young people over a one-year period. It was school-based and consisted of three components: (1) trained peer educators delivering educational sessions and street plays; (2) teachers trained to improve their relations with students and their ability to identify

and manage common problems faced by youth; and (3) distribution of health education materials. Evaluation took the form of a controlled trial where a control community was matched to the intervention community on urbanization and socio-economic development. A population-based survey was conducted at six, 12 and 18 months in both communities. The following outcomes were observed in the intervention community:

- Reduction in suicidal behaviors, perpetration of physical violence and substance use.
- Significant reduction in sexual abuse.
- Increased knowledge of sexual health matters.

A challenge observed in the delivery of this intervention was the competing demands on the time of the peer educators and the teachers. Although both teachers and peer educators were keen to become involved and were committed to the program, they were unable to deliver the activities as planned due to other demands on their time. To ensure that school-based SRH programs are delivered as required, it can therefore be useful to find ways of mainstreaming them into existing activities.

APPENDIX 2: EVALUATION OF THE INTERVENTIONS – METHODOLOGIES AND RESULTS

Name of the Intervention	Evaluation Methodology	Results
A Team Against AIDS - MEXICO -	Four schools were divided into pairs, one receiving the intervention and one acting as control. The control schools only received a general health and sex education program that was not interactive. Questionnaires were administered to all students at baseline, endline, and at six and 12 months post-intervention.	Improvements were registered in all outcome variables, including knowledge, attitudes, perceived self-efficacy, decision-making skills and behavioral intent. Over time the effects of the intervention faded; however, they remained higher than at baseline and compared to the control groups.
Biruh Tesfa - ETHIOPIA -	Baseline surveys administered in experimental and control communities, with follow-up two years later. Surveys measured community-wide changes associated with the project, with particular focus on social participation and social safety nets.	Increase in girls reporting having “many friends” from 29 percent at baseline to 35 percent at follow-up. No changes were observed in the control site. Girls in the experimental group saying they had a safe space in their community increased from 7 percent at baseline to 25 percent at follow-up. At endline, girls in the project site were more likely to have undergone voluntary counseling and testing for HIV, compared to girls in the control site.
CARE Livelihood and Reproductive Health Initiative - INDIA -	Quasi-experimental design, with nine informal settlements in the control area receiving RH component only, and five informal settlements in the intervention area receiving RH component followed by livelihood activities. Baseline and endline surveys conducted in both control and intervention areas.	Girls in the intervention areas were more likely to know safe places where young, unmarried girls can congregate, they scored higher on social skills index and were better informed about SRH issues than their peers in the control areas. 80 percent of participants in the intervention area continued to use their vocational skills when program ended and more than half were able to open savings accounts in their name.
The China Youth Reproductive Health Project - CHINA -	Qualitative evaluation, including focus group discussions, stakeholder interviews, document reviews and observational visits. Three surveys conducted in four intervention schools and two control schools to assess knowledge, attitudes and practice before, shortly after and at three months post-intervention.	Improvements identified in intervention groups in the following areas: knowledge of contraception (though this decreased at 3 months post-intervention); knowledge on how to use condoms correctly; knowledge of HIV/AIDS; attitudes towards condoms. Nonetheless, some misconceptions remained around contraception, gender roles and modes of transmission of HIV/AIDS.

Name of the Intervention	Evaluation Methodology	Results
Comprehensive Sex Education Program in Suburban Shanghai - CHINA -	Unmarried young people aged 15 to 24 were invited to participate in the study from two suburban towns in the Shanghai area (one intervention and one control town). Control town was selected on the basis of similarity with the intervention town and was far enough away to minimize cross-contamination. In total, 1,220 young people enrolled in the program in the intervention town and 1,007 enrolled in the control town. Self-administered surveys were completed pre and post intervention.	No difference identified in sexual initiation in the intervention and control groups. Among participants who reported coital experience, pre-intervention results indicated no difference in contraceptive use between control and intervention groups. Post-intervention results indicated an increase in contraceptive use most or all of the time by intervention participants (89 percent compared to 45 percent in control group). Condom was the preferred method in both groups and reported use was significantly higher in the intervention group (96 percent vs 67 percent). More than twice the amount of young women in the intervention group used emergency contraception. Reports of having coerced someone into sex were lower in the intervention group (3 percent vs 9 percent) as were reports of being at the receiving end of sexual coercion (3 percent vs 6 percent).
Filles Eveillées / Girls Awakened -BURKINA FASO -	Pre- and post-test design, with questionnaires administered by trained female surveyor.	At endline, participants were less isolated, had more friends and felt more confident in themselves. They became more aware of what steps to take to improve their health, they improved their knowledge on reproductive health issues and knew where to go in case of rape. Some gender-role attitudes also improved.
Flying Youthood - CHINA -	Non-randomized controlled trial over a period of 10 months, where an intervention group had access to the website while a control group only received SRH information from school. Baseline and end line survey conducted to assess individual SRH knowledge, attitudes toward contraception and sexual behavior.	Knowledge of reproduction, STIs, condoms and contraceptives increased in the intervention group and was three times greater than in control group. No significant differences identified between the intervention and control groups in terms of sexual behavior. Intervention group was more likely to agree with the provision of condoms. A total of 1,337 students participated.
Grassroot Soccer -ZIMBABWE-	Quasi-experimental design with one intervention classroom and one control classroom in four separate schools. The control classes would receive general HIV/AIDS content and health education. A total of 304 students participated (155 in the intervention and 149 in the control classrooms). Quantitative surveys were administered at baseline, immediately post-intervention and at five months post-intervention.	Immediately post-intervention, those receiving the activity demonstrated significantly higher levels of belief in condom effectiveness, social support, awareness of HIV prevention services and reduced levels of stigma. At five months post-interventions results were sustained though there were slight decreases in belief in condom effectiveness and social support.

Name of the Intervention	Evaluation Methodology	Results
HEART: Helping Each other Act Responsibly Together - ZAMBIA -	Quasi-experimental, separate sample, baseline and follow-up design. Follow-up was replicated 12 months after start of the campaign. Only the TV element of the campaign was assessed and viewing was more common in urban areas.	Viewership of health communication ads was more common in urban areas. Actions reported by respondents who claimed having seen the ads included talking with others about the ads, intending to abstain from sex and intending to use condoms. HIV-related knowledge remained low. Condom use at last sex was higher at follow-up than baseline. Significant association identified between campaign recall and positive outcomes related to HIV reduction.
HIV Prevention in Mexican Schools - MEXICO -	Cluster randomized controlled trial. Ten schools assigned as control to receive standard sex education during biology classes; 15 randomized intervention schools received HIV education plus condom use; 15 randomized intervention schools received HIV education, plus condom use plus emergency contraception. Questionnaires were administered to all students (n.10,954) at baseline, immediately after the intervention and one year after completion of the intervention.	At first follow-up, a higher proportion of men in the condom use only intervention group reported using a condom with a casual partner or sex worker than in the control group. This difference was not noted at second follow-up (one year later). A higher portion of girls in the condom use plus emergency contraception group reported using emergency contraception than in the control group. Both interventions had significant impact on knowledge of HIV and risky sexual behaviors.
HIV Workshop plus Condom Kiosk -MEXICO-	Quasi-experimental design with students from four schools being randomly assigned to either the intervention (consisting of a workshop) or to no-intervention. Pre- and post-intervention face-to-face interviews were administered at baseline and at three months follow-up. At six-months, the condom distribution component was also assessed via a face-to-face interview.	At three months follow-up the percentage of sexually initiated students increased less in the intervention group (12.5 percent compared to 27.3 percent in the control groups). The slower increase continued at six months follow-up. Percentage of students in the intervention group buying condoms increased by 102 percent compared to 5.4 percent in the control group, but this seemed to have no effect on condom use as no differences were observed between intervention and control groups in the likelihood of having had unprotected sex at three and six months follow-up. At six months, none of the experimental conditions seemed to have an effect on reported sexual practices or unprotected sex.
Hoy Toka - MEXICO -	1,295 questionnaires administered by trained surveyors pre-intervention in 2009 and post-intervention in 2011.	Knowledge of modern contraceptives improved and young people felt better able to abstain, to negotiate condoms and to use modern contraceptives. More young people started carrying condoms in 2011, but this did not result in an increase in the use of condoms at last sexual intercourse.

Name of the Intervention	Evaluation Methodology	Results
Jongo Love - KENYA -	Mid-term data collection asking questions about exposure to specific communication activities.	Increase in the use of modern contraceptives by women, especially those aged 15 to 19 years.
Journey of Love - ETHIOPIA -	Panel design, whereby the same respondents were interviewed via a face-to-face survey prior to the intervention and two years later.	The majority of the respondents agreed that after listening to the radio show they wanted to change their lives for the better. 95 percent of listeners agreed that <i>Journey of Life</i> influenced them to protect themselves from HIV/AIDS. 91 percent of respondents reported that the radio show influenced them to use FP methods. Perception of risk increased with 66 percent of listeners agreeing that they were susceptible to HIV infection. Majority of listeners (96 percent) said that <i>Journey of Life</i> made them feel that they can do something to protect themselves from HIV/AIDS.
Kesho Ilyo Njeme - For a Better Tomorrow - TANZANIA -	Quasi-experimental pre- and post-test research design to evaluate student's knowledge, attitudes and behavior about reproductive health pre- and post-intervention.	Statistically significant increase in knowledge at post-test for both boys and girls, but no change was observed for attitude.
m4RH - RWANDA -	No evaluation done yet in Rwanda. In Tanzania and Kenya however, where the project targeted the wider population (not just young people), evaluation methodology included tracking queries from users, sending text messages with closed/open ended questions and conducting phone interviews.	So far, only available data is on process evaluation indicating that users accessed the service between approximately 5000 and 80000 times in a three-month period depending on how much the service has been promoted. Among the young users, information on condoms was the first choice, with condoms being the most cited family-planning change made by this group. The service is used mostly by young people up to the age of 29. Between 39 percent and 44 percent of users are male.
MTV's "Staying Alive" Campaign - GLOBAL -	Three cross-sectional, population-based, face-to-face pre- and post-campaign surveys in the three cities (Kathmandu, Sao Paulo, Dakar) through multi-stage probability sampling procedure.	Exposure was related to greater likelihood of having talked to someone about HIV, in particular friends and siblings. A significant and positive association was found in all three sites between exposure and positive beliefs about HIV prevention behaviors.
NURHI: Nigerian Urban Reproductive Health Initiative - NIGERIA -	No evaluation data available at the time of writing.	No results available.
Nyeri Youth Health Project - KENYA -	Quasi-experimental design with control community (Nyahururu Municipality) at 100 km from intervention municipality, with comparable religious composition, socio-economic status and health and education infrastructure. Cross-sectional surveys carried out at baseline (1997) and endline (2001).	Young people in the project area improved their SRH behavior. Results include: decline in males initiating sex or having more than three sexual partners; increase in males reporting using condoms, abstaining from sex and discussing sexual and RH matters with an adult; decline in females in the project area reporting having sex and having more than three partners; increase in females reporting abstaining from sex or using condoms and discussing RH issues with an adult. None of these changes for male or female were observed in the control area.

Name of the Intervention	Evaluation Methodology	Results
Peer Education vs Single-Session Lectures in Turkish Universities - TURKEY -	One randomly selected group was assigned to peer education and one to single-session lecture, and one control group was on a waiting list. Post-test-only design was used three weeks after the intervention to assess knowledge and attitudes in all three groups.	Knowledge of HIV/AIDS was higher in both the peer education group and the single-session lecture group. Attitudes were better in peer education and single-session lecture group. Overall, single-session lectures seemed to affect knowledge more, while peer education seemed more effective in improving attitudes, especially among females.
Project Light –adapted - BELIZE -	Quasi-experimental, pre- and-post-test research design with three intervention schools and three control schools. Baseline surveys were administered prior to intervention. Post-intervention surveys administered at end the activity.	Intervention groups reported higher levels of HIV-related knowledge, higher levels of condom use, greater intentions to use condoms at next intercourse and more positive attitudes towards condoms. No significant differences were identified between control and intervention groups in peer norms, self-efficacy and communication.
Responsible Sexuality Education Program - BELIZE -	Cluster randomized design with 399 pupils in 19 classrooms in seven schools. Eleven classrooms were control classrooms (233 pupils) and eight classrooms were intervention (166 pupils). Pre- and post-tests were administered to all pupils in control and intervention classes.	Greater changes in knowledge found in the intervention group. No changes observed in attitudes or behavioral domains in either group.
Rutang - SOUTH AFRICA -	Non-randomized controlled trial with stratified random sample of 15 schools receiving the intervention and 15 schools, selected for their similarities with the interventions schools, acted as controls. Self-administered questionnaires were completed by all students at baseline and at follow-up 18 months later.	Students in the intervention schools were 1.54 times more likely to have had sex than those in the control schools. No differences were registered in terms of condom and in the age of sexual debut.
Rwandan Red Cross Anti-AIDS club - RWANDA -	Non-randomized, longitudinal controlled trial, with eight interventions and six control schools. Surveys to assess knowledge, attitudes and behaviors of students were administered prior to intervention, at six and 18 months.	Increase in number of sexually active students and in knowledge found in both control and intervention groups. Enacted stigma decreased in the intervention group, while HIV-specific knowledge increased. Alcohol had a significant impact on being sexually active and on recent sexual activity in both intervention and control groups. Respondents with high sexual self-concept were more likely to be sexually active.
School-based Risk-Reduction Program - SOUTH AFRICA -	Random selection of seven pairs of urban schools and two pairs of rural schools. One school in each pair was randomized into risk-reduction program. Other school received general health promotion program only. 1,057 six-graders (558 boys and 499 girls), average age 12 years, participated. Confidential questionnaires were completed before intervention; follow-up questionnaires were completed at three, six and 12 months post-intervention.	Pupils assigned to risk-reduction intervention were less likely than those in the general health promotion program to report having had unprotected vaginal intercourse or intercourse with multiple partners in the past three months. The proportion of students who reported having had vaginal intercourse in the past three months was lower in the intervention groups than in the control groups.

Name of the Intervention	Evaluation Methodology	Results
SmartChoice - LIBERIA -	No evaluation data available at the time of writing.	No results available.
TRY: Tap and Reposition Youth - KENYA -	Pre- and post-test intervention surveys among participants and among controls that were selected on the basis of their similarity to participants in terms of age, residence, education, work, marital and childbearing status.	Participation in the TRY program contributed to increases in: (1) individual income; (2) individual savings; (3) members' material assets; (4) girls' mobility and exposure to non-familial social networks; and (5) girls' ability to gain control over sexual relations, including their ability to negotiate safer sex. TRY participants were not more knowledgeable than girls in the control about reproductive health issues, but felt more able to refuse sex and negotiate condom use, and held more liberal gender-role attitudes. All differences were statistically significant.
TeenWeb -KENYA- -BRAZIL-	Quasi experimental design with three schools assigned to the intervention and two acting as comparison. Confidential questionnaires assessing knowledge, attitudes and practices were completed at baseline and endline.	<u>In Nairobi:</u> Intervention students were more likely to disagree that condoms often break, but they were less likely to disagree that they are too expensive or too embarrassing to talk about. Boys in intervention were more likely to perceive that condoms were effective at preventing HIV/AIDS, but not girls. Girls in comparison schools were more likely to know the timeframe within which to take EC, but boys in web school were more knowledgeable of EC than those in comparison schools. Girls in web school had better knowledge of abortion law. <u>In Rio de Janeiro:</u> Students in web school were more likely to disagree that condoms are difficult to use or break easily, but less likely to disagree with the statement that condoms are embarrassing to use. Attitudes towards condoms improved in web group. No differences in EC knowledge for girls, while boys in web schools had lower levels of EC knowledge than control schools.
Youth Health Promotion - INDIA -	An intervention community and a control community were matched on urbanization and socio-economic development. Population-based survey conducted at six, 12 and 18 months in both communities.	A greater reduction in the following adverse outcomes was identified in the intervention group: suicidal behavior, perpetration of physical violence, substance use. Sexual abuse showed the highest degree of proportionate reduction in the intervention group. Knowledge of sexual health matters increased in the intervention group while symptoms of genital discharge increased in the control group.

APPENDIX 3: OTHER POTENTIALLY HELPFUL INTERVENTIONS ADDRESSING ADOLESCENT SRH

The activities and interventions listed here were not included in this review as they did not correspond entirely to the selection criteria. Most address adolescent sexual health; however, they do not focus on urban youth. Nonetheless, they were found to provide potentially helpful information that can support programming in urban settings and are thus shared here.



The Fataki Campaign

http://www.aidstar-one.com/sites/default/files/AIDSTAR-One_Case_Study_Fataki_Tanzania.pdf

The Fataki Campaign is not an urban-based intervention, nor does it target young people exclusively. It is a country-wide campaign addressing inter-generational sex in Tanzania and aims to change the environment in which these liaisons take place by encouraging individual and community-level discussions about inter-generational sex and creating an uncomfortable social environment for older men who wish to engage young girls in a relationship. The Fataki Campaign consists of radio spots, a TV cartoon spot and a community resource kit delivered by peer educators.

FEMINA Health Information Initiative (HIP)

http://www.feminahip.or.tz/fileadmin/femina/Key_Documents/stratergic_plans/FeminaHip_5_Year_Strategic_Plan_2006-2010.pdf

FEMINA HIP did not meet the selection criteria for this report because it is not an urban-focused intervention. However, it represents a successful example of how to create youth-friendly, culturally sensitive formats and contents to communicate with young people about sexual health and sexuality. It is a multi-mass media initiative, which uses popular recurring magazines, a TV talk show and an interactive website to entertain and educate young audiences on a range of sexual health, HIV/AIDS and healthy lifestyle issues. The products reflect the needs and interests of young people in both urban and rural areas. It uses both media communication and community mobilization to affect behavior change.

GREAT: Gender Roles, Equality and Transformations Project

<http://www.pathfinder.org/our-work/projects/gender-roles-equality-and-transformations-uganda.html>

The Gender Roles, Equality and Transformations (GREAT) project aims to foster more equitable gender norms and improve sexual and reproductive health among adolescents aged 10 to 19 years in northern Uganda. It is not implemented in urban areas and was

therefore excluded from this review; however, it is reported here because of its holistic approach to integrating gender norms in reproductive health SBCC Programming. Activities include a toolkit to use by young people in platforms to dialogue and reflect on their own gender norms and reproductive health, a serial radio drama called Oteka that is broadcast by two local stations in the region, a system to improve access to sexual and reproductive health services for youth and the promotion of GREAT champions to act as role models in the community.

Soul City Series

<http://www.soulcity.org.za/projects/soul-city-series>

The Soul City vehicle is developed by the Soul City Institute for Health and Development Communication, a South African NGO. The vehicle consists of prime time radio, television dramas and print material, and mirrors the social and development challenges faced by poor communities. Since 2007, sexual health issues, gender norms and gender-based violence, risky sexual behaviors and risk and protective factors have been featured more prominently in the episodes. The intervention was designed to operate at multiple mutually reinforcing levels; individual, community and socio-political environment. It was excluded from the review because it is countrywide and not targeting young people specifically, however it represents a creative example of how edutainment can be used to affect behavior change.

dance4Life

<http://www.dance4life.com/en/about-dance4life/our-work/>

dance4Life works with young people toward a world without AIDS. Sex education in schools is delivered using music and dance to involve and inspire young people. Furthermore, dance4life motivates young people to take action to stop the worldwide spread of HIV and AIDS. The initiative is active in 24 countries, spread over five continents. With music, dance and role models, dance4life informs young people about sexuality, HIV and AIDS in a positive way. The intervention utilizes a participatory and creative approach to engage youth, but was not reviewed in this report because it is not urban-based.

Go Girls!

http://www.k4health.org/sites/default/files/GoGirls_English%20Final%20Rev1.pdf

Go Girls! is a community-based intervention delivered through a scripted curriculum and targeting 13- to 17-year-old girls who are not enrolled in school or who live in vulnerable situations. It provides a safe and fun learning experience where girls can be equipped with life skills and knowledge to help them maintain a happy and healthy life, stay in or return to school and feel empowered to protect themselves from HIV/AIDS. The program succeeded in engaging adults in supportive, nurturing relationships by building their communication skills, role modeling and relationship skills. Although the intervention is not urban-focused, it provides a successful example of how parents can be helped to improve their communication with their children about their unique needs, concerns and interests including sexuality.

The African Youth Alliance (AYA)

http://www.aidstar-one.com/promising_practices_database/g3ps/african_youth_alliance_aya

The African Youth Alliance (AYA) is a program with the aim to reduce the incidence and spread of HIV/AIDS and other sexually transmitted infections (STIs), and improve overall adolescent reproductive health in four African countries: Botswana, Ghana, Tanzania and Uganda. Although the intervention is not aimed at urban youth in particular, it provides an interesting example of a multi-faceted activity from which helpful insights into youth SBCC programming can be drawn. AYA encourages healthy behaviors by strengthening systems across different levels of the ecological model through partnerships with governments, nongovernmental organizations (NGOs), and community-based and youth-serving groups. The project adopts a multi-component, holistic approach addressing six intervention areas: advocacy and policy, behavior change communication, youth-friendly services, institutional capacity building, life and livelihood skills, and coordination of activities and dissemination of results.

Scrutinize

<http://www.scrutinize.org.za/about-scrutinize.html>

Scrutinize is a national public health campaign in Africa encouraging young people to “scrutinize,” or understand, their risk of HIV infection in relation to multiple concurrent partnerships, correct and consistent condom use, transactional sex, intergenerational sex and alcohol use. As it is country-wide and not especially focused on urban youth, it was not analyzed in this review. Scrutinize is a communications campaign composed of seven animated advertisements broadcast by national television, facilitated group discussions assisted by a facilitators guide, community events promoting positive behaviors and an online information system, including a Facebook page.

Geração Biz

<http://www.pathfinder.org/publications-tools/pdfs/From-Inception-to-Large-Scale-The-Geracao-Biz-Programme-in-Mozambique.pdf>

Geração Biz is a multi-sectoral program which seeks to address the SRH needs of in and out-of-school youth by encompassing the three following components: youth friendly clinical services, school-based interventions and community-based outreach. The multi-sectoral approach is evident in the implementation responsibilities, which are shared between the Ministry of Health, the Ministry of Education and the Ministry of Youth and Sports. Through mid-term evaluation it has identified ways of engaging young males and it has reported improvements in terms of knowledge, attitudes and behaviors related to sexual health. It was not included in this review, however, because it does not solely target urban youth.