Adolescent Pregnancy: Sexual and Reproductive Health

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Keywords

Adolescent motherhood · Abortion · Coerced sex · Contraception · Fistulae · Gender violence · HIV/STIs · Obstructed labor · Perinatal care · Postpartum care

Introduction

Addressing the sexual and reproductive health needs and problems of adolescents is a crucial element of the World Health Origination (WHO) Global Reproductive Health Strategy (World Health Organization 2004b). In many parts of the world, the sexual and reproductive health needs of adolescents are either poorly understood or not fully appreciated. Evidence is growing that this neglect can seriously jeopardize the health and future well-being of young people (World Health Organization 2003, 2006b, 2011g).

Sexual activity during adolescence (within or outside marriage) puts adolescents at risk of sexual and reproductive health problems if they do not have access to the needed information, education and services (United Nations 2005, 2011f, 2012c). These include early pregnancy (intended or otherwise), unsafe abortion, sexually transmitted infections (STIs) including human immunodeficiency virus (HIV), and sexual coercion and violence. In addition, in some cultures, girls face genital mutilation and its consequences (World Health Organization 2006c).

This chapter looks at the sexual and reproductive health issues related to adolescent pregnancy from the point of view of the continuum of care. The continuum of care is an approach promoted by WHO and in the context of reproductive, maternal, newborn, and child health (RMNCH); it includes integrated service delivery and community actions for mothers and children from pre-pregnancy to delivery, the

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immediate postnatal period, and childhood. In the context of adolescent pregnancy, the continuum of care means that provisions should be made to ensure access and quality services before the pregnancy (such as interventions to improve nutritional status and health to reduce the likelihood of health problems in the mother and baby), during the pregnancy (antenatal, intra- and immediate postnatal care, as well as safe abortion and post-abortion care), and after the delivery to ensure proper care for the adolescent mother and her baby.

Moreover, the continuum of care has a second dimension, which is linking the various levels of care at home, community, and health facilities. The care for pregnant adolescents, thus, is a joint responsibility of families, communities, and health care systems—through outpatient services, clinics, and other health facilities (Fig. 1), as well as other sectors (WHO Regional Office for Europe 2011b). It is a person-centered care that involves adolescents in its design, planning, and monitoring and understands holistically their physical, emotional, and social concerns.

A broader life-course perspective emphasizes that the health of adolescents is affected by early childhood development and the biological and social role changes that accompany puberty, shaped by social determinants of health that affect the uptake of health-related behaviors. The onset of these behaviors and states in adolescence affects the burden of disease in adults and the health and development of their children (Sawyer et al. 2012; Viner et al. 2012). The importance of tacking the social determinants of adolescent pregnancy, such as the cultural norms that support early marriage, the cultural context of sexuality education, social norms *vis-a-vis* coerced sex, etc. is of paramount importance.

With this framework in mind, in the first part of the chapter, we describe the global situation in sexual behaviors and use of contraception; pregnancy, childbirth, postpartum care, and health of newborns; access to safe abortions for pregnant girls; adolescent pregnancy and HIV/STIs; and adolescent pregnancy and gender-based violence. Further, the chapter describes actions that are required to prevent early pregnancy and poor reproductive health outcomes in adolescent girls. These actions, as the continuum of care requires, encompass actions by the families and communities, health sector, and other sectors. This part is based on a WHO systematic review developed in line with the WHO's Guidelines Review Committee (GRC)-recommended process. A guidelines development core group—consisting of representatives from different relevant WHO departments—was constituted. The core group worked together to list the main health and behavioral outcomes that were being aimed for as well as a series of questions relating to each outcome. This set of outcomes and corresponding questions was sent to a carefully selected multidisciplinary group of experts from around the world. The expert groups included researchers, advocates, policy makers, program managers, and staff from the United Nations and other development agencies. Group members were asked to rank the importance of the outcomes in reducing adolescent pregnancy and poor reproductive outcomes in adolescents, on a scale of 1–9. Outcome rates were deemed as *critical* if they scored 7–9 on average*, important but not critical* if they scored 4–6, and *not important* if they scored less than 4. Expert group members were also asked to provide feedback on the relevance of each question to the corresponding outcome and to the overall objective of the review, and in addition to suggest any needed revisions to the questions. Finally, they were invited to propose additional outcomes and questions. The responses were collated, reviewed by the core group, and based on this, a final set of outcomes and questions was agreed upon. This chapter is presenting evidence-based interventions for the selected outcomes which in broad categories are preventing early pregnancy and preventing poor sexual and reproductive health outcomes and includes health care systems as well as community actions. Finally, the chapter looks at the latest international developments in the global health agenda and analyzes the opportunities that these present to translate the recommendations in the WHO Guideline into actions.

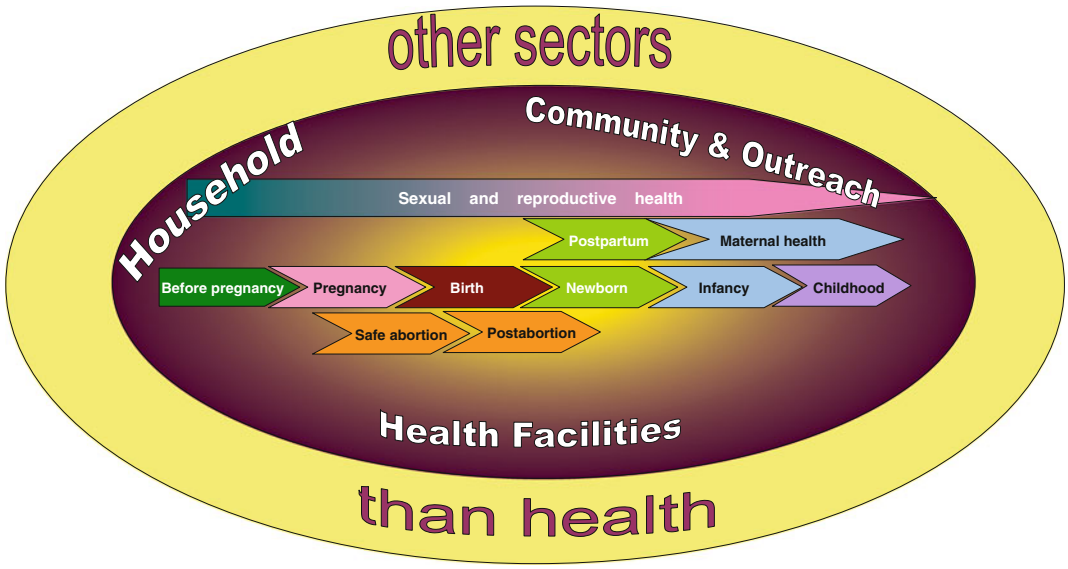

Fig. 1 The continuum of sexual and reproductive care for pregnant adolescents. *Source* Adapted from PMNCH fact sheet: RMNCH continuum of care http://www.who.int/pmnch/media/press_materials/fs/continuum_of_care/en/

Global Situation

Despite declines in average fertility rates, an estimated 14–16 million children are born to adolescent mothers aged 15–19 each year, representing 11 % of total births worldwide (Temin and Levine 2009; World Health Organization 2006b, 2012c). Even within the developing world, the incidence of adolescent pregnancy varies dramatically by region; while over 50 % of women in sub-Saharan Africa give birth before age 20, only 2 % of Chinese children are born to teenage mothers (Temin and Levine 2009; World Health Organization 2007).

Sexual Behaviors and Use of Contraceptives

Many of the births in adolescent girls are intended and take place within the context of early marriage, which is encouraged in some societies and remains common in developing countries. Approximately half of girls in sub-Saharan Africa are married by age 18, compared with 20–40 % in Latin America and 73 % of girls in Bangladesh (World Health Organization 2007). However, the status of being married does not guarantee access to family planning: 44 % of married girls aged 15–19 years in developing countries want to avoid pregnancy, but less than one in three of them use effective contraception (Singh et al. 2009). Thus, a substantial portion of teenage pregnancies are unintended and unwanted, ranging from 10 to 16 % in India and Pakistan to a high of 50 % or more in several African countries (World Health Organization 2007). In developed countries, fewer adolescents enter into marriage before the age of 18, which means that pregnancy and childbearing in this age group are occurring mostly outside of marriage or other formal unions (World Health Organization 2007).

Condom use is a key means of preventing negative reproductive health outcomes. Although data from sub-Saharan Africa and the developed world suggest that use of condoms by adolescents is increasing worldwide; the proportion of sexually active young people who report condom use is clearly too small to contain the spread of STIs (Bearinger et al. 2007). A survey among 15-year olds in 32 countries of the WHO European Region showed that on average

76 % of 15-year-old girls have used a condom at last intercourse and 26 % used the contraceptive pill; however, variations between countries ranges between 60 and 89 % for condom use and between 2 and 62 % for pill use (Baltag 2008; WHO Regional Office for Europe 2012). In the developing world, use of medical contraceptive methods is substantially lower among adolescent girls than in adult women (Bearinger et al. 2007). In sub-Saharan Africa, very small proportions of unmarried, sexually experienced girls aged 15–19 used medical contraceptive methods at most recent sex (from 4 % in Benin to 12.4 % in Mali). Current use of medical methods is slightly greater in unmarried, sexually experienced adolescent girls in Latin America and the Caribbean (from 16.1 % in the Dominican Republic to 41.3 % in Brazil) (Bearinger et al. 2007).

Young women under age 25 in developing regions are particularly vulnerable to unwanted pregnancies (Shah and Åhman 2012), and there is considerable regional variations in the extent to which adolescents plan to have babies. In the United States, almost three-quarters of pregnant 15–19-year olds said that their pregnancies were unplanned; in Latin America and the Caribbean, between a quarter and half of adolescent mothers said that their babies were unplanned, while in India, Indonesia, and Pakistan, only 10–16 % were unplanned (World Health Organization 2006b). The situation is not better in married adolescents: more than half of married adolescents in Ghana and Peru, and more than a third in Botswana, Kenya, Malawi, Zimbabwe, and Colombia reported unplanned or unwanted babies (World Health Organization 2006b).

Preconception Care

Preconception care is the provision of biomedical, behavioral, and social health interventions to women and couples before conception occurs, aimed at improving their health status, reducing risky sexual behaviors, and identifying individual and environmental factors that could contribute to poor maternal and child health outcomes. Its ultimate aim is to improve maternal and child health outcomes—both in the short and the long term (World Health Organization 2012a).

The USA-based Centers for Diseases Control, the Netherlands-based Erasmus University and the Health Council of the Netherlands, and the Pakistan-based Aga Khan University have published ample reviews of the evidence of preconception care interventions in contributing to a range of health and development outcomes (Bhutta et al. 2011; Center for Disease Control and Prevention 2006; Health Council of the Netherlands 2007; Jack et al. 2008).

These reviews have shown that to address a number of health problems—such as nutritional deficiencies and disorders, vaccine for preventable infections, environmental risks, screening for genetic disorders, early pregnancies, unwanted pregnancies, and pregnancies in rapid succession, female genital mutilation, intimate partner and sexual violence—effective interventions do exist (World Health Organization 2012a). A recent meeting of WHO and other international experts concluded that in both high- and low-income countries, preconception care should make a special effort to target adolescent girls who are especially vulnerable in many low- and middle-income settings; without special attention, their needs are likely to be neglected (World Health Organization 2012a).

Pregnancy, Childbirth, Postpartum Care, and Health of Newborns

About one in eight births in developing countries are to girls aged 15–19(United Nations 2009). Although adolescent birth rates are declining, the absolute number of births has declined less, owing to the increase in the adolescent population. Moreover, in many countries, the proportion of births (among women of all ages) that occur in adolescents has increased, because of the reduction of fertility in older women (World Health Organization 2012c). Women aged 15–24 in the Africa region account for 43 % of all births in the region. In Asia (excluding the

Eastern Asia sub-region) and in the Latin America/Caribbean region, young women aged 15–24 account for 49 and 47 % of births, respectively (Shah and Åhman 2012).

Maternal and Perinatal Mortality

Maternal mortality and morbidity account for 16 % of all disability-adjusted life years, the sum of years of potential life lost owing to premature mortality and the years of productive life lost owing to disability, among women aged 15–29 in developing countries (United Nations Commission on Population and Development 2012). Health risks for mother and baby are strongly associated with childbirth at an early age. Many of these risks are also associated with giving birth for the first time (primiparity). Since adolescent mothers are usually also first-time mothers, it is difficult to separate these risks. Adolescent mothers aged 15–19 are more likely than older mothers to die in childbirth, while very young mothers aged 14 and under are at highest risk (World Health Organization 2006b). A systematic analysis of population health data that investigated global patterns of mortality in young people has shown that maternal conditions were a leading cause of female deaths at 15 % (Patton et al. 2009).

Adolescents are more likely than older women to give birth to preterm and low birth weight (less than 2,500 g) or very low-weight (less than 1,500 g) babies, are at risk for malnourishment, poor development, or even death (World Health Organization 2004a, 2006b). Impaired fetal growth is more common in pregnancy in girls younger than 18 years and is a potent precursor of adult diabetes (Norris et al. 2012). The youngest age groups run the highest risk and lack of social support during pregnancy and are also associated with preterm labor (and associated risk of neonatal or perinatal mortality), increased risk of stillbirth, and infant and child mortality (World Health Organization 2006b). Furthermore, about 140 million girls and women worldwide are currently living with the consequences of female genital mutilation which is mostly carried out on young girls sometime between infancy and age 15. In Africa an estimated 101 million girls 10 years old and above have undergone FGM (World Health Organization 2013c). Babies born to women who have undergone female genital mutilation suffer a higher rate of neonatal death compared with babies born to women who have not undergone the procedure.

Anemia

Severe anemia is an important indirect cause of maternal mortality, and approximately half of adolescent girls in the developing world are anemic (World Health Organization 2006b). Nutritional deficiencies in folic acid or iron and infectious diseases, such as malaria and intestinal parasites, all contribute to adolescent anemia. Iron-deficient, anemic adolescent mothers are more likely to give birth to preterm or low-birth-weight babies. Specific transgenerational effects would be particularly severe in countries where both adolescent malnutrition and micronutrient deficiency are high and teenage pregnancy is common (Patton et al. 2009). For example, in India, about half of girls aged 15–19 are underweight and anemic, and a similar proportion are married before age 19 years (Norris et al. 2012).

Prolonged Labor, Obstructed Labor, and Fistulae

Teenage women are themselves more likely to face intrapartum complications such as obstructed and prolonged labor, vesico-vaginal fistulae, and infectious morbidity (Bhutta et al. 2011).

Prolonged obstructed labor, usually the result of a small pelvis, is more common in first-time mothers, smaller women, and girls below the age of 16 whose pelvis is immature (World Health Organization 2004a). Pregnant women experiencing prolonged or obstructed labor need emergency obstetric care which makes it difficult for adolescent mothers in poor, rural communities to seek timely emergency care. Labor therefore may

continue for days without intervention and result in obstetric fistula. Each year between 50 000 to 100 000 women worldwide are affected by obstetric fistula. It is estimated that more than 2 million young women live with untreated obstetric fistula in Asia and sub-Saharan Africa (World Health Organization 2010). In fistula patients from some countries the association with adolescent pregnancy is very high (World Health Organization 2006). Harmful traditional practices, such as female genital cutting or mutilation, also contribute to the risk of obstetric fistulae. Such cutting is usually carried out under unsanitary conditions, often by removing large amounts of vaginal or vulval tissue, thus causing the vaginal outlet and birth canal to become constricted by thick scar tissue. These practices, mostly carried out on very, increase the likelihood of gynaecological and obstetric complications, including prolonged labour and fistula. Although there are few reliable statistics available, these practices may increase the likelihood of such complications by up to seven times (World Health Organization 2006).

Puerperal Sepsis

Puerperal sepsis is one of the main causes of maternal mortality among adolescents (World Health Organization 2004a) and is common in mothers who experience complicated childbirth without access to hygienic health services and/or have had a long or obstructed labor.

Health Care of Adolescent Girls During Pregnancy, Delivery, and the Postpartum Period

Timely antenatal care, care in childbirth, and postnatal care are all critical for safe motherhood. For routine antenatal care, WHO recommends minimum four visits during the pregnancy (at 16 weeks, between 24 and 28 weeks, at 32 weeks, and at 36 weeks) with specific activities (scientifically proven to be effective) during each visit (World Health Organization 2002b). More frequent visits may be required if there are other intercurrent problems, such as HIV infection, severe anemia, and hypertension (World Health Organization 2010a). Data from the United Kingdom and the United States show that adolescents often do not receive optimum antenatal care (Lewis 2001; Partridge et al. 2012). However, studies that compare pregnancy-related care between adolescents and older women show mixed evidence. An analysis of Demographic and Health Survey data for 15 developing countries examined adolescents' use of antenatal care, delivery care, and infant immunization services compared with use by older women. The study found that in five of the 15 countries, women aged 18 or younger were less likely than women aged 19–23 to use either antenatal care or delivery care, or both. The association of age and health care use was largely limited to Bangladesh, India, Indonesia, Nicaragua, Peru, and Uganda. In Latin America, controlling for parity allowed differences between adolescents and older women to emerge. Except in Uganda, there were no differences in health care use by mother's age in the African countries (Reynolds et al. 2006). The latest data from Burundi and Ethiopia show that the coverage with antenatal care in surveyed adolescents is comparable with the coverage in women between 20 and 34 years old (Central Statistical Agency Ethiopia and ICF International 2011; Institut de Statistiques et d'Études Économiques du Burundi (ISTEEBU), Ministère de la Santé Publique et de la Lutte contre le Sida [Burundi] (MSPLS), and ICF International 2010). In the same time, fewer than half the pregnant adolescents in Chad, Ethiopia, Mali, Niger and Nigeria have received any antenatal care from a skilled provider (Kothari et al., 2012). Clearly, the situation is mixed and it seems that coverage with antenatal care alone although useful indicator does not capture the whole picture. It seems that looking more in depth into the content of the antenatal care and coverage with specific interventions might provide a better insight into the specifics of adolescence.

In addition to receiving adequate antenatal care, the WHO recommends assistance from a skilled birth attendant during delivery (World Health Organization 2002a). Information about the percentage of births to adolescents that are attended by skilled personnel is scarce. Some countries, like India and Bangladesh, show no significant difference in institutional deliveries and deliveries by skilled attendants between adolescents and older women (20–34 years of age) (World Health Organization 2007). In Chad, Ethiopia, Mali, Niger and Nigeria less than 50 per cent of adolescents delivered with the help of a skilled attendant (Kothari et al., 2012). A DHS analysis (Reynolds, et al., 2006) found that in some countries, including Brazil, Bangladesh, India and Indonesia, adolescents were less likely than older women to obtain skilled care during childbirth.

Postpartum Care

The majority of maternal deaths occur because of postpartum hemorrhage, and almost half of maternal deaths occur within one day of delivery and 70 % within a week (World Health Organization 2007). It is therefore very important to pay attention to immediate and later postpartum care. Information regarding postpartum care among adolescents is scarce. The proportion of adolescent mothers who received postpartum care within 2 months ranges from 16 % in Colombia to 55.7 % in Ghana and compares with the postpartum care received by older women (World Health Organization 2007).

Access to Safe Abortion for Pregnant Girls

Although many of adolescent pregnancies are intended, many still are not only unplanned but also unwanted, as seen by the estimated 2.2–4 million adolescent girls who obtain abortions each year. In many countries, 30–60 % of adolescent pregnancies end in abortion (World Health Organization 2004a). This figure is disproportionate considering that adolescent pregnancies make up just over 10 % of pregnancies worldwide.

In 2008, of the 43.8 million induced abortions globally (Sedgh et al. 2012), 21.6 million were estimated to be unsafe. Unsafe abortion is defined by the WHO as a procedure for terminating an unintended pregnancy, carried out either by persons lacking the necessary skills or in an environment that does not conform to minimal medical standards, or both (World Health Organization 2012b). Nearly, all unsafe abortions (98 %) occur in developing countries. Unsafe abortion accounts for 13 % of maternal deaths (Ahman and Shah 2011) and 20 % of the total mortality and disability burden due to pregnancy and childbirth (World Health Organization 2008). Almost all deaths and morbidity from unsafe abortion occur in countries where abortion is severely restricted by law and in practice. Every year, about 47,000 women die from complications of unsafe abortions (World Health Organization 2011d); an estimated 5 million women suffer temporary or permanent disability, including infertility (World Health Organization 2012b).The total number of unsafe abortions has increased from about 20 million in 2003 to 22 million in 2008 (World Health Organization 2012b); also there was a global increase in the proportion of abortions that are unsafe among all induced abortions—from 44 % in 1995 to 49 % in 2008; in developing countries, it stayed at around 55 % (Sedgh et al. 2012).

Because they are less likely to have access to legal and safe abortion, adolescents are especially vulnerable to unsafe abortion. In 2008, there were an estimated 3 million unsafe abortions in developing countries among girls aged 15–19 (World Health Organization 2011e). Forty-one percent of unsafe abortions in developing regions are among young women aged 15–24, 15 % among those aged 15–19, and 26 % among those aged 20–24. The differences in the distribution of unsafe abortion by age between regions are distinct. Of the 3.2 million, unsafe abortions are among young women 15–19 years old, and almost 50 % are in the

Africa region. Some 22 % of all unsafe abortions in Africa compared to 11 % of those in Asia (excluding Eastern Asia) and 16 % of those in Latin America and the Caribbean are among adolescents aged 15–19 (Shah et al. 2012).

Whether abortion is legally more restricted or available upon request, a woman's likelihood of having an unintended pregnancy and seeking induced abortion is about the same. However, legal restrictions, together with other barriers, mean many pregnant adolescents seek abortions from unskilled providers. The legal status of abortion has no effect on a woman's need for an abortion, but it considerably limits her access to a safe abortion. Where access to safe abortion is restricted, there is a greater likelihood that abortions are performed by unqualified persons in unhygienic circumstances (World Health Organization 2006b, 2012b). In Africa and Asia, about 13 % of maternal deaths are related to unsafe abortion, many of them in young single women (World Health Organization 2004c, 2006b). Of the 19 million illegal abortions each year, 2.2–4 million are among adolescents who tend to seek abortions later in pregnancy and have a tendency to delay seeking care in the event of complications (World Health Organization 2006b). The later the women in pregnancy undergo abortion, the greater the health risk.

Adolescent Pregnancy and HIV/STIs

Young people are at the center of the global HIV epidemic. Sub-Saharan Africa is home to almost two-thirds (61 %) of all youth living with HIV (3.28 million), 76 % of them being female. In parts of southeast and central Africa, 20–30 % of pregnant girls and women are infected with HIV, which is also spreading rapidly in Southeast Asia (World Health Organization 2006b). In Central and Eastern Europe, the Russian Federation and Ukraine have the fastest growing epidemics in the world, and young people account for a large proportion of the number of people living with HIV (Inter-Agency Task Team on HIV and Young People 2008). Furthermore, the global paediatric HIV epidemic is shifting into a new phase as children on antiretroviral therapy (ART) move into adolescence and adulthood. Their survival into adolescence and beyond represent one of the major successes in the battle against the disease that has claimed the lives of millions of children (Agwu AL, Fairlie L. 2013). However, the growing number of perinatally HIV-infected adolescents globally, and hence pregnant perinatally HIV-infected adolescent girls, poses challenges as they may fall through the cracks and suffer from a sense of abandonment as they move to adult HIV care and lose the familiar and dependable environment and staff of the paediatric HIV clinic (clinicians, social workers, nursing staff) and its support services (Mofenson LM, Cotton MF. 2013).

Given the level of risk of HIV/AIDS and the risk of teenage pregnancy in developing countries, it is clear that special attention should be paid to maternal health care services for pregnant HIV-positive adolescents. The factors that are influencing adolescent HIV-positive mothers' use of such services need to be well understood and interventions tailored. However, research on their access to and use of these services is scant, and pregnant adolescents remain a vulnerable subgroup, understudied and underserved, and at increased risk for HIV/STD (DiClemente et al. 2010). Emerging evidence indicates that the existing HIV/AIDS treatment, and care and support programs do not ask their adolescent clients about their sexual and reproductive health needs. This represents a missed opportunity for systematically identifying and addressing the reproductive health concerns of HIV-positive adolescent clients (Birungi et al. 2011). Data on prevention of mother-to-child HIV transmission in adolescent girls are also limited (North et al. 2006). Because of their age, teenage mothers may have to deal with disapproving health care providers; in addition, those living with HIV may face stigma and discrimination in health care settings (Birungi et al. 2011; Bond et al. 2002). Not surprisingly, in some settings, the use of Prevention of mother-to-child transmission of HIV (PMTCT) services

was less common than use of prenatal care services among HIV-positive female adolescents (Birungi et al. 2011). Factors found to influence adherence of pregnant adolescents to PMTCT recommendations included HIV and early premarital pregnancy stigma, fear of a positive test result, concerns over confidentiality, and poor treatment by health care providers (Varga and Brookes 2008). Adolescents seem to employ elaborate strategies to avoid HIV disclosure to labor and delivery staff, despite knowing this would mean no antiretroviral therapy for their newborn infants (Varga and Brookes 2008). A study that compared the percent testing for HIV and receiving the results in adolescents and older youth found no differences in these parameters; however, adolescents were less likely to say that a provider demonstrated condom use or that methods to prevent subsequent pregnancies were discussed (North et al. 2006).

An international comparison of levels and trends in STIs showed that overall, syphilis, gonorrhea, and chlamydia disproportionately affect adolescents and young people, with huge variations in the incidence among young people (Baltag 2008; Panchaud et al. 2000). *Chlamydia trachomatis* infection is one of the most common STIs among adolescents and is one of the most common causes of perinatal infection. Studies suggest that high-risk sexual behavior may continue in teen pregnancy and in the postpartum period, and routine prenatal and postpartum care with repeated prenatal chlamydial and other STD screening and counseling are indicated in this population (DiClemente et al. 2004, 2010; Ickovics et al. 2003; Niccolai et al. 2003).

Adolescent Pregnancy and Gender-Based Violence

Young women are at particular risk of unwanted sex, or sex in unwanted conditions, particularly when there are large age differences between them and their partners (World Health Organization 2012b); in turn, forced sexual initiation, intimate partner violence, and/or sexual violence appear to increase the risk of pregnancy in early adolescence (World Health Organization 2010b). Up to 50 % of sexual assault cases are committed against girls under age 16 (United Nations Commission on Population and Development 2012). Between 7 and 50 % of adolescent girls report that their first sexual experience was forced (Bott 2001; Jewkes et al. 2002; United Nations Commission on Population and Development 2012). Adolescent girls are more likely to be pressured into sexual activity at an older man's request or by force and often must rely on the man to prevent pregnancy. Although research on intimate partner violence among adults has dramatically expanded over the past 30 years; comparatively little is understood about partner violence among adolescents (WHO Regional Office for Europe 2011c). Women who are coerced into sex or who face abuse from partners are less likely to be in a position to use contraception and are therefore more exposed to unintended pregnancy than others (Jewkes et al. 2002). Conversely, women with unintended pregnancy are more likely to experience intimate partner violence (World Health Organization 2011c), which places adolescent girls at a relatively higher risk for the latter. In South Africa, it was found that pregnant adolescents were more than twice as likely to have a history of forced sexual initiation as non-pregnant adolescents (Jewkes et al. 2001). Similar findings in the United States have also been reported (Silverman et al. 2004).

The WHO Guidelines on Preventing Early Pregnancy and Poor Reproductive Outcomes in Adolescents in Developing Countries

The recommendations of the WHO guidelines on preventing early pregnancy and poor reproductive outcomes in adolescents in developing countries (World Health Organization 2011e), as well as the basis for these recommendations, are listed below by outcomes.

Prevent Early Pregnancy

To prevent early pregnancy, the WHO guidelines recommend actions to prevent marriage before the age of 18, to reduce pregnancy before age 20 (through sexuality education, education, economic and social support programs), to increase the use of contraception, and to reduce coerced sex.

Preventing Early Marriage

WHO's recommendations for preventing early marriage are informed by 21 studies, and project reports did not meet the criteria for grading as well as the collective judgment of the expert panel. The studies were conducted in countries, which included Afghanistan, Bangladesh, Egypt, Ethiopia, India, Kenya, Nepal, Senegal, and Yemen. In some of these studies and projects, the primary outcome was delaying the age of marriage, while in others, this outcome was examined secondary to outcomes such as school retention, knowledge and attitudes, or sexual behavior.

To prevent early marriage, WHO recommends actions by policy makers and by individuals, families, and communities.

Actions by Policy Makers

Prohibit early marriage In many countries, laws do not prohibit the marriage of girls before the age of 18. Even in countries where they do, these laws are not enforced. Consequently, child marriage occurs in many countries. Policy makers must put in place laws to prohibit the marriage of girls before the age of 18. In those countries where such laws are already in place, policy makers must ensure that they are enforced so that they make a difference in girls' lives.

Actions by Individuals, Families, and Communities

Keep girls in school Around the world, more girls are being enrolled in school than ever before. Educating girls has a positive effect on their health, the health of their children, and that of their communities. Additionally, girls in school are less likely to be married at an early age. Sadly, the school enrollment rate in girls drops sharply after 5 or 6 years of schooling in some countries. Policy makers must increase formal and non-formal educational opportunities for girls at both primary and secondary levels.

Influence cultural norms that support early marriage In some parts of world, girls are expected to marry and begin child bearing in their early or middle teenage years, well before they are physically or mentally ready to do so. Parents feel pressured by prevailing norms, traditions, and economic constraints to get their daughters married at an early age. In order to successfully delay marriage, community leaders must work with all stakeholders to challenge and change these norms. An empowered, informed girl needs a supportive family and community environment in order to fulfill her potential.

WHO's recommendations for research in this area are as follows:

1. To build evidence on the effect of interventions to prevent early pregnancy, including those that increase employment, school retention, education availability, and social supports.
2. To better understand how economic incentives and livelihood programs can work to delay the age of marriage among adolescents.
3. To develop better methods to assess the impact of education and school enrollment on the age of marriage.
4. To assess the feasibility of existing interventions to inform and empower adolescent girls, their families, and their communities to delay the age of marriage, and the potential of taking the interventions to scale.

Creating Understanding and Support for Preventing Early Pregnancy

WHO's recommendations for preventing early pregnancy are informed by two graded systematic reviews, three ungraded studies, as well as the collective experience and judgment of the expert panel. The studies in the systematic reviews included those conducted in developing countries (Mexico and Nigeria) as well as those conducted among poorer socioeconomic populations in developed countries. Collectively, the studies demonstrate reductions in early pregnancy among adolescents exposed to interventions that included sexuality education, cash transfer schemes, early childhood education and youth development, and life skills building. One study demonstrated a reduction in repeated pregnancies as a result of an intervention that included home visits for social support.

To create understanding and support for preventing early pregnancy, WHO recommends actions by policy makers and by individuals, families, and communities.

Actions by Policy Makers

Support Pregnancy Prevention Programs among Adolescents Early pregnancies occur because of a combination of social norms, traditions, and economic constraints. At the same time, there continues to be resistance to implementing sexuality education. Policy makers must give strong and visible support for efforts to prevent early pregnancy. Specifically, they must ensure that sexuality education programs, which are linked to contraceptive information and services, are in place.

Actions by Individuals, Family, and Communities

Educate girls (and boys) about sexuality Many adolescents become sexually active at an early age when they do not know how to avoid unwanted pregnancies and STIs. Contextual factors such as the pressure to conform to media stereotypes and the norms of their peers increase the likelihood of early and unprotected sexual activity. In order to prevent early pregnancy, curriculum-based sexuality education must be widely implemented. These programs must be carried out in a context in which adolescents can build their life skills and are supported to deal with thoughts, feelings, and experiences that accompany sexual and reproductive maturity. Sexuality education programs must be linked to contraceptive counseling and services.

Build Community Support for Preventing Early Pregnancy

In some places, premarital sexual activity is acknowledged. In others, it is not, and there is resistance to discussing meaningful ways of addressing it. Families and communities are key stakeholders and must be engaged and involved in efforts to prevent early pregnancies and STIs including HIV.

WHO's recommendations for research in this area are as follows:

1. To build evidence on the effect of interventions to prevent early pregnancy, including those that increase employment, school retention, education availability, and social supports.
2. To conduct research across sociocultural contexts to identify feasible, scalable interventions to reduce early pregnancy among adolescents.

Increasing the Use of Contraception

WHO's recommendations for increasing the use of contraception are informed by seven graded studies or systematic reviews, 26 ungraded studies, as well as the collective experience and judgment of the expert panel. The studies were conducted in countries including Bahamas, Belize, Brazil, Cameroon, Chile, China, India, Kenya, Madagascar, Mali, Mexico, Nepal, Nicaragua, Sierra Leone, South Africa, Tanzania, and Thailand. Some studies focused exclusively on condom use, while others sought to increase the use of hormonal contraceptives and emergency

contraceptives. Some studies examined the use of contraception as a primary outcome, while others examined their use as secondary to outcomes such as HIV prevention or knowledge and attitudes. Some studies focused exclusively on health care system actions (such as over-the-counter or clinic provision of contraceptives), while others focused on community and stakeholder engagement.

To increase contraceptive use (including condoms, hormonal contraceptives, and emergency contraceptives), WHO recommends actions by policy makers, individuals, families, and communities to change the health care system.

Actions by Policy Makers

Legislate access to contraceptive information and services In many places, laws and policies prevent the provision of contraceptives to adolescents, especially to unmarried ones and those below a certain age. Policy makers must intervene to reform laws and policies to enable adolescents to obtain contraceptive information and services, including emergency contraceptives.

A conditional recommendation is to reduce the cost of contraceptives to adolescents Financial constraints can restrict access to contraceptives to only those who have the financial means to purchase them. Policy makers should consider intervening to reduce the financial cost of contraceptives to adolescents, in order to increase their use.

Actions by Individuals, Families, and Communities

Educate adolescents about contraceptive use Adolescents in many places are not aware about where to obtain contraceptives and how to use them appropriately. Efforts to provide them with accurate information about contraceptives must be carried out in combination with sexuality education.

Build community support for contraceptive provision to adolescents There is continuing resistance to the provision of contraceptives to adolescents, especially those who are unmarried. Community members must be engaged, and their support must be obtained for the provision of contraceptives to adolescents.

Actions at the Level of the Health Care System

Enable adolescents to obtain contraceptive services In many places, adolescents do not seek health services such as contraceptive information and services because they are afraid of social stigma, of being judged, and being treated with disrespect by clinic staff. Health service delivery must be made more responsive and friendly to adolescents. Further, repeated pregnancies must be prevented by providing contraceptives to adolescents after they have a child or an abortion.

WHO's recommendations for research in this area are as follows:

1. To build evidence on interventions—formulating laws and policies, generating community support, improving the availability of over-the-counter hormonal contraceptives, and reducing the cost of contraceptives, to increase contraceptive use by adolescents.
2. To build evidence on ways of involving males in decisions about contraceptive use by couples and on transforming gender norms about the acceptability of contraceptive use (including condoms and hormonal contraceptives).

Reducing Coerced Sex

WHO's recommendations for reducing coerced sex are informed by two graded studies, six ungraded studies or reports, and the collective experience and judgment of the expert panel. The studies and reviews were conducted in countries including Kenya, Zimbabwe, Botswana, India,

South Africa, and Tanzania. The reports were of reviews of national laws. The studies involved actions across multiple sectors to influence knowledge and attitudes about coerced sex.

To reduce coerced sex, WHO recommends actions by policy makers and actions to influence individual and community norms on gender-based violence and coerced sex.

Actions by Policy Makers

Prohibit coerced sex In many places, law enforcement officials do not actively pursue perpetrators of coerced sex. Further, the fear of bringing shame and stigma upon themselves makes it very hard for victims to press for justice. Policy makers must formulate and—even more importantly—enforce laws that prohibit coerced sex and punish its perpetrators. These laws should be enforced in a way that victims and their families feel safe and supported in approaching the authorities and seeking justice.

Actions by Individuals, Families, and Communities

Empower girls to resist coerced sex In many places, girls feel powerless to refuse unwanted sex and to resist coerced sex. Girls must be protected from harassment and coercion. They must be empowered to protect themselves and to ask for and obtain effective assistance when they feel unable to handle a situation by themselves. Programs that build the self-esteem of adolescent girls, develop their life skills, and improve their links to social networks and social supports can help them refuse unwanted sex, resist coerced sex, and work with authorities to hold perpetrators accountable for their actions.

Influence Social Norms that Condone Coerced Sex Prevailing societal norms condone violence and sexual coercion in many parts of the world. Efforts to empower adolescents are important, but they are not enough. They must be combined with efforts to challenge and change the community norms that condone coerced sex. Communities and societies must be mobilized to make them fiercely intolerant of these violations of rights.

Engage men and boys to critically assess gender norms In many places, gender-based violence and coercion are accepted as the norm. Men and boys must be actively supported to look critically at and to question prevailing gender norms and stereotypes and the negative effects they have on women, girls, families, and communities. This could persuade them to change their attitudes and to refrain from violence and coercive behaviors.

WHO's recommendations for research in this area are as follows:

1. To build evidence on the effectiveness of laws and policies aimed at preventing sexual coercion.
2. To assess how these laws and policies are formulated, enforced, and monitored in order to understand how best to prevent the coercion of adolescent girls.

Prevent Poor Reproductive Outcomes in Adolescents

To prevent poor reproductive outcomes in adolescents, the WHO guidelines recommend actions to prevent unsafe abortion and mortality for unsafe abortion when it occurs and to increase access to skilled antenatal, delivery, and postnatal care.

Reducing Unsafe Abortion

WHO's recommendations for reducing unsafe abortions are informed by the collective experience and judgment of the expert panel. There were no studies that could be used to provide evidence to inform the panel's decisions.

To reduce unsafe abortion and mortality resulting from it, WHO recommends actions by policy makers, individuals, families, and communities and at the level of the health care system.

Actions by Policy Makers

Enable access to safe abortion and post-abortion services Policy makers must support efforts to inform adolescents of the dangers of unsafe abortion and to improve their access to safe abortion services, where legal. They must also improve adolescent access to appropriate post-abortion care, regardless of whether the abortion itself was legal. Adolescents who have had abortions must be offered post-abortion contraceptive information and services.

Actions by Individuals, Families, and Communities

Inform adolescents about the dangers of unsafe abortion and where they can obtain safe abortion services When faced with an unwanted pregnancy, adolescents in many places turn to illegal and unsafe abortions because they are not aware of its dangers and are unable or unwilling to seek help from health workers. All adolescents must be well informed about the dangers of unsafe abortion. In countries where abortion services are legally available, they must also be informed about where and how they can obtain these services.

Increase community awareness of the dangers of unsafe abortion There is very little public awareness of the scale and tragic consequences of withholding legal and safe abortion services to those adolescents who need them. Families and community members must be made aware of this as a means of building their support for policies to enable adolescents to access abortion and post-abortion services.

Actions at the Level of the Health Care System

Identify and remove barriers to safe abortion services Even in places where laws permit adolescents to obtain safe abortion services, they are unable or unwilling to do because of unfriendly health workers and clinic policies and procedures. Managers and health service providers must identify and overcome these barriers so that adolescents can obtain safe abortion services, post-abortion care, and post-abortion contraceptive information and services.

WHO's recommendations for research in this area are as follows:

1. To build evidence on the impact of laws and policies that enable adolescents to obtain safe abortion and post-abortion services.
2. To identify and assess interventions that reduce barriers to the provision of safe, legal abortion services in multiple sociocultural contexts.

Increasing Use of Skilled Antenatal, Childbirth, and Postpartum Care

WHO's recommendations for increasing the use of skilled antenatal, childbirth, and postpartum care are informed by 1 graded study, 1 ungraded study, existing WHO guidelines, and the collective experience and judgment of the expert panel. The studies were conducted in Chile and India. One intervention was a home visit program for adolescent mothers. Another intervention was a cash transfer system that was contingent upon health facility births.

To increase the use of skilled antenatal, childbirth, and postpartum care, WHO recommends action by policy makers, individuals, families, and communities and at the level of the health care system.

Action by Policy Makers

Expand access to skilled antenatal, childbirth, and postnatal care Policy makers must intervene to expand the access of all women, including pregnant adolescents to skilled antenatal care, childbirth care, and postnatal care.

Expand access to emergency obstetric care Basic and comprehensive emergency obstetric care is life-saving interventions. Policy makers

must intervene to expand their access to all women, including pregnant adolescents.

Actions by Individuals, Families, and Communities

Inform adolescents and community members about the importance of skilled antenatal and childbirth care Lack of information is a significant barrier to seeking services. It is important to disseminate accurate information about the risks of not utilizing skilled care for mother and baby, and where to obtain care.

Actions at the Level of the Health Care System

Ensure that adolescents and their families and communities are well prepared for birth and birth-related emergencies Pregnant adolescents must get the support they need to be well prepared for birth and birth-related emergencies. This includes creating a birthing plan that addresses complications and emergencies during childbirth. Birth and emergency preparedness must be an integral part of antenatal care for all pregnant adolescents and should be implemented in households, communities, and health facilities.

Be sensitive and responsive to the needs of young mothers and mothers-to-be Adolescent girls must receive skilled—and sensitive—antenatal and childbirth care. If complications arise, they must receive emergency obstetric care.

WHO's recommendations for research in this area are as follows:

1. To build evidence to identify and eliminate barriers that prevent the access to and use of skilled antenatal, childbirth, and postnatal care among adolescents.
2. To build evidence on interventions that inform adolescents and stakeholders about the importance of skilled antenatal and childbirth care.

Identify interventions to tailor the way in which antenatal, childbirth, and postnatal services are provided to adolescents, to expand the availability of emergency obstetric care, and to improve birth and emergency preparedness for adolescents.

Table 1 summarizes the interventions recommended by WHO guidelines on preventing early pregnancy and poor reproductive outcomes in adolescents in developing countries.

Summary of Interventions Recommended by WHO

The WHO guideline on preventing early pregnancy and poor reproductive outcomes in adolescents in developing countries did not investigate outcomes related to adolescent pregnancy and HIV/STIs specifically. Other WHO guidelines and strategies describe the health sector response to HIV epidemics in order to achieve universal access to HIV prevention, diagnosis, treatment, care, and support (WHO Regional Office for Europe 2011a; World Health Organization 2006a, 2010a, 2011b). For instance, the global health sector strategy on HIV/AIDS 2011–2015 (World Health Organization 2011b) identifies the strategic directions to guide national responses and outline recommended country actions, while the use of ARV drugs for HIV treatment and prevention is addressed in WHO Consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection. The issues are addressed across all age groups and populations including adolescents, and are based on the broad continuum of HIV care (World Health Organization 2013b). For the first time the specific needs of adolescents both for those living with HIV as well as those who are at risk of infection are addressed in WHO's recommendations HIV and adolescents: *Guidance for HIV testing and counselling and care for adolescents living with HIV*. The guidelines suggest ways in which health services can improve the quality of care and social support for adolescents. It is

Table 1 Summary of interventions recommended by WHO guidelines on preventing early pregnancy and poor reproductive outcomes in adolescents in developing countries

	Actions by policy makers	Actions by individuals, families, and communities	Actions at the level of the health system
Prevent early pregnancy			
Preventing early marriage	Prohibit early marriage	Keep girls in school	
		Influence cultural norms that support early marriage	
Creating understanding and support for preventing early pregnancy	Support pregnancy prevention programs among adolescents	Educate girls (and boys) about sexuality	
		Build community support for preventing early pregnancy	
Increasing the use of contraception	Legislate access to contraceptive information and services	Educate adolescents about contraceptive use	Enable adolescents to obtain contraceptive services
	Reduce the cost of contraceptives to adolescents	Build community support for contraceptive provision to adolescents	
Reducing coerced sex	Prohibit coerced sex	Empower girls to resist coerced sex	
		Influence social norms that condone coerced sex	
		Engage men and boys to critically assess gender norms	
Prevent poor reproductive outcomes in adolescents			
Reducing unsafe abortion	Enable access to safe abortion and post-abortion services	Inform adolescents about the dangers of unsafe abortion and where they can obtain safe abortion services	Identify and remove barriers to safe abortion services
		Increase community awareness of the dangers of unsafe abortion	
Increasing use of skilled antenatal, childbirth, and postpartum care	Expand access to skilled antenatal, childbirth, and postnatal care	Inform adolescents and community members about the importance of skilled antenatal and childbirth care	Ensure that adolescents and their families and communities are well prepared for birth and birth-related emergencies
	Expand access to emergency obstetric care		Be sensitive and responsive to the needs of young mothers-to-be and mothers

recommended that governments review their laws to make it easier for adolescents to obtain HIV testing and care without needing consent from their parents. While adolescents should be encouraged to involve their families in health decisions, WHO recognizes that this is not always possible (World Health Organization 2013a). In an European Context, actions from the *whole-of-society* perspective are presented in Table 2.

Actions to Prevent and Manage HIV/AIDS and STIs Among Adolescent Boys and Girls (WHO Regional Office for Europe 2011a)

Translating the WHO Recommendations into Action on the Ground

There are good reasons for optimism that the WHO guidelines will contribute to strengthening national policies and strategies, and their concerted application.

Firstly, there is widespread recognition of the importance of preventing early pregnancy and pregnancy-related mortality and morbidity in adolescents. The Millennium Development Goals report published by United Nations in 2011 reiterates the point that "Reaching adolescents is critical to improving maternal health and achieving other Millennium Development Goals" (United Nations 2011).

Secondly, there is now a global strategy to prevent maternal and childhood mortality, within which activities to prevent early pregnancy and pregnancy-related mortality and morbidity are included. The development of the Global Strategy for Women's and Children's Health was led by the Secretary General of the United Nations. The strategy charts out what needs to be done and what contributions different stakeholders could make (United Nations 2010). More than 250 organizations have made commitments to advance the Global Strategy for Women's and Children's Health. Over a quarter (26%) of these commitments relate to adolescent health. Adolescent sexual and reproductive health policies, health services sensitive to adolescent needs, reducing early and forced marriage, reducing violence against girls are major areas where commitments are made (World Health Organization 2013d). To jointly implement this strategy, UNFPA, UNICEF, WHO, World Bank, and UNAIDS have joined forces in the context of the Health 4+ collaborative initiative to support countries with the highest rates of maternal and newborn mortality, and to accelerate progress in saving the lives and improving the health of women and their newborns. The initiative focuses on 60 countries with the highest burden and is supporting them to reduce the maternal mortality ratio by 75 % and to achieve universal access to reproductive health—the two targets under MDG 5 (WHO, UNICEF, UNFPA, World Bank, and UNAIDS 2010). A recent review of Strategy' implementation highlighted that adolescents have been a neglected dimension, and the independent expert review group recommended that an adolescent indicator should be included in all monitoring mechanisms for women's and children's health, and young people should be meaningfully involved on all policymaking bodies affecting women and children (World Health Organization 2013d).

Thirdly, funds to step up country-level work to reduce maternal mortality, and infant and childhood mortality are increasingly being made available. The UK is one of a growing number of high-income countries, which has published a strategy and set aside a substantial body of funds to support work in selected countries. The UK government's strategy document provides the rationale for addressing adolescents in relation to its twin priorities—preventing unintended pregnancies and ensuring that pregnancies and childbirth are safe, lists evidence-based strategies, and contains an explicit focus on adolescents in the section on measuring results (Department for International Development/UK Aid 2012). There is more happy news. On July 11, 2012, the UK government and the Bill and Melinda Gates Foundation with UNFPA and other partners hosted a groundbreaking summit to mobilize global policy, financing, commodity, and service delivery commitments to support the rights of an additional 120 million women and girls in the world's poorest countries to use contraceptive information and services and supplies without coercion or discrimination, by 2020. The official press release of the UK government and the Bill and Melinda Gates Foundation said that "The Summit has raised the resources to deliver contraceptives to an additional 120 million women that is estimated to

Table 2 Actions to prevent and manage HIV/AIDS and STIs among adolescent boys and girls

Cross sector actions		Family and community	Health system	Health services
Health in all policies	School setting			
Ensure that legal policy and regulatory framework supports the rights of adolescents to age-appropriate information, confidentiality, and privacy, and reinforce the principle of evolving capacities of the child in the existing policies and procedures for autonomous decision and informed consent	Implement comprehensive sex and STIs/HIV education programs that incorporate characteristics of effective programs and take into account the social and cultural influences on young people sexual behaviors	Implement dedicated (community-based or center for young people) services for MARA, including demand and harm reduction initiatives	Ensure that strategic information on the STIs/HIV epidemic among young people and its social drivers is available and informs programmatic and policy decision-making	Provide services that reflect characteristics of youth-friendly health services and are linked to activities to increase the use of services
Enforce laws and policies that directly address gender inequality and protect most-at-risk adolescents (MARA), decriminalize the behaviors that place them most at risk, and ensure that MARA have access to the services they need	Complement SRH education with selected social and health services either directly or through linkages to the community	Implement culturally appropriate interventions for young migrants, related training for health and community workers, and greater involvement of migrant communities in service delivery	Implement interventions to control HIV that are adapted to the country's epidemiological situation: interventions to control HIV among injecting drug users, including harm reduction programs; measures to prevent heterosexual transmission targeted at those with high-risk partners; interventions to control HIV among men who have sex with men	Ensure that local procedures protect and support young people in their decisions about disclosure of their HIV status
Implement interventions for HIV prevention, treatment, and care that reach migrant populations	Keep girls in schools and make schools free of sexual violence	Implement social support programs for YPLHIV, caregivers, and orphans, which engage men and transform caregiving roles	Implement interventions for HIV prevention, treatment, and care that reach migrant populations	Implement standardized approaches to the assessment and management of sexually abused children and adolescents, performed by a trained clinician following locally defined procedures and guidelines

(continued)

Table 2 (continued)

Cross sector actions		Family and community	Health system	Health services
Health in all policies	School setting			
Put in place policies to protect young people living with HIV (YPLHIV) from stigma, discrimination, and to support them in making decisions about disclosure of their HIV status	Provide access to alternative education approaches for YPLHIV, including flexible instruction hours, acceleration and catch-up programs, home-based care and education	Implement interventions targeting youth and community as a whole to increase use of existing services, mitigate the impact of HIV-related stigma and discrimination, and change gender norms that affect the risk of HIV infection	Implement gender-sensitive and appropriately adapted to young people needs STIs/HIV prevention and control interventions, including information and counseling, condom use, harm reduction, HIV testing and counseling, treatment, care and support services, and adolescent specific comprehensive approach to STIs case management	Make available syphilis screening of high-risk adolescent girls and young women, e.g., in antenatal and post-abortion clinics
Enforce laws and policies that protect women and girls against sexual violence, disinheritance, and gender discrimination of all kinds, including harmful traditional practices and sexual violence in and outside of marriage		Implement sex and STIs/HIV education programs with multiple components that are based on local needs, send clear, consistent messages about appropriate sexual behavior, and take into account the social and cultural influences on young people sexual behaviors	Strengthen referral within and outside the health system, coordination and partnerships between health, social and child protection services, to provide effective support to MARA and YPLHIV, including facilities to establish support groups for YPLHIV	Ensure that facilities have procedures to involve YPLHIV in service provision and that they provide age, developmentally and educationally appropriate information on care, treatment, support, and prevention for YPLHIV
Design and implement sex and STIs/HIV education programs that incorporate characteristics of effective programs and take into account the social and cultural influences on young people sexual behaviors		Implement parenting programs with certain characteristics to improve adolescents' SRH	Improve accessibility of health care facilities and train staff to be able to deal with young people on the basis of their specific situations and needs, including the needs of young migrants	Use culturally appropriate materials for young migrants population and increase efforts to inform migrant communities about available services

(continued)

Table 2 (continued)

Cross sector actions		Family and community	Health system	Health services
Health in all policies	School setting			
Expand social marketing projects to prevent HIV that are tailored to the needs of the young people and designed with their involvement		Implement community-based (on-site) STI case management, i.e., by integration of STI case management into existing community-based projects directed at young people	Promote linkages and convergence of STIs/HIV prevention interventions, including HIV counseling and testing, with sexual and reproductive health services, tuberculosis services, and PMTCT	
Ensure that social mobilization campaigns against gender inequality and HIV-related stigma and discrimination involve YPLHIV		Promote campaigns and community dialog to change harmful gender norms, engage men and boys, and eliminate violence against women and girls	Consider the benefits, acceptability, and feasibility of introducing HPV vaccination programs	
Put in workplace HIV policies and interventions with emphasis on prevention and non-discrimination		Consider male circumcision by well-trained health professionals in properly equipped settings for HIV prevention in countries and regions with heterosexual epidemics, high HIV, and low male circumcision prevalence	Ensure that financial considerations are not a limiting factor for YP in accessing services, appropriate medicines, and technology	
Ensure girls protection from foregoing education because of caregiving to HIV-infected parents or siblings				
Develop livelihood and vocational skills programs to increase employment opportunities				

Source Adapted from WHO Regional Office for Europe. (2011a). Evidence for gender-responsive actions for the prevention and management of HIV/AIDS and STIs. Young people's health as a whole-of-society response. Copenhagen, WHO Regional Office for Europe

cost $4.3 billion. More than 20 developing countries made bold commitments to address the policy, financing and delivery barriers to women accessing contraceptive information, services and supplies. Donors made new financial commitments to support these plans amounting to $2.6 billion—exceeding the Summit's financial goal." More importantly, it drew attention to the importance of addressing girls: "Contraceptive use also leads to more education and greater opportunities for girls, helping to end the cycle of poverty for them and their families. Up to a quarter of girls in Sub-Saharan Africa drop out of school due to unintended pregnancies, stifling their potential to improve their lives and their children's lives." (UK aid and Bill and Melinda Gates Foundation 2012.)

Finally, there is strong commitment at the highest level in Ministries of Health and in governments to address adolescent pregnancy. At the sixty-fifth session of the World Health Assembly in Geneva, WHO's report titled Early Marriage and Adolescent and Youth Pregnancies was universally welcomed (World Health Organization 2011a). Equally, in the context of the implementation of the Global Strategy for Women's and Children's Health, more commitments are made on adolescents' access to contraception such as development of adolescent sexual health policies (Benin), development of a comprehensive sexual and reproductive health programme (Malawi), and community mobilisation to increase involvement of young people in family planning (Senegal) (World Health organization 2013d).

That early marriage is illegal in most places where it occurs, that it is a violation of the rights of girls, and that it has detrimental health and social consequences on adolescent girls and their families and communities were reiterated by all speakers. Several of them went on to describe activities that their countries were involved in to prevent early marriage and the consequences of early and unprotected sexual activity. The Gambian representative was one of many speakers who said that her government was committed to implementing the recommendations made in WHO's Guidelines. She said that her government was committed to challenging and changing community norms that supported early marriage, to enrolling and retaining girls in schools, and to reducing the negative health outcomes of pregnancy by providing the needed health care services. This augurs well for the future.

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