

Research Gaps in Adolescent Sexual and Reproductive Health



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Many global health and development initiatives call for action to improve adolescents' prospects for a healthy and productive adulthood, and, in particular, to reduce adolescent childbearing.¹ Information on adolescent sexual and reproductive health is vital to support decision-making to advance these initiatives and to develop effective programs addressing adolescents' needs. Yet, numerous data and research gaps impede these efforts.

This memo outlines major gaps in data and research on the sexual and reproductive behaviors of adolescents in developing regions, the health and economic consequences of those behaviors, service and information needs, and effective interventions. Filling these gaps will require efforts that include basic data collection, in-depth research to increase understanding of adolescent behaviors and evaluations of interventions to enable decision-makers to scale up promising programs.

Documenting Adolescent Sexual and Reproductive Behaviors

Periodic household surveys, such as the Demographic and Health Surveys (DHS), provide critical national and subnational information about a range of issues, including sexual activity, marriage, childbearing, contraceptive use and use of maternal health care. However, the available data have gaps related to population coverage, reporting of sensitive behaviors and the substantive topics covered.

Coverage gaps

Sexual and reproductive health information is not uniformly available for all adolescents worldwide. Excluded groups of adolescents in developing regions include the following:

- **Unmarried/never-married women.** In many countries in Asia and Northern Africa, and in some francophone countries of Sub-Saharan Africa, unmarried women are either excluded from fertility and health surveys, or they are included but not asked questions related to sexual activity, contraceptive use and desired fertility. Yet, studies in these regions show that some young unmarried women are sexually active and in need of sexual and reproductive health services.²⁻⁴
- **Adolescents younger than 15.** Because fertility and health surveys usually have a lower bound of age 15, very little information is available for younger adolescents, even though in a number of countries more than 10% of surveyed women report having had sexual intercourse before age 15.⁵ There is also evidence that some of these adolescents had unintended pregnancies and births before their 15th birthday.¹ Obtaining

data on sexual and reproductive behavior directly from those younger than 15 requires overcoming serious challenges. These include obtaining approval from institutional review boards, obtaining consent for the youth's voluntary and confidential participation, developing appropriate survey methods, and selecting topics and phrasing questions in ways that are appropriate to younger respondents.

- **Youth in vulnerable situations.** National fertility and health surveys that rely on household samples often miss some adolescents who live in vulnerable situations, such as refugees⁶ and street youth.⁷
- **Male adolescents.** More than 160 DHS surveys in 68 countries have included men,⁸ but insufficient attention is given to using these data and to obtaining additional information about adolescent men's sexual and reproductive behaviors, contraceptive needs and use, and fertility preferences.^{9,10}
- **Youth in China.** Some 15% of adolescent women aged 15–19 in developing regions live in China.¹ However, very little age-specific information is available from that country about contraceptive use, sexual and reproductive behaviors, and childbearing desires.

Underreporting gaps

Sexual and reproductive behaviors are generally self-reported, and are therefore subject to underreporting. This is especially true for stigmatized or illegal behaviors such as early and premarital sexual activity and induced abortion.

- **Sexual activity.** The proportion of adolescents who are sexually active may be underestimated because respondents may be reluctant to admit to having intercourse at young ages and outside of marriage.¹¹
- **Induced abortion.** Accurate information about numbers of induced abortions and the conditions under which they are obtained is extremely limited, especially in countries with highly restrictive abortion laws.¹² Also, limited information is available on the age distribution and marital status of women having induced abortions in developing countries.¹³

Substantive gaps

Social, cultural and economic factors, and the interplay among them, can influence adolescents' sexual and reproductive behaviors, and they can also mitigate or worsen the impacts of these behaviors. The following are examples of topics for which our current knowledge is incomplete.

- **Contexts of adolescent sexual and reproductive health.** Some sexual activity occurs in the context of human rights violations such as child marriage, coerced sex or sexual abuse,¹⁴ yet many of these abuses remain undocumented. Childbearing at early ages—before age 18 and especially before age 15—also often overlaps with truncated education and limited job prospects. Researchers and program planners need a better understanding of the linkages between early marriage, sexual violence, low education and early childbearing to help inform interventions seeking to improve reproductive health outcomes.
- **Health impacts of adolescent pregnancy and child-bearing.** Very little global information is available on age differentials in maternal mortality and its causes^{15–18} or in disability associated with pregnancy and child-bearing. Some of the estimation challenges apply to maternal mortality overall. But they also stem from the small numbers of pregnancies and births to very young adolescents and the difficulties untangling the effects of age from other disadvantages that young mothers face, including low socioeconomic status, the heightened risks of first births, and the lack of adequate antenatal and delivery care.
- **Long-term economic impacts of adolescent child-bearing.** Estimates of the long-term economic impacts of adolescent childbearing for individuals, families and societies can be useful for policymakers assessing approaches to reducing poverty and inequality.¹⁹ However, insufficient research exists on these impacts, and research that separates the effects of age from those of poverty and low education among women who begin motherhood early is especially scarce.
- **Adolescents' pregnancy and childbearing intentions.** Interventions to reduce adolescent pregnancy and child-bearing often do not recognize that the majority of adolescent births, even those to very young adolescents, are intended. More data and research are needed on the societal pressures that result in many adolescents wanting to become mothers at early ages. Research is also needed to distinguish consequences of planned versus unplanned adolescent childbearing.
- **Reasons for unmet need for contraception among young people.** DHS data reveal broad categories of reasons why adolescents who are sexually active and want to avoid pregnancy do not use contraceptives, such as not being married or having concerns about side effects, but the information is insufficient to identify corrective interventions.^{20,21}

- **Other underexplored issues.** Information is lacking on what, if any, sex education adolescents receive, and on issues related to young people's sexual identity, sexual orientation and same-sex behaviors.

Assessing Sexual and Reproductive Health Interventions

Programs and services to provide adolescents with needed sexual and reproductive health care and related information, education, counseling and support, vary in their reach, acceptability and effectiveness. Research that monitors and evaluates services and interventions that adolescents receive is crucial to using resources efficiently and effectively and, ultimately, to ensuring adolescents' sexual and reproductive health.

Identifying effective interventions

Recent reviews of interventions for adolescents have identified effective approaches, as well as some that are not cost-effective or have limited reach.^{22–24} However, available research does not cover all types of sexual and reproductive health-related interventions or care that adolescents need. Further, effectiveness often varies across settings and population subgroups, and approaches must be responsive to changes over time. Continued and expanded research is important to assess intervention effectiveness, including cost-effectiveness, across different contexts and subgroups of adolescents. Moving effective programs to scale, monitoring and evaluating them on an ongoing basis, and sharing what is learned from the process and results can help increase the spread of effective approaches.

Monitoring the protection of adolescents' rights

Numerous program reviews have documented service obstacles that adolescents face in obtaining contraceptive information and services, such as judgmental attitudes of providers, a lack of confidentiality, limited contraceptive options, and a lack of policies and guidelines for protecting adolescents' rights to information and services.²⁵ Efforts to monitor rights are underway and need to be expanded. Information is needed on the accessibility and quality of services that adolescents receive, since actual care may differ greatly from what laws and policies intend; for instance, community and provider attitudes can make it difficult for adolescents to obtain contraceptive services even where laws and regulations allow such access without parental or spousal consent.

Assessing the costs of sexual and reproductive health care

The available data on the costs of sexual and reproductive health services mainly apply to public-sector services in which trained providers deliver a comprehensive package of information and counseling, health assessment and contraceptive care. Little is known, however, about the costs of care by other providers, especially drugstores, shops and other nonclinical sources, which substantial proportions of adolescents use for reproductive health supplies.

Recommendations for Closing Data and Evidence Gaps

A variety of solutions should be pursued to close gaps in knowledge about adolescent sexual and reproductive health.

Use creative analyses of existing data

Creative analyses include using retrospective reports of respondents older than 15 on their experiences prior to age 15 and disaggregating data by age within the age-group 15–19. These analyses can help shed light on sexual and reproductive behaviors that change greatly over the course of adolescence.²⁶ Retrospective analysis needs to attend to the fact that underreporting of past behaviors can still occur, that changes in behavior can occur over short periods of time,¹¹ and that changes over time in respondent characteristics such as educational attainment, marital status, income and residence make it difficult to identify differences in behaviors across subgroups of youth younger than 15. In addition, analysis by age subgroups is sometimes limited by small numbers of respondents.

Expand current data collection into new topics and groups of respondents

Some data gaps can be addressed by expanding national fertility and health surveys of women of reproductive age to include previously excluded groups of adolescents and to ask additional questions. For example, it may be feasible to lower the sample age range for national surveys in countries where data already show sizeable proportions of young women beginning sexual activity and even child-bearing before age 15. Lessons learned from countries whose surveys include never-married women can be helpful to countries where this group has been excluded from surveys or has not been asked questions regarding sexual behavior.

However, some excluded groups, such as street youth and refugees, cannot be reached by household surveys and require focused attention and targeted sampling and

data collection. In certain circumstances, use of youth-focused surveys may be more successful than adapting current national fertility and health surveys to collect information from young people aged 10–14.²⁶ This type of approach was successful in four Sub-Saharan African countries, where nationally representative youth-focused surveys were implemented in 2004, providing data from almost 20,000 youth aged 12–19 about their sexual behaviors and the barriers they face in preventing HIV, other STIs and pregnancy.²⁷

Improve data collection and availability

Closing gaps in data on adolescents' sexual and reproductive health involves improving countries' vital statistics systems and developing new and more rapid ways to collect and report data. The Performance Monitoring and Accountability 2020 project, for example, has pioneered new ways of collecting data using mobile devices.²⁸ Key topics of sexual and reproductive health behaviors, service needs and coverage should also be included in studies that examine adolescent health more broadly.²⁹

Approaches to improving reporting on sensitive behaviors are being developed, and increased use of tablets, mobile phones and other technology to collect data has the potential to reduce underreporting of such behaviors.^{2,30,31}

To close the large data gap on China, scholars should be encouraged to publish analyses of available data and to include disaggregation by age. Another option might be to increase the span of content at U.S.-based organizations that provide access to data on China.³²

Plans and funding for evaluations must be included in interventions. Selecting interventions for scaling up to better meet adolescents' needs, and the scale-up process itself, can benefit from what has been learned from other health interventions.^{33,34} Country involvement and funding will be essential for the scale-up and continuity of promising interventions.

Further work is needed to develop and validate indicators for monitoring the protection and promotion of human rights in sexual and reproductive health services and to integrate them into service monitoring. These efforts should include assessing how indicators apply to adolescents.³⁵

Undertake special studies and analyses

Qualitative and in-depth quantitative research, including longitudinal studies, are needed on issues for which routine survey data leave many unanswered questions. Some examples include the following:

- Studies of induced abortion in countries where it is commonly obtained outside the official medical system

(although the cost and effort required limit the number of countries in which they are feasible)^{36,37}

- Research to document and address harmful behaviors, such as early marriage, coerced sex and sexual abuse, that can lead to early childbearing and have severe health consequences for women and their children
- In-depth investigation of reasons for not using contraceptives among women who want to avoid pregnancy, to illuminate the specifics of reported reasons and how they can be addressed
- Analyses of the health, social and economic impacts of early childbearing and the effects of contextual factors, including health care, education, and employment availability and quality
- Assessment of the cost, content and quality of private sector services (e.g., from drugstores and shops) and their potential for providing improved care
- Research to document components and levels of indirect costs of services (i.e., program and health systems costs), which have a considerable impact on services' total costs and cost-effectiveness.

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