WHO guideline on preventing early pregnancy and poor reproductive outcomes among adolescents in low- and middle-income countries

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Preface

Adolescent pregnancy remains a global public health concern with wide-reaching impacts on adolescents health, education and future opportunities. Adolescents who give birth face higher risks of maternal and infant mortality compared with older women, while early pregnancies can restrict adolescents' choices, limiting their educational and economic prospects. These limitations often perpetuate cycles of poverty and inequality.

In many parts of the world, adolescents – whether married or unmarried – lack access to the information and resources necessary to make informed decisions about their sexual and reproductive health (SRH). This leaves them vulnerable to early pregnancies and unprepared to navigate the physical, emotional and social changes that follow. Child marriage, which remains prevalent in certain regions, further exacerbates these risks. Marrying before the age of 18 increases the likelihood of early and repeated pregnancies, contributes to poor mental health, and can lead to early school dropout, further restricting life choices.

Yet, there is also much to celebrate. Significant progress has been made in reducing adolescent pregnancy and child marriage globally. Between 2000 and 2021, the global adolescent birth rate fell by 34%, and between 2010 and 2020 child marriage declined by 24%. These improvements underscore the fact that adolescent pregnancy and child marriage are preventable when multisectoral efforts come together. Comprehensive SRH education has played a key role in driving these advances, alongside supportive policies and programmes. But progress is uneven, and we must sustain efforts to ensure that the most vulnerable groups of adolescent girls are not left behind.

The global community has reaffirmed its commitment to advancing adolescent sexual and reproductive health and rights (SRHR) through initiatives such as the Sustainable Development Goals (SDGs) and the Global Strategy for Women's, Children's and Adolescents' Health. The World Health Organization (WHO) has remained at the forefront of this effort, for instance through the publication of the *WHO recommendations on adolescent sexual and reproductive health and rights* (2018).

Recognizing the need to build on existing achievements and respond to evolving evidence, World Health Organization (WHO) is proud to present the updated *WHO guideline on preventing early pregnancy and poor reproductive outcomes among adolescents in low- and middle-income countries*. Originally published in 2011, this updated guideline is essential to ensure that policies and programmes reflect the realities adolescents face today, promoting bodily autonomy, informed decision-making and access to services that support their rights. By implementing these recommendations, we will continue to strengthen the foundation for healthier and more equitable societies where every adolescent can thrive.

Ensuring that adolescents have the information, resources and support to exercise their SRHR is not only a matter of health – it is a matter of justice. All adolescents need to be empowered to make choices that lead to healthier, more fulfilling lives.

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Director, WHO Department of Sexual and Reproductive Health and Research, and UNDP/UNFPA/UNICEF/WHO/World Bank Special Programme on Human Reproduction (HRP)

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Abbreviations

ASRHR	adolescent sexual and reproductive health and rights
CEDAW	Convention on the Elimination of All Forms of Discrimination Against Women
COVID-19	Coronavirus disease
CRC	Convention on the Rights of the Child
DMPA-SC	subcutaneous depot medroxyprogesterone acetate
EC	emergency contraception
ERG	External Review Group
GDG	Guideline Development Group
GRADE	Grading of Recommendations Assessment, Development and Evaluation
HIV	human immunodeficiency virus
HPV	human papillomavirus
HRP	UNDP/UNFPA/UNICEF/WHO/World Bank Special Programme of Research, Development and Research Training in Human Reproduction
icddr,b	International Centre for Diarrhoeal Diseases Research, Bangladesh
ICRW	International Center for Research on Women
ICPD	International Conference on Population and Development
LGBTQIA+	lesbian, gay, bisexual, transgender, queer/questioning, intersex or asexual
LMIC	low- and middle-income country
MDGs	Millennium Development Goals
NGO	nongovernmental organization
OTC	over the counter
OCP	oral contraceptive pill
PICO	population, intervention, comparator and outcome(s)
PMNCH	Partnership for Maternal, Newborn and Child Health
QES	quasi-experimental study
RCT	randomized controlled trial
SDG	Sustainable Development Goal
SRH	sexual and reproductive health
SRHR	sexual and reproductive health and rights
STI	sexually transmitted infection
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
UHC	universal health coverage
WHO	World Health Organization

Executive summary

Background

Adolescent pregnancy is a worldwide phenomenon, albeit with variations between and within countries. It continues to have serious and lasting consequences. There is an imbalance between efforts to prevent adolescent pregnancy and efforts to respond to the needs of pregnant and parenting girls and their families. Although normative documents, policies and programmes are more likely to be based on sound data and evidence than in the past, this is still a work in progress.

In the 13 years since the publication of the 2011 guideline, more research evidence and programmatic experience have been generated. The field has transitioned from a focus on addressing the needs of all adolescents, to addressing the needs of groups of adolescents depending on their particular needs and circumstances. Based on these developments, stakeholders within and outside the United Nations expressed in a variety of fora that the guideline served a useful purpose and called for it to be updated.

Objectives

The objectives of this updated edition of the *WHO guidelines on preventing early pregnancy and poor reproductive outcomes among adolescents in low- and middle-income countries* are the same as those of the 2011 edition, namely to provide evidence-based normative guidance on interventions to improve adolescent morbidity and mortality by reducing the chances of early pregnancy and its resulting poor health outcomes. The specific objectives of the guideline were to:

1. identify effective interventions to prevent early pregnancy by influencing factors such as early marriage, coerced sex, unsafe abortion, access to contraceptives and access to maternal health services by adolescents; and
2. provide an analytical framework for policy-makers and programme managers to use when selecting evidence-based interventions to prevent early pregnancy and negative health outcomes when they occur that are most appropriate for the needs of their countries and context.

Intended audience

The primary intended audience for the updated guideline is the same as those of the 2011 edition, namely, policy leaders/planners and programme managers from government, nongovernmental organizations (NGOs), and agencies that provide technical and financial support in low- and middle-income countries (LMICs). Secondary audiences include health workers, researchers, government officials, professional associations, programme managers and advocacy groups. Finally, the updated guideline is also intended for young professionals belonging to the above groups, and for young people in general.

Methods

This guideline was developed according to World Health Organization (WHO) standards and requirements for guideline development, and with the oversight of the WHO Guidelines Review Committee.

All of the recommendations in this guideline were developed by the Guideline Development Group (GDG), facilitated by the guideline methodologist using the Grading of Recommendations Assessment, Development and Evaluation (GRADE) approach.

See the **Introduction** and **Annex 3**, which describe how the specific recommendations and good practice statements included in this guideline were determined.

One notable change in the updated edition of the guideline is the inclusion of good practice statements. Good practice statements may be issued when the quality of evidence for an intervention is low or very low, but when there is high certainty based on indirect evidence and/or expert opinion that the intervention does more benefit than harm and when not implementing the intervention would be contrary to practice norms. **In terms of implementation, good practice statements should be viewed as equivalent to strong recommendations.** This updated edition contains three good practice statements in the section on preventing child marriage and supporting the needs and rights of married girls, and four good practice statements in the section on improving access to, uptake of, and continued use of contraception among adolescents (**see Table 1**).

Table 1. Summary of recommendations

1. Preventing child marriage and responding to the needs and rights of married girls

Recommendation 1.1	WHO recommends the implementation of interventions to empower girls by building their knowledge, skills, assets and social networks. **(Conditional recommendation; low-certainty evidence)**
Recommendation 1.2	WHO recommends that programmes aiming to reduce child marriage and support married girls engage with parents/guardians, boys and men, and the broader community to create and sustain a gender-equitable and enabling environment. **(Conditional recommendation; low-certainty evidence)**
Recommendation 1.3	WHO recommends offering conditional incentives (conditioned on school attendance and/or remaining unmarried) as a broad strategy to increase educational attainment and reduce child marriage as a part of social protection interventions for girls at highest risk of child marriage. **(Conditional recommendation; moderate-certainty evidence)**
Recommendation 1.4	WHO recommends the implementation of interventions to remove gender-related barriers to education and ensure girls' completion of 12 years of quality education. **(Strong recommendation; moderate-certainty evidence)**
Recommendation 1.5	WHO recommends the implementation of interventions aimed at the economic empowerment of girls to improve their financial literacy, access to savings, and employment skills and prospects, and to expand alternatives to marriage before age 18. **(Strong recommendation; moderate-certainty evidence)**
Recommendation 1.6	WHO recommends the formulation and implementation of laws that restrict marriage before age 18, consistent with human rights standards. **(Conditional recommendation; very-low-certainty evidence)**

Good practice statement 1.1	Political, governmental, religious, traditional and other influential leaders should be mobilized to support the prevention of child marriage and promotion of girls' rights.
Good practice statement 1.2	Efforts to address the needs and rights of women and girls should recognize and address the specific needs and rights of ever-married girls and those in formal or informal unions.
Good practice statement 1.3	Adolescents, including those who are ever married or in formal or informal unions, should be meaningfully engaged in the design, implementation, monitoring and evaluation of efforts to address their needs and rights.

2. Increasing access to, uptake of, and continued use of contraception among adolescents

Recommendation 2.1a	WHO recommends the implementation of gender-transformative behaviour change interventions with adolescents to strengthen their ability to make decisions about their contraceptive use. **(Strong recommendation; moderate-certainty evidence)**
Recommendation 2.1b	WHO recommends the implementation of interventions to shift gender and other social norms to support contraceptive decision-making and access to, uptake of, and continued use of contraception among adolescents. **(Strong recommendation; moderate-certainty evidence)**

Recommendation 2.2	WHO carried forward the recommendations in the *WHO guideline on self-care interventions for health and well-being, 2022 revision* that are relevant to adolescents' access to, uptake of, and continued use of contraception.[1] These recommendations include: Self-administered injectable contraception should be made available as an additional approach to deliver injectable contraception for individuals of reproductive age. **(Strong recommendation; moderate-certainty evidence)** Over-the-counter oral contraceptive pills (OCPs) should be made available without a prescription for individuals using OCPs. **(Strong recommendation; very-low-certainty evidence)** Over-the-counter emergency contraceptive pills should be made available without a prescription to individuals who wish to use emergency contraception. **(Strong recommendation; moderate-certainty evidence)** The consistent and correct use of male and female condoms is highly effective in preventing the sexual transmission of HIV; reducing the risk of HIV transmission both from men to women and women to men in serodiscordant couples; reducing the risk of acquiring other sexually transmitted infections (STIs) and associated conditions, including genital warts and cervical cancer; and preventing unintended pregnancy. Provide up to one year's supply of pills, depending on the woman's preference and anticipated use. Programmes must balance the desirability of giving women maximum access to pills with concerns regarding contraceptive supply and logistics. The resupply system should be flexible, so that the woman can obtain pills easily in the amount and at the time she requires them.
Recommendation 2.3	WHO recommends the implementation of interventions to reduce financial barriers related to access to, uptake of, and continued use of contraception among adolescents. **(Conditional recommendation; very-low-certainty evidence)**
Recommendation 2.4	WHO recommends the implementation of accurate and safe digital health interventions for adolescents as part of sexual and reproductive health (SRH) programming. **(Conditional recommendation; low-certainty evidence)**
Good practice statement 2.1	Political, governmental, religious, traditional and other influential leaders should be mobilized to support the access to, uptake of, and continued use of contraception among adolescents.

1 Available at: https://iris.who.int/handle/10665/357828

Good practice statement 2.2	Interventions to improve the quality of health services should be implemented to improve access to, uptake of, and continued use of contraception among adolescents.
Good practice statement 2.3	Enabling laws and policies on age, marital status and consent procedures in relation to sexual activity, access to sexual and reproductive health (SRH) services and access to specific contraceptive methods, should be coherently formulated and implemented to improve access to, uptake of, and continued use of contraception among adolescents.
Good practice statement 2.4	Adolescents should be meaningfully engaged in the design, implementation, monitoring and evaluation of efforts to address their contraceptive needs and rights.

What is similar and what is different

Rationale:
The rationale for this guideline is similar to the 2011 edition of the guideline. However, given the progress made globally in reducing child marriage and increasing the access to, uptake of, and continued use of contraception among adolescents, there is a stronger focus on groups who have not benefited from this progress.

Objectives:
The overall objective for this guideline is unchanged from the 2011 edition.

Intended audience:
The intended audience for this guideline is unchanged from the 2011 edition.

Scope:
The scope of this guideline is reduced as compared with the 2011 edition. Given that separate guidelines have been developed on four of the six outcomes included in the 2011 edition, this update focuses on the remaining two objectives: preventing child marriage and responding to the needs and rights of married girls, and improving access to, uptake of, and continued use of contraception among adolescents.

Guideline development process:
The guideline development process for this guideline was similar to that used for the 2011 edition. However, the process for this edition involved teams representing different stakeholder groups – government, NGOs, academics and young people – from one country in each of WHO's regions, selected in conjunction with our regional offices, as members of the External Review Group. In addition to the young people who were part of these six country teams, representatives of global networks/organizations working for and led by young people were included in the Guideline Development Group (GDG).

Population, intervention, comparator and outcomes (PICO) questions:
The PICO questions for this guideline are similar to those in the 2011 edition. However, on child marriage, this edition includes two new PICO questions – one on responding to the health and social needs and rights of married girls and another on the meaningful engagement of young people in efforts intended to benefit them. On improving access to, uptake of, and continued use of contraception, this edition of the guideline includes two new PICO questions – one on digital health interventions and another on the meaningful engagement of young people in efforts intended to benefit them. In the 2011 edition of the guideline, the PICO question on self-care did not explicitly refer to self-care; the PICO question in this edition does so. The wording of some PICO questions for both sections was revised without substantial changes to their meaning.

Recommendations and good practice statements:
The 2011 edition of the guideline did not contain good practice statements. This edition contains three on child marriage and four on improving access to, uptake of, and continued use of contraception. Additionally, the 2011 edition of the guideline included both action and research recommendations.

This edition does not include the latter, because separate but linked research priority-setting exercises are under way.

Analytic frameworks for selecting evidence-based interventions for implementation

This guideline contains an additional section that provides an overview of analytic frameworks for selecting evidence-based interventions for implementation. Specifically, it guides readers to set priorities (balancing efforts to achieve global targets with those to understand and respond to local needs), employ an explicit and directive equity focus to leave no one behind, and monitor and evaluate programmes and projects.

Plan to disseminate the guideline and support its application

The following approaches will be used to raise awareness and interest in this updated edition of the guideline, to build capacity for its use, and to support countries directly. First, awareness of and interest in the updated guideline will be built using media, including social media, targeted email outreach and briefings (e.g. with technical and funding agencies), publishing articles in peer-reviewed journals and newsletters, and contributing to conferences and seminars, both in person and virtually. Second, capacity will be built for the application of the guideline through in-person and virtual seminars that share the recommendations, their implications for the field, and their basis in research evidence and programmatic experience. Alongside this, practical examples of their application in different country contexts will be shared. Third, direct support to countries will be provided through partnerships such as Family Planning 2030 and Girls Not Brides. These activities will be conducted in collaboration with WHO's regional and country offices; partners within the United Nations system, notably the United Nations Population Fund (UNFPA), United Nations Educational, Scientific and Cultural Organization (UNESCO), United Nations Children's Fund (UNICEF), UN Women and Joint United Nations Programme on HIV/AIDS (UNAIDS); and other partners, including academic institutions, professional associations and NGOs.

Plan to fill evidence gaps

The evidence reviews conducted to inform this updated edition of the guideline identified numerous research studies and evaluations that were published in the 13 years since the 2011 edition was published. However, there are still substantial gaps in the evidence either because some issues have yet to be addressed or have been addressed inadequately, or because of the way in which the studies/evaluations have been carried out and reported. As a result, the number of studies that could be included as part of the GRADE process was limited, and the strength of evidence was downgraded in some studies. These evidence gaps will feed into the separate but linked research priority-setting exercises that are under way. Future research studies and evaluations should be analysed and reported in a way that enables their findings to be included in future GRADE processes.

Plan to review and update the guideline

As in the case of this edition of the guideline, a decision on future updates will be based on an assessment of its need. Future updates will follow WHO's standards and requirements for guideline development, including the possibility of utilizing a living guideline approach.[2]

2 Akl EA, Meerpohl JJ, Elliott J, Kahale LA, Schünemann HJ. Living systematic reviews: 4. Living guideline recommendations. J Clin Epidemiol. 2017;91:47-53 (https://doi.org/10.1016/j.jclinepi.2017.08.009).

CHAPTER 1

Introduction

1. Introduction

This chapter provides key background information about child marriage and adolescent contraceptive use and an overview of the guideline, including brief summaries of its scope, how it was developed and its intended use.

1.1 Background

1.1.1 What is the situation of adolescent pregnancy and childbearing today, and how has it evolved over the last two decades?

Levels and trends in adolescent pregnancy and childbearing

Adolescent girls aged 15–19 years in low- and middle-income countries (LMICs) have an estimated 21 million pregnancies each year, 50% of which are unintended *(1)*. In 2021, an estimated 12.1 million girls aged 15–19 years and 499 000 girls aged 10–14 years gave birth globally *(2)*.

Worldwide, the adolescent birth rate decreased from 64.5 births per 1000 women aged 15–19 years in 2000 to 42.5 births per 1000 women of the same age in 2021. However, rates of change have been uneven across different regions of the world, with the sharpest decline occurring in Southern, Central, and Western Asia and North Africa, and slower declines in Latin American and the Caribbean and sub-Saharan Africa *(3, 4)*. Although declines have occurred in all regions, sub-Saharan Africa and Latin America and the Caribbean continue to have the highest rates globally at 101 and 53.2 births per 1000, respectively in 2021 *(3)*. There are also substantial differences in rates between countries within regions. In Latin America and the Caribbean, for example, Nicaragua reported 85.6 births per 1000 adolescent girls in 2021, compared to 24.1 per 1000 adolescent girls in Chile *(3)*. Even within countries there are large variations. For example, in Zambia, the percentage of adolescent girls aged 15–19 years who have begun childbearing (women who are either pregnant or who have had a birth) ranged from 14.9% in Lusaka to 42.5% in the Southern Province in 2018 *(5)*. In the Philippines, the percentage of girls aged 15-19 years who have begun childbearing ranged from 3.5% in the Cordillera Administrative Region to 17.9% in the Davao Peninsula Region in 2017 *(6)*.

While the estimated global adolescent birth rate has declined, the actual number of births to adolescent girls continues to be high. The largest number of estimated births to girls aged 15–19 years in 2021 occurred in sub-Saharan Africa (6 114 000), whereas far fewer births occurred in Central Asia (68 000). The corresponding number for girls aged 10–14 years was 332 000 in sub-Saharan Africa, compared to 22 000 in South-East Asia in the same year *(3)*.

The contexts in which adolescent pregnancies and childbearing occur

Adolescent pregnancies are a global problem occurring in high-, middle- and low-income countries. Studies of risk and protective factors related to adolescent pregnancy in LMICs indicate that levels tend to be higher among girls with less education and/or of low economic status *(7, 8)*. Progress in reducing adolescent first births has been particularly slow among these groups, leading to increasing and continuing inequities *(9)*.

Several factors contribute to adolescent pregnancies and births. First, in many contexts, girls are under pressure to marry and bear children. Child marriage – marriage before the age of 18 years – places girls at increased risk of pregnancy, with girls who are married early often having limited autonomy to influence decision-making about contraceptive use and the timing of childbearing *(10)*. Globally, child marriage has declined over the last decade

from approximately 25% in 2010 to 19% in 2020. Progress has been most marked in South Asia and to a lesser extent in sub-Saharan Africa, the Middle East and Northern Africa, and Eastern Europe and Central Asia. However, 1 in 20 girls around the world is married before age 15, and the estimated global number of married girls was still 650 million in 2021 *(11, 12)*. Additionally, there is evidence of growing inequities; for example, while child marriage has decreased among girls from the wealthiest quintiles in Latin America and sub-Saharan Africa, it has increased among girls from the poorest quintiles *(13)*. Second, in many settings girls choose to become pregnant because they have limited educational and employment prospects. Often, in such contexts, motherhood – within or outside marriage/union – is valued, and marriage or union and childbearing may be the best of the limited options available to adolescent girls *(14)*.

Across settings, access to accurate and up-to-date information and education about sexuality, reproduction and sexual and reproductive health and rights (SRHR) is limited. This has important consequences. First, many adolescents are poorly informed about the physical and emotional changes that take place during puberty, and are unprepared to deal with them. Second, many adolescents are unaware and ill-equipped to protect themselves from sexually transmitted infections (STIs) and unintended pregnancies, and to have sex safely and pleasurably when sexual activity begins – generally during adolescence *(15)*. They may also be ill-prepared to refuse unwanted sex from peers or from influential adults who use physical or emotional pressure to coerce them. Finally, they may not know where and how to seek help from their families and from health, social and legal services when problems occur *(16)*.

In many contexts, contraceptives are not easily accessible to adolescents. Even when contraception is available, adolescents may face stigma when seeking contraceptives, lack the agency or the resources to pay for them, and lack the knowledge of where to obtain them and how to use them correctly. Further, they are often at higher risk of discontinuing contraceptive use due to side-effects, and due to changing life circumstances and reproductive intentions *(16)*. Restrictive laws and policies regarding the provision of contraceptives based on age or marital status pose an important barrier to the provision and uptake of contraceptives among adolescents. This is often combined with health worker bias and/or lack of willingness to acknowledge adolescents' sexual and reproductive health (SRH) needs and rights *(17)*.

Globally, the proportion of adolescent girls aged 15–19 years whose needs for contraception were satisfied by modern methods rose from approximately 49% to 60% between 2010 and 2020. The aggregate level of modern contraceptive use in adolescents aged 15–19 years increased from 17.8% in 2000–2006 to 27.2% in 2013–2017; however, this is notably lower than the level among adult women aged 20–34 years, which increased from 30.9% in 2000–2006 to 40.3% in 2013–2017. Additionally, both the levels and trends of contraceptive use have been uneven across regions. Latin America and the Caribbean, and Eastern Europe and Central Asia had the highest levels of demand for contraception satisfied by modern methods (> 70%) in 2020, a relative increase of approximately 8% from 2010 (65%) *(12)*.

Child sexual abuse and intimate partner violence increase the risk of unintended pregnancy. An estimated 120 million girls aged under 20 years have experienced some form of forced sexual contact *(18)*. Likewise, the estimated global prevalence of physical or sexual intimate partner violence against ever-partnered adolescent girls aged 15–19 years is 24% in their lifetime and 16% in the past year, with wide variation by region *(19)*. This abuse is deeply rooted in gender inequality; it affects more girls than boys, although many boys are also affected.

What is the state of the global response to adolescent pregnancy and childbearing, and how has this evolved in the 30 years since the International Conference on Population and Development?

There has been increased awareness of the need to address adolescent pregnancy and childbearing in countries around the world for over 50 years *(20)*. However, the issue did not get the attention it deserved until it was placed on the global public health and social development agendas by the International Conference on Population and Development (ICPD) in 1994. This enabled international organizations and grassroots champions to press governments to pay attention to this issue.

The Millennium Development Goals (MDGs) were announced in 2000. Goal 5 on reducing maternal mortality provided a new impetus for the work on preventing early pregnancy and childbearing in adolescents. United Nations agencies and other international organizations pressed for attention to adolescent pregnancy (and to HIV in adolescents and young people as part of Goal 6) and strived to stimulate and support policy and programme development in countries. Despite concerted efforts, there was little engagement because, in the first decade of the MDG era, adolescent health was not seen as a high priority *(21)*.

In the early 2010s, there was growing realization worldwide that adolescents were being left behind, and that this had implications not only for their health and well-being but also for efforts to reduce maternal and child mortality. International organizations responded with data on the scope of the problem, as well as policy and programme guidance based on research studies and project experiences. They also used the platforms set up by the ICPD and the MDGs to pay greater attention to the SRHR of adolescents *(21)*.

In the last five years of the MDG era (i.e. 2011–2014), Girls Not Brides, a global partnership of nongovernmental organizations (NGOs) and the newly established UNFPA–UNICEF Global Programme to End Child Marriage, injected energy and resources to strengthen ongoing efforts to end child marriage. Likewise, Family Planning 2020, a global partnership to put family planning at the centre of global health, development and gender equality, initiated efforts to support countries to include adolescent contraceptive use in their national commitments *(21)*.

The Sustainable Development Goals (SDGs) and the updated Global Strategy for Women's, Children's and Adolescents' Health (2016–2030), which were both launched in 2015, placed adolescents at the centre of the agenda. Adolescent pregnancy prevention is on the agenda of the SDGs and the ICPD+25 *(21)*; it is also solidly positioned on the agenda of regional political bodies *(22)*. Over the years, research evidence and programmatic experience have been built, and this has informed policy and programme support tools *(23-25)*. Global partnerships, such as Family Planning 2020 and its successor Family Planning 2030, are encouraging and supporting countries to develop bold and innovative commitments *(26)*.

Global financing institutions, such as the Global Financing Facility (GFF), are providing countries with resources to translate their plans into action *(27)*. They and others, such as the Global Fund to fight AIDS, Tuberculosis and Malaria (the Global Fund), are pressing for stronger synergies between HIV and adolescent pregnancy prevention programmes *(28)*. Global initiatives, such as The Challenge Initiative, are supporting countries to translate country aspirations into context-specific programmes, delivered at scale with quality and equity, and to make full use of approaches such as self-care and the direct-to-consumer movement *(29)*. There is much more to be done. There are both enormous opportunities to exploit and challenges to overcome, but the prospects for progress for adolescents are better today than ever before.

How has WHO contributed to the overall global effort, and what is its specific role?

WHO has contributed to the evolving field of adolescent pregnancy and childbearing for over 25 years. The organization began by making the case for attention to and investment in this area. It next set out evidence-based guidance on what needed to be done to address these issues. For example, WHO developed an *Orientation programme on adolescent health for health-care providers* in 2006 to strengthen the abilities of health workers and health facilities to respond to adolescents effectively and with sensitivity, and it published *WHO guidelines on preventing early pregnancy and poor reproductive outcomes in adolescents in developing countries* in 2011 *(24, 30)*. WHO also used the forum of the World Health Assembly to advocate for the application of the guidelines in a session on "Early marriages, and adolescent and young pregnancies" in 2012. Since then, WHO has supported countries to develop national policies and strategies on preventing child marriage and improving access to, uptake of, and continued use of contraception among adolescents. This has included: publishing country profiles synthesizing available data; distilling evidence of what works and what does not; documenting analytic case studies of "positive deviant" countries that have demonstrated success in reducing levels of child marriage and adolescent childbearing; stimulating and supporting implementation research; building the capacity of researchers, policy-makers and programmers from the global South; and setting up an innovative mechanism to provide

technical assistance to countries that is responsive to their needs, and is timely, effective, efficient, and contributes to strengthening national capacity. All this work has been done in close collaboration with partners within and outside the United Nations.

In summary, WHO works with partners to advocate for attention to adolescents, build the evidence and epidemiologic base for action, develop and test programme support tools, build capacity, and support countries to address adolescent pregnancy effectively in the context of their national programmes.

1.2 Rationale for the guidelines

The rationale for the development of the 2011 *WHO guidelines on preventing early pregnancy and poor reproductive outcomes among adolescents in developing countries (24)* was as follows. First, adolescent pregnancy was recognized as a worldwide phenomenon, albeit with differing levels in different countries, and within countries. Second, its serious and lasting negative health, educational and social consequences for girls, their children, their families and communities were acknowledged. Third, while some efforts were under way to prevent adolescent pregnancy, little was being done to respond to the needs of pregnant and parenting adolescents. Fourth, while a growing number of governments had formulated national policies and strategies to address adolescent pregnancy, there were gaps and weaknesses in their normative documents, and even more importantly there were gaps between policies and strategies on the one hand, and implementation on the other. Finally, governments and NGOs working to address adolescent pregnancy in LMICs, and the agencies supporting them, requested evidence-based guidance from WHO to inform their work.

WHO decided to develop an updated edition of the 2011 guideline for the following three reasons. First, in the 12 years since its publication, more research evidence and programmatic experience have been generated, including in some of the areas in which the 2011 guideline indicated that there was limited or no evidence that met the inclusion criteria. Second, the field has transitioned from a focus on addressing the needs of all adolescents to addressing the needs of groups of adolescents based on their particular needs and circumstances. Third, stakeholders in a variety of fora within and outside the United Nations indicated that the 2011 guidelines served a useful purpose and called for them to be updated.

1.3 Objectives of the guideline

The objectives of this updated edition of the *WHO guideline on preventing early pregnancy and poor reproductive outcomes among adolescents in low- and middle-income countries* are the same as those of the 2011 edition, namely to provide evidence-based normative guidance on interventions to improve adolescent morbidity and mortality by reducing the chances of early pregnancy and its resulting poor health outcomes *(24)*.

The specific objectives of the guideline are to:

1. identify effective interventions to prevent early pregnancy by influencing factors such as early marriage, coerced sex, unsafe abortion, access to contraceptives and access to maternal health services by adolescents; and
2. provide an analytical framework for policy-makers and programme managers to use when selecting evidence-based interventions to prevent early pregnancy and negative health outcomes when they occur that are most appropriate for the needs of their countries and contexts.

1.4 Scope of the guideline

The scope of the 2011 edition of the *WHO guideline on preventing early pregnancy and poor reproductive outcomes among adolescents in developing countries* is reflected in its objectives. These are: (i) to prevent adolescent pregnancy through preventing child marriage, providing sexuality education, improving access to and uptake of contraception, and preventing pregnancy resulting from sexual abuse and coercion; and (ii) to reduce negative outcomes of pregnancy through preventing unsafe abortion and mortality and morbidity resulting from it, and improving maternal health outcomes by improving access to quality maternal health services *(24)*.

The United Nations published an updated edition of the *International technical guidance on sexuality education (31)* in 2018 and *International technical and programmatic guidance on out-of-school sexuality education (32)* in 2020, and WHO published recommendations for *Intrapartum care for a positive*

childbirth experience (33) in 2018, an updated edition of the evidence-to-action brief on *Companion of choice during labour and childbirth for improved quality of care (34)* in 2020, *Guidelines for the health sector response to child maltreatment (35)* in 2019, the *RESPECT Framework for preventing violence against women and girls (36)* in 2019 and the *Abortion care guideline (37)* in 2022. As such, the Guideline Steering Group decided not to update these sections at this time. Thus, the scope of this updated edition of the guideline is limited to two sections of the 2011 edition, namely (i) to prevent child marriage and support the needs and rights of married girls, and (ii) to improve access to, uptake of, and continued use of contraception among adolescents.

Within these two sections, the population, intervention, comparator and outcomes (PICO) questions used in this updated edition are similar to those used in the 2011 edition; however, the language and framing have been updated to reflect the current state of the field. In the section on preventing child marriage and supporting the needs and rights of married girls, the updated edition includes two PICO questions that were not included in the 2011 edition: one on responding to the health and social needs and rights of married girls and another on the meaningful engagement of adolescents in efforts intended to benefit them. In the section on improving access to, uptake of, and continued use of contraception among adolescents, the updated edition also includes two new PICO questions: one on digital health interventions and another on the meaningful engagement of adolescents in efforts intended to benefit them. Additionally, it includes a PICO question that explicitly refers to self-care interventions; the 2011 edition dealt with related issues but did not use this terminology.

Importantly, this updated edition of the *WHO guideline on preventing early pregnancy and poor reproductive outcomes among adolescents in low- and middle-income countries*, as with the 2011 edition, does not address the safety and effectiveness of contraceptive methods *(24)*. These issues are addressed elsewhere *(38)*. It is worth reiterating that there is no medical reason to withhold the provision to adolescents of any contraceptive method that WHO recommends for adults.

1.5 Intended audience of the guideline

The intended audience of this updated edition of the *WHO guideline on preventing early pregnancy and poor reproductive outcomes among adolescents in low- and middle-income countries* are the same as those of the 2011 edition, namely policy-makers and programme managers from governments, NGOs and agencies that provide technical and financial support to LMICs *(24)*. The recommendations may also be of interest to health workers and researchers at global and country levels, government officials, professional associations, programme managers, and advocacy groups. Finally, they are also intended for young professionals belonging to the above groups, and for young people in general.

1.6 Guideline development process

This guideline was developed according to WHO standards and requirements for guideline development, based on the *WHO handbook for guideline development, second edition*, and with the oversight of the WHO Guidelines Review Committee *(39)*.

All of the recommendations in this guideline were developed by the Guideline Development Group (GDG), facilitated by the guideline methodologist using the Grading of Recommendations Assessment, Development and Evaluation (GRADE) approach *(40)*. See **Annex 3**, which describes how the specific recommendations and good practice statements included in this guideline were determined.

The guideline was updated using a step-by-step process, as set out by WHO. First, consultations were held with the intended audience of the 2011 edition of the guideline to determine whether they believed an update would be useful to inform the work they were doing. Second, a stock-taking review was conducted to determine whether there were publications in the public arena to respond to the research questions on adolescent contraceptive use. This was not needed on child marriage because two major reviews had recently been carried out *(41, 42)*. Third, partnerships were forged with United Nations Population Fund (UNFPA) and United States Agency for International

Development (USAID), with which WHO developed the 2011 edition of the guideline. Fourth, the groups of key contributors to the guideline development process were constituted: a Guideline Steering Group, a Guideline Development Group (GDG), an External Review Group (ERG) comprising small teams from one country in each of WHO's six regions (Argentina in the Region of the Americas, Bangladesh in the South-East Asia Region, Burkina Faso in the African Region, the Republic of Moldova in the European Region, the Philippines in the Western Pacific Region and Yemen in the Eastern Mediterranean Region), and two systematic review teams (one for research questions on child marriage and the other for research questions on adolescent contraceptive use) along with an experienced methodologist. Fifth, in consultation with the Guideline Steering Group and the GDG as well as other stakeholders, the PICO questions were developed in an open and consultative manner. Sixth, a series of GDG meetings were held – in July 2022 (virtual), March 2023 (virtual), June 2023 (in person), July 2023 (virtual) and August 2023 (virtual) – at which the process was set out; respective roles were defined; PICO questions were reviewed and finalized; evidence and the Evidence-to-Decision tables were presented and discussed; and recommendations were formulated. Alongside the meetings of the GDG, country-level consultations were supported in the six countries mentioned above to draw upon the inputs of a wider range of stakeholders. Seventh, the updated edition of the guideline was drafted and reviewed by the GDG, the Guideline Steering Group, and the ERG. Eighth, the updated edition of the guideline was reviewed and approved by the Guidelines Review Committee. Finally, the guideline was published and plans to disseminate it and support its application were operationalized.

There are two notable changes to the types of recommendations included in this guideline. First, it contains three good practice statements in the section on preventing child marriage and supporting the needs and rights of married girls, and four good practice statements in the section on improving access to, uptake of, and continued use of contraception among adolescents. Good practice statements may be issued when the quality of evidence for an intervention is low or very low, but when there is high certainty based on indirect evidence and/or expert opinion that the intervention does more benefit than harm and when not implementing the intervention would be contrary to practice norms. **In terms of implementation, good practice statements should be viewed as equivalent to strong recommendations.** Second, while the 2011 edition of the guideline included both action and research recommendations, this updated edition does not include the latter because separate but linked research priority-setting exercises are under way.

1.7 Plans for disseminating and supporting the application of the guideline

The following approaches will be used to raise awareness of and interest in the updated edition of the guideline, to build capacity for its use and to support countries directly.

First, awareness of and interest in the updated edition of the guideline will be built using media, including social media, targeted email outreach and briefings, articles in peer-reviewed journals and newsletters, and conferences and seminars, both in person and virtually. Second, capacity will be built for the application of the updated edition through in-person and virtual seminars that share the recommendations, their implications for the field, and their basis in research evidence and programmatic experience. Alongside this, practical examples of their application in different country contexts will be shared. Third, direct support to countries will be provided through partnerships such as Family Planning 2030 and Girls Not Brides.

All of these activities will be conducted in conjunction with WHO's regional and country offices; United Nations partners, notably UNFPA, United Nations Educational, Scientific and Cultural Organization (UNESCO), United Nations Children's Fund (UNICEF), UN Women, and Joint United Nations Programme on HIV/AIDS (UNAIDS); and with academic institutions, professional associations and NGOs.

1.8 Overarching evidence gaps

The evidence reviews conducted to inform this updated edition of the guideline identified a substantial number of research studies and evaluations that were published in the 13 years since the 2011 edition. However, there are still substantial gaps in the evidence either because some issues have yet to be addressed or have been addressed inadequately, or because of the way in which the studies/evaluations have been carried out and reported. As a result, the number of studies that could be included as part of the GRADE process was limited, and the strength of evidence was downgraded in some studies. These evidence gaps will feed into the separate but linked research priority-setting exercises that are under way. Future research studies and evaluations should be analyzed and reported in a way that enables their findings to be included in future GRADE processes.

First, while many studies included young people (i.e. ages 15–24 years), few had a large enough sample of adolescents (i.e. ages 10–19 years) or else failed to disaggregate by age group to permit examining effects among adolescents. In particular, few studies included very young adolescents (i.e. ages 10–14 years), limiting the possibility to understand which interventions are specifically effective for this age group. Future studies that seek to target adolescents, including those aged 10–14 years and/or 15–19 years, must ensure that the number of participants in those age groups is large enough to allow for conclusions to be made regarding the effect of interventions in that group, and the results must be specifically disaggregated by age group.

Second, while it is best practice to undertake multi-component interventions for adolescents that target the multiple influences and influencers on their behaviours, assessing intervention effects of a specific component is challenging through the GRADE process. As a result, the strength of evidence from multi-component interventions is often downgraded. Studies that seek to understand the specific intervention effects of individual components, and/or those that seek to determine which components are the most essential, could test different arms with different combinations of intervention components and use advanced statistical analyses such as structural equation modelling. This would avoid the downgrading of the strength of evidence through the GRADE approach.

1.9 Plans for updating the guideline

Decisions on future updates of the guideline will be based on an assessment of their need, through consultation with relevant stakeholders. As with this updated edition, future updates will follow WHO standards and requirements for guideline development *(39)*. WHO is moving towards a living guideline approach, defined by an optimization of the guideline development process to allow individual recommendations to be updated as soon as new relevant evidence becomes available *(43)*. The pros and cons of employing this approach, notably the cost and whether there is a need for a rapid update to specific recommendations, will be considered in making this decision.

Future guideline updates should consider the inclusion of qualitative evidence to inform the guideline development process, as is becoming increasingly common. The inclusion of qualitative evidence such as on the acceptability and feasibility of interventions may contribute to improving the quality and usability of guidelines, and to ensure the needs and perspectives of all stakeholders are taken into account. Additionally, the use of other types of evidence, including from non-randomized studies as well as case studies and programmatic evidence should be stepped up, if and where appropriate, and in line with the criteria for use of evidence to inform recommendations in WHO guidelines.

CHAPTER 2

Guiding principles

2. Guiding principles

This updated edition of the *WHO guideline on preventing early pregnancy and poor reproductive outcomes among adolescents in low- and middle-income countries* is based on the following guiding principles:

- Adolescence, as one phase in the life course, is one of the most rapid formative phases of human development.
- Adolescents have a fundamental right to health. Investments in adolescent health and well-being bring triple benefits – now, in the future, and in the next generation. Such investments also lead to substantial economic benefits.
- Determinants – including both protective and risk factors – at the individual, interpersonal, family, community, organizational and societal levels, powerfully influence adolescent health and well-being. Determinants may operate at multiple levels and in combination to accentuate their effects. For example, physical disability, restrictive gender attitudes and norms, poverty and insecurity can operate together to restrict a girl's abilities to continue schooling. On the other hand, the same girl can still attend school if committed parents and teachers ensure an enabling environment.
- Adolescents are a diverse group with differing and changing needs, which are often not recognized and/or addressed. Leaving no one behind should be a key principle in programming for adolescents. A concern for equity should be embedded within this.
- Interventions should operate at all levels of the socioecological framework. They may be adolescent-specific (e.g. comprehensive sexuality education), those with wider impacts that need to be tailored to the needs of adolescents to be effective (e.g. making health services user-centred), and those with impacts across the life course but with particular benefits to adolescents (e.g. improving security). Intervention delivery should be of high quality and with universal coverage.
- Given the multi-dimensional nature of adolescent health and well-being, collaboration across sectors to deliver multisectoral and/or integrated programming is crucial.
- While national and subnational priorities should guide local action, further contextualization should take place locally and should be based on local data and insights.
- Adolescents should be meaningfully engaged in efforts to address their needs, so their expectations and perspectives are incorporated into policy and programmatic decision-making. There is strong consensus that adolescents should be enabled to make a meaningful contribution to their own health and well-being, and that of others.
- The rapid physical, mental and social changes across the adolescent period make it essential to disaggregate data by age and sex.
- Adolescent health programmes should monitor the full range of indicators, from inputs and processes to outputs, outcomes and impact. These indicators answer different questions and are useful for different purposes. Periodic evaluations are essential and should build on routinely collected monitoring data.

CHAPTER 3

Recommendations and key considerations

3. Recommendations and key considerations

This chapter presents the WHO recommendations and good practice statements that have been newly developed and published for the first time in this guideline.

The recommendations are listed in the Executive summary (**Table 1**) and are described in greater detail in **sections 3.1 and 3.2**. Each recommendation is presented in a box along with information about its strength and the certainty of the evidence on which it is based. This is followed by sections describing the background for each recommendation, the PICO question(s) and search process, the results of the evidence review, the certainty of the evidence, and the rationale for the strength and direction of the recommendation.

3.1 Preventing child marriage and responding to the needs and rights of married girls

Table 3.1 Summary of recommendations and good practice statements

Recommendation 1.1	WHO recommends the implementation of interventions to empower girls by building their knowledge, skills, assets and social networks. **(Conditional recommendation; low-certainty evidence)**
Recommendation 1.2	WHO recommends that programmes aiming to reduce child marriage and support married girls engage with parents/guardians, boys and men, and the broader community to create and sustain a gender-equitable and enabling environment. **(Conditional recommendation; low-certainty evidence)**
Recommendation 1.3	WHO recommends offering conditional incentives (conditioned on school attendance and/or remaining unmarried) as a broad strategy to increase educational attainment and reduce child marriage as a part of social protection interventions for girls at highest risk of child marriage. **(Conditional recommendation; moderate-certainty evidence)**

Recommendation 1.4	WHO recommends the implementation of interventions to remove gender-related barriers to education and ensure girls' completion of 12 years of quality education. **(Strong recommendation; moderate-certainty evidence)**
Recommendation 1.5	WHO recommends the implementation of interventions aimed at the economic empowerment of girls to improve their financial literacy, access to savings, and employment skills and prospects, and to expand alternatives to marriage before age 18. **(Strong recommendation; moderate-certainty evidence)**
Recommendation 1.6	WHO recommends the formulation and implementation of laws that restrict marriage before age 18, consistent with human rights standards. **(Conditional recommendation; very-low-certainty evidence)**
Good practice statement 1.1	Political, governmental, religious, traditional and other influential leaders should be mobilized to support the prevention of child marriage and promotion of girls' rights.
Good practice statement 1.2	Efforts to address the needs and rights of women and girls should recognize and address the specific needs and rights of ever-married girls and those in formal or informal unions.
Good practice statement 1.3	Adolescents, including those who are ever married or in formal or informal unions, should be meaningfully engaged in the design, implementation, monitoring and evaluation of efforts to address their needs and rights.

A three-phased approach was utilized to identify peer-reviewed journal publications in English to inform the development of the updated recommendations on preventing child marriage and supporting married girls. First, studies included in existing systematic reviews related to child marriage were appraised for their relevance to the PICO questions. Second, a systematic search of additional databases from relevant fields was conducted to identify natural experiments from legal and/or policy reform. Third, a systematic search of additional databases from relevant fields was conducted to identify studies that consider macro-level drivers of child marriage and interventions to address them. This approach identified 55 unique references that were ultimately included in the GRADE process.

3.1.1 Recommendation 1.1

Recommendation 1.1	WHO recommends the implementation of interventions to empower girls by building their knowledge, skills, assets and social networks. (Conditional recommendation; low-certainty evidence)

Background

The WHO Guideline Steering Group examined the effects of interventions aimed at building adolescent girls' protective assets and promoting positive gender socialization to prevent child marriage.

WHO defines empowerment as "a process through which people gain greater control over decisions and actions affecting their health" *(44)*. While a problem prevention approach (in this case, a child marriage prevention approach) is useful and important, there is growing recognition of the need for positive youth development approaches *(45)*. Research has demonstrated the importance of supporting adolescents' empowerment by providing them with opportunities to build their core protective assets, which enable them to grow and develop in good health, avoid and mitigate poor health outcomes, and thrive in other aspects of their lives *(46-48)*. These core assets are:

- competence (i.e. the abilities and skills to do specific tasks)
- confidence (i.e. a sense that one can do something and have a positive sense of self-worth)
- connection (i.e. positive bonds with people and institutions)
- character (i.e. a sense of right and wrong and respect for standards of right behaviour) and
- caring (i.e. a sense of sympathy and empathy for others).

Gender socialization is defined as a "process by which individuals develop, refine and learn to 'do' gender through internalizing gender norms and roles as they interact with key agents of socialization, such as their family, social networks and other social institutions" *(49)*. Unequal gender norms are widespread across contexts, although they may manifest differently *(50)*. As children and adolescents grow and develop cognitively, psychologically and socially, they consciously and unconsciously absorb and assimilate these norms in the form of their own beliefs, attitudes, values and practices.

The 2011 edition of the guideline included a PICO question to determine if efforts to inform and empower adolescents are effective in delaying marriage among girls under age 18. The systematic review process at that time did not find any studies that met the inclusion criteria. The Guideline Development Group (GDG) considered ungraded evidence that interventions to inform and empower girls, in combination with interventions to influence family and community norms, can positively affect attitudes and behaviours related to delaying the age of marriage. Despite the limitations of the evidence at that time, the 2011 GDG made the following strong recommendation: implement interventions to inform and empower girls, in combination with interventions to influence family and community norms, to delay the age of marriage among girls under 18 years of age.

PICO question

Do interventions to empower girls by building their protective assets and/or promoting positive gender socialization reduce child marriage? For further details on PICO question 1.1 (including comparators and secondary outcomes), refer to **Annex 4.**

Summary of the evidence

Seventeen studies from 17 interventions were ultimately included in the review for this PICO question, of which 11 were randomized controlled trials (RCTs) and six were quasi-experimental studies (QES).

With regard to reductions in child marriage, 11 RCTs from Bangladesh, Ethiopia, India, Liberia, Malawi, Mali, Nepal, Niger, Uganda, the United Republic of Tanzania and Zambia provided low-certainty evidence regarding the effect of interventions to build girls' protective assets on reductions in child marriage. Specifically, three studies found significant reductions in child marriage, one multi-country study found a significant reduction in child marriage in some settings but not in others, and seven did not

find significant intervention-attributable effects. Three QESs from Bangladesh, Ethiopia and India provided very-low-certainty evidence regarding the effect of interventions to build girls' protective assets on reductions in child marriage. Specifically, two found reductions in child marriage without statistical significance, while one found a significant reduction in marriage among younger adolescents but a significant increase in marriage among older adolescents.

Additionally, three RCTs from Bangladesh, Ethiopia and Nepal provided very-low-certainty evidence regarding the effect of interventions to promote positive gender socialization on reductions in child marriage. Specifically, one found a significant reduction in child marriage and two did not find significant intervention-attributable effects. One QES from Bangladesh provided very-low-certainty evidence regarding the effect of interventions to promote positive gender socialization on reductions in child marriage. Specifically, it found a non-significant reduction in child marriage when control variables were included to establish comparability of treatment and comparison groups.

With regard to improving knowledge about the consequences of child marriage and about SRHR, five RCTs from India, Malawi, Nepal, Uganda, United Republic of Tanzania and Zambia provided moderate-certainty evidence regarding the effect of interventions to build girls' knowledge. Specifically, three found significant increases in knowledge about SRHR, one found mixed results depending on the SRHR topic and setting, and one did not find significant intervention-attributable effects. Six QESs from Bangladesh, Egypt and India provided very-low-certainty evidence regarding the effect of interventions to build girls' protective assets. Specifically, one showed a significant increase in knowledge about child marriage and five found significant increases in knowledge about SRHR more broadly.

Additionally, one RCT from Nepal provided very-low-certainty evidence regarding the effect of interventions to promote positive gender socialization on knowledge about the consequences of child marriage and about SRHR. Specifically, it found a significant increase in knowledge about SRHR. One QES from Bangladesh provided very-low-certainty evidence regarding the effect of interventions to promote positive gender socialization on knowledge about the consequences of child marriage and about SRHR. Specifically, it did not find significant intervention-attributable effects.

With regard to self-esteem and agency, internalized gender norms, and supportive social networks, five RCTs from India, Malawi, Mali, Nepal, Niger, Uganda, United Republic of Tanzania and Zambia provided very-low-certainty evidence regarding the effect of interventions to build girls' protective assets. The collection of studies was assessed to be of very-low-certainty for two reasons. First, in the multi-site studies, significant change was found in some sites but not others. Second, three of the studies provided insufficient information to determine if the treatment and comparison groups were comparable. Of the five RCTs, two found significant increases in girls' self-esteem and agency, and three did not find significant intervention-attributable effects; one found a significant effect on girls' internalized gender norms and three did not find significant intervention-attributable effects; and one found a significant increase in girls' supportive social networks, while one found a significant increase in girls' supportive social networks in some settings but not in others. Four QESs from Bangladesh, Egypt and India provided very-low-certainty evidence regarding the effect of interventions to build girls' protective assets. Specifically, one did not find significant intervention-attributable effects on self-esteem and agency; one found a significant impact on internalized gender norms; and two found significant increases in girls' supportive social networks.

Additionally, one RCT from Nepal provided very-low-certainty evidence regarding the effect of interventions to promote positive gender socialization on self-esteem, agency and internalized gender norms. Specifically, it found a significant increase in girls' self-esteem and agency, but did not find a significant intervention-attributable effect on girls' internalized gender norms. One QES from Bangladesh provided very-low-certainty evidence regarding the effect of interventions to promote positive gender socialization. Specifically, it found a significant impact on some internalized gender norms, but not on others.

Finally, with regard to harms and/or unintended consequences, one RCT from Bangladesh provided moderate-certainty evidence regarding the effect

of a peer-facilitated empowerment curriculum. Specifically, it found a possible indirect but significant impact on marital decision-making, whereby the intervention incentivized a subset of more conservative girls within the community to marry significantly earlier. In the study, conservatism was assessed using a composite attitude index from responses indicating support for restrictive gender norms.

Notably, the studies identified for this PICO question varied widely in their content, scope, quality of intervention design, dose and intensity, and theory of change. Overall, the strongest evidence supported asset and/or skill-building interventions, as opposed to those that promote positive gender socialization.

Certainty of the evidence for the recommendation

In summary, the certainty of the available evidence ranged from very low to moderate.

Rationale for the strength and direction of the recommendation

The GDG spent considerable time deliberating on the strength of this recommendation. It discussed the challenge of issuing a recommendation regarding interventions to build girls' protective assets and/or promote positive gender socialization due to the large differences in the content, quality and conceptual underpinnings of the interventions identified in this review. Because the evidence on the effectiveness of the intervention is mixed depending on these differences, and uncertainty persists regarding the content and conceptual underpinnings that are most effective among different populations, the GDG agreed that it would not be appropriate to make a strong recommendation or a good practice statement. However, based on its assessment that the balance of benefits to harms across all outcomes favours the intervention, the GDG ultimately reached a consensus to make a conditional recommendation in favour of this intervention.

Overall, the GDG agreed that the intervention would be largely acceptable to girls, their families and the broader community, although it may not be supported by some who oppose the empowerment of women and girls. It agreed that the intervention has been demonstrated to be feasible and can be implemented with limited human and financial resources, if needed. The intervention can also contribute to meeting girls' needs and fulfilling their rights, including their right to gender equality, and can promote equity if well designed and implemented.

The GDG noted that this conditional recommendation represents a departure from the 2011 edition of the guideline, which included the following strong recommendation: "Implement interventions to inform and empower girls, in combination with interventions to influence family and community norms, to delay the age of marriage among girls under 18 years of age". This change from a strong recommendation to a conditional recommendation is primarily due to very low certainty regarding the effects of these interventions on key outcomes based on currently available evidence, including inconsistent effects on rates of child marriage, as well as marked heterogeneity in the interventions evaluated. The GDG discussed the implications of this change for the field, given that interventions aimed at empowering girls are nearly ubiquitous in multi-component programmes to prevent child marriage. It suggested that the decision to implement interventions to empower girls for the prevention of child marriage should be guided by an understanding of the types of interventions that hold the most promise of being effective, scalable and sustainable and the contexts and populations of girls who benefit most from such interventions *(51)*. Overall, the evidence review and programmatic experience suggested that the most promising interventions are those with the following attributes: they are girl-centred, engage the community as allies and advocates, build valued skills as assets that cannot be taken away (e.g. financial literacy), create spaces where girls can feel safe and supported, and connect girls to services *(31, 32, 52)*.

Finally, the GDG emphasized that the conditionality of this recommendation does not imply the conditionality of WHO's recommendations on sexuality education. The strong recommendation from the 2011 edition of the guideline to "Offer interventions that combine curriculum-based sexuality education with contraceptive promotion to adolescents, in order to reduce pregnancy rates" still stands, as do the United Nations' *International technical guidance on sexuality education and International technical and programmatic guidance on out-of-school comprehensive sexuality education (31, 32)*.

3.1.2 Recommendation 1.2

Recommendation 1.2	WHO recommends that programmes aiming to reduce child marriage and support married girls engage with parents/guardians, boys and men, and the broader community to create and sustain a gender-equitable and enabling environment. **(Conditional recommendation; low-certainty evidence)**

Background

The WHO Guideline Steering Group examined the effects of interventions to (i) build awareness of and change attitudes and norms about child marriage, the rights of girls, and gender equality among parents/guardians and the broader community, and (ii) build gender-equitable attitudes, norms and behaviours among boys and men aimed at preventing child marriage. The rationale was that in such a gender-equitable environment, girls and their families would be supported to enable girls to stay in school and to avoid early marriage and motherhood.

From research evidence and programmatic experience, it is clear that while building personal, social, and economic assets in adolescent girls is important, this alone is often not sufficient to enable them to make decisions for themselves about when and with whom to marry. These efforts at the individual level must be combined with gender-synchronized approaches to reach men and boys; and to identify and and address influential individuals, networks and institutions around them to support decisions for girls to not marry *(53, 54)*. Gender-synchronized approaches are those that operate at the "intentional intersection of gender-transformative efforts reaching both men and boys and women and girls of all sexual orientations and gender identities. They engage people in challenging harmful and restrictive constructions of masculinity and femininity that drive gender-related vulnerabilities and inequalities and hinder health and well-being" *(55)*.

In particular, men and boys have a role to play as partners in creating such a gender-equitable environment to benefit the lives of women and girls, and their own. The perceived roles of men and boys in gender and development work have shifted over time: initially they were invisible; then they were seen as promiscuous, violent perpetrators; over time, there was growing understanding of them as socially constructed within wider contexts of power relations and dynamics of masculinities (including as victims); and today, there is greater recognition that men also have interests in ending gender inequalities (e.g. in violence, health) from self-interest to broader perspectives based on equality and rights *(56, 57)*.

The 2011 edition of the guideline included a PICO question to determine if efforts to influence family and community norms concerning marriage were effective in delaying marriage among girls under age 18. The PICO question did not make a specific reference to boys and men. The systematic review process at that time did not find any studies that met the inclusion criteria. The GDG considered ungraded evidence that demonstrated improvements in community members' knowledge and attitudes regarding the potential dangers of early marriage as a result of community-level and family-level interventions, and made the following strong recommendation: *"Undertake interventions to delay the marriage of girls until 18 years of age by influencing family and community norms. These interventions should be undertaken in conjunction with interventions directed at political leaders/planners"*.

PICO questions

- Do interventions to build awareness of and change attitudes and norms about child marriage, the rights of girls, and gender equality among parents/guardians of girls and boys and/or the broader community reduce child marriage?
- Do interventions to build gender-equitable attitudes, norms and behaviours among boys (as peers and/or partners) and/or men (as partners or fathers) reduce child marriage?

For further details on PICO questions 1.2a and 1.2b (including comparators and secondary outcomes), refer to **Annex 4**.

Summary of the evidence

Eight studies from eight interventions were ultimately included in the review for these PICO questions, of which four were RCTs and four were QESs.

With regard to reductions in child marriage, four RCTs from Bangladesh, Ethiopia and Nepal provided low-certainty evidence regarding the effect of interventions to engage parents/guardians and the broader community on reductions in child marriage. Specifically, one found a significant reduction in child marriage, while the other three did not find significant intervention-attributable effects. Two QESs from Burkina Faso, Ethiopia, India and the United Republic of Tanzania provided low-certainty evidence regarding the effect of interventions to engage parents/guardians and the broader community on reductions in child marriage. Specifically, one found a significant reduction in child marriage in some settings but not others, while the other did not find significant intervention-attributable effects. One QES from India provides very-low-certainty evidence regarding the effect of interventions to engage boys and men on reductions in child marriage; it also did not find significant intervention-attributable effects.

With regard to knowledge about the consequences of child marriage and about SRHR, one QES from India provided very-low-certainty evidence regarding the effect of interventions to engage parents/guardians and the broader community. Specifically, it found a significant increase in knowledge about child marriage among adults. One QES from India provided very-low-certainty evidence regarding the effect of interventions to engage boys and men. Specifically, it found a significant increase in knowledge about child marriage among boys.

With regard to gender-equitable attitudes, behaviours and/or norms, two RCTs from Bangladesh and Nepal provided low-certainty evidence regarding the effect of interventions to engage parents/guardians and the broader community. Specifically, one found a significant improvement in gender-equitable attitudes, behaviours and norms, while the other did not find significant intervention-attributable effects. Three QESs from Bangladesh, Egypt and India provided very-low-certainty evidence regarding the effect of interventions to engage parents/guardians and the broader community, with all three finding non-significant improvements in gender attitudes. Two QESs from Egypt and India provided very-low-certainty evidence regarding the effect of interventions to engage boys and men, of which one found significant improvements in gender attitudes, while the other did not find significant intervention-attributable effects.

Notably, no studies assessed the harms and/or unintended consequences of such interventions. Additionally, very few studies disaggregated the results of the interventions by sex, and most studies focused on family members and community gate-keepers, rather than on men and boys in particular. Finally, overall, the interventions that utilized social norm change strategies—as conceptualized by the studies—did not have a significant effect on reducing child marriage or improving related outcomes for girls.

Certainty of the evidence for the recommendation

In summary, the available evidence was of very low to low certainty.

Rationale for the strength and direction of the recommendation

The GDG spent considerable time deliberating on the strength of this recommendation. They discussed the challenge of issuing a recommendation regarding the intervention due to the large differences in the content, quality and conceptual underpinnings of the interventions identified in this review. Because the evidence is mixed on the effectiveness of the intervention depending on such differences, and uncertainty persists regarding the content and conceptual underpinnings that are most effective among different populations, the GDG agreed that it would not be appropriate to make a strong recommendation or a good practice statement. They also noted that some practitioners consider community engagement to be a complementary activity to support the implementation of other interventions to prevent child marriage, while some consider it to be an intervention in its own right. Thus, the GDG ultimately reached a consensus to make a conditional recommendation in favour of this intervention.

The GDG noted that this conditional recommendation represents a departure from the 2011 edition of the guideline, which included the following strong

recommendation: *"Undertake interventions to delay marriage of girls until 18 years of age by influencing family and community norms. These interventions should be undertaken in conjunction with interventions directed at political leaders/planners"*. This change from a strong recommendation to a conditional recommendation is primarily due to low to very low certainty regarding the effects of these interventions on the outcomes discussed above based on the currently available evidence, as well as marked heterogeneity in the interventions evaluated.

The GDG discussed the implications this change has for the field, given that the intervention is a common component of multi-component programmes to prevent child marriage. They recommended that the decision to implement the intervention should be guided by an understanding of the types of interventions that hold the most promise and the contexts and populations that benefit most from such interventions. Specifically, there is a need to understand and address the structural underpinnings of norms and gender stereotypes that interventions seek to shift *(58)*. In some settings, such underpinnings might include transactional aspects of marriage (e.g. the practice of bride price/dowry), especially in the context of socioeconomic hardship, and how these aspects drive decisions about marriage timing. In other settings, such underpinnings might include norms and gender stereotypes about school-going and women's entry into the workforce. In settings where premarital sex and pregnancy are drivers of child marriage, changes in norms may be brought about by greater acknowledgement of adolescent sexual activity (coerced and/or consensual) and better access to SRH services to prevent pregnancy.

Overall, the GDG agreed that the intervention would be largely acceptable to parents/guardians, men and boys, and the broader community. They agreed that the intervention has been demonstrated to be feasible and can be implemented with limited human and financial resources, if needed. The intervention can also contribute to meeting girls' needs and fulfilling their rights, including their right to gender equality, and can promote equity if well designed and implemented. While no studies examined harms and/or unintended consequences, the GDG noted one potential harm, which is that the intervention could reinforce the authority of individuals other than girls themselves regarding marital decision-making. The GDG also reflected on programmatic experience suggesting the potential for backlash to such interventions and they, therefore, emphasized that strategic and intentional efforts must be made to build and sustain support for such interventions.

3.1.3 Recommendation 1.3

Recommendation 1.3	WHO recommends offering conditional incentives (conditioned on school attendance and/or remaining unmarried) as a broad strategy to increase educational attainment and reduce child marriage as a part of social protection interventions for girls at highest risk of child marriage. **(Conditional recommendation; moderate-certainty evidence)**

Background

The WHO Guideline Steering Group examined the effects of conditional financial incentives, unconditional financial incentives (labelled or otherwise), and non-financial incentives aimed at preventing child marriage. Conditional incentives are incentives that are given to beneficiaries conditional on whether they undertake specific actions (e.g. sending their children to school or attending regular health visits), while unconditional incentives are those that are given to beneficiaries without any specific requirements beyond eligibility *(59, 60)*. Unconditional incentives can either be labelled, wherein their intended impact is clearly communicated to beneficiaries, or unlabelled.

In 2022, the World Bank estimated that 712 million people lived below the US$2.15 per day poverty line *(61)*. Conditional and unconditional financial incentives have been widely applied to alleviate poverty, including most recently in the context of the Coronavirus disease (COVID-19) pandemic *(62)*.

In recent years, there has been growing interest in the use of such incentives to prevent child marriage, given that poverty is a well recognized driver of child marriage across contexts. There is now considerable research and programmatic experience in providing families with incentives to enrol girls in school, to keep them in school, and to ensure that they complete their schooling, as a means of contributing to several outcomes including preventing child marriage *(63)*.

The 2011 edition of the guideline included a PICO question to determine if providing economic incentives to families is effective in delaying the marriage of girls under age 18. The systematic review process at that time did not find any evidence that met the inclusion criteria. The GDG discussed several ungraded studies that collectively indicated an improvement in school retention, as well as a reduction in early marriage, due to interventions that involved economic incentives. However, the GDG noted methodological flaws in the evaluation designs that limited the attribution of the outcomes observed to the interventions implemented. They also concluded that there were potential negative effects of these interventions. Given this, the GDG decided not to make a recommendation for action. Instead, they highlighted the need for research in this area, as follows: *"Undertake research to determine the feasibility, effectiveness and long-term impact of economic incentives on adolescent girls and their families as a means of delaying the age of marriage until girls are 18 years of age"*.

PICO question

Do the following types of incentives reduce child marriage:

- conditional financial incentives
- unconditional financial incentives (labelled or otherwise) and/or
- non-financial incentives?

For further details on PICO question 1.3 (including populations, comparators and secondary outcomes), refer to **Annex 4**.

Summary of the evidence

Thirteen studies from 12 interventions were ultimately included in the review for this PICO question, of which seven were RCTs, four were QESs, and two were observational studies/natural experiments.

With regard to reductions in child marriage, five RCTs from Bangladesh, India, Kenya and Malawi (Malawi being evaluated both in the short term and long term) provided moderate-certainty evidence regarding the effect of conditional financial incentives on reductions in child marriage. Specifically, four (conditioned on staying unmarried or in school) found significant reductions in child marriage, while one (conditioned on staying in school) found a significant intervention-attributable effect in the long term but not in the short term. Four QESs from Burkina Faso, Ethiopia, Mexico and United Republic of Tanzania provided moderate-certainty evidence regarding the effect of conditional financial incentives on reductions in child marriage. Specifically, one (conditioned on staying unmarried) found a significant reduction in child marriage, one (conditioned on staying unmarried) found a significant impact on delaying marriage but not on reducing child marriage, one (conditioned on staying unmarried) found mixed results across intervention arms and settings, and one did not find a significant intervention-attributable effect. Two observational studies from Bangladesh and Pakistan (conditioned on staying unmarried and in school) provided very-low-certainty evidence regarding the effect of conditional financial incentives on reductions in child marriage. Specifically, the study in Pakistan found a significant impact on delaying marriage, while the study in Bangladesh found a large decline in the proportion of girls married as children, but statistical significance tests were not presented.

Additionally, four RCTs from Malawi and Zambia provided moderate-certainty-evidence regarding the effect of unconditional financial incentives on reductions in child marriage. Specifically, one found a significant reduction in child marriage, while the other three did not find significant intervention-attributable effects. One observational study/natural experiment from Pakistan provided very-low-certainty evidence regarding the effect of unconditional financial incentives on reductions in child marriage. Specifically, it found a statistically significant impact on delaying marriage but not on reducing child marriage.

With regard to educational outcomes, five RCTs from Bangladesh, Kenya, Liberia and Malawi (conditioned on staying unmarried and attending mentoring sessions [Liberia]) provided moderate-certainty

evidence regarding the effect of conditional financial incentives on educational outcomes, with all five finding significant improvements. Three QESs from Burkina Faso, Ethiopia, India and the United Republic of Tanzania provided very-low-certainty evidence regarding the effect of conditional financial incentives on educational outcomes. Specifically, two (conditioned on staying unmarried and in school) found improvements in educational outcomes, and one (conditioned on staying unmarried and in school) found mixed results across settings; however, the statistical significance tests were not presented. Two observational studies from Bangladesh and Pakistan (conditioned on school enrolment and attendance) provided very-low-certainty evidence regarding the effect of conditional financial incentives on educational outcomes, with both finding improvements; however, statistical significance tests were not presented.

Additionally, two RCTs from Malawi provided moderate-certainty evidence regarding the effect of unconditional financial incentives on educational outcomes. Specifically, both found significant improvements in educational outcomes, but the improvements were not sustained over time. One observational study/natural experiment from Bangladesh provided very-low-certainty evidence regarding the effect of unconditional financial incentives. Specifically, it found an improvement in educational outcomes, but statistical significance tests were not presented.

With regard to SRHR outcomes, five RCTs from Bangladesh, Kenya, Liberia and Malawi provided moderate-certainty evidence regarding the effect of conditional financial incentives (conditioned on staying unmarried and attending monitoring sessions [Liberia]) on SRHR outcomes, with all five finding statistically significant improvements. Three QESs from Burkina Faso, Ethiopia, Mexico and the United Republic of Tanzania provided very-low-certainty evidence regarding the effect of conditional financial incentives on SRHR outcomes. Specifically, two (conditioned on staying unmarried and in school) found statistically significant improvements in SRHR outcomes, and one (conditioned on staying unmarried and in school) found mixed results across settings. One observational study from Pakistan (conditioned on school enrolment and attendance) provided very-low-certainty evidence regarding the effect of conditional financial incentives; specifically, it found significant improvements in SRHR outcomes.

Additionally, four RCTs from Kenya, Malawi and Zambia provided high-certainty evidence regarding the effect of unconditional financial incentives on SRHR outcomes. Specifically, three found significant improvements in SRHR outcomes, while the fourth found non-significant improvements in SRHR outcomes that were not sustained over time.

Of note, some studies involved financial incentives as a component of social protection strategies that were not explicitly tied to delayed marriage or school enrolment. Overall, these results suggested that conditional financial incentives may be an effective intervention to address poverty as a driver of child marriage.

Certainty of the evidence for the recommendation

In summary, the available evidence was of very low to high certainty.

Rationale for the strength and direction of the recommendation

The GDG made a conditional recommendation in favour of this intervention based on the certainty of the evidence available and its expert consensus. There was considerable debate about the high degree of variation in the interventions identified in the review: the type, size, timing, scale and funding sources of the incentives; whether the incentives were conditional or unconditional; and the conditionality of the conditional incentives.

Overall, the GDG agreed that the evidence suggested conditional incentives are more effective in reducing child marriage than unconditional incentives, and that conditional incentives should be conditioned on girls' school attendance and/or remaining unmarried. The systematic review team for the questions on child marriage noted that while six of the included studies conditioned incentives on school attendance, three conditioned incentives on school attendance and on remaining unmarried. It suggested that in settings where marriage precludes school attendance, it may be reasonable to consider school attendance as a proxy for remaining unmarried, particularly because enforcement of school attendance may be more feasible than enforcement of delayed marriage.

A few members of the GDG shared programmatic experiences that the length of incentive schemes and the degree to which participants of the schemes could predict future incentives also had an impact on their effectiveness *(64)*. Beyond this, however, the GDG decided that the evidence was not sufficient to recommend other intervention attributes (e.g. regarding the type, size, timing, scale and funding sources of incentives) at this time.

Overall, the GDG posited that the acceptability of financial incentive interventions likely varies by stakeholder group: they are likely to be acceptable to girls and their families but may be less so to policy-makers. As such, it noted that decisions about such interventions can be political and thus they are susceptible to modifications and even suspensions. Where financial incentives have been implemented, either in the context of a project or a large-scale programme, the GDG noted that they have been shown to be feasible. However, by definition they require the investment of financial resources and management capacity. The GDG emphasized that financial incentive interventions can contribute to promoting equity if well designed and implemented. Finally, it cautioned that if they are discontinued, there is a risk that early marriage rates may rebound. Thus, the GDG emphasized that the scalability and sustainability of financial incentive interventions must be carefully considered prior to their implementation.

3.1.4 Recommendation 1.4

Recommendation 1.4	WHO recommends the implementation of interventions to remove gender-related barriers to education and ensure girls' completion of 12 years of quality education. **(Strong recommendation; moderate-certainty evidence)**

Background

The WHO Guideline Steering Group examined the effects of interventions to improve the availability and/or quality of educational opportunities on the prevention of child marriage.

While 50 million more girls were enrolled in school in 2023 compared with 2015, completion rates of lower and upper secondary education, at 79% and 61%, lag behind the completion rate for primary education, which is 89% *(65)*. There is a large body of evidence on gender-related barriers to education. A recent review set out 18 such barriers: lack of support for girls' education; child marriage and adolescent pregnancy; lack of information on returns to education and/or alternative roles for women; school-related gender-based violence; gender-insensitive school environments; lack of safe spaces and social connections; lack of teaching materials and supplies; insufficient academic support; inadequate sports programmes for girls; inadequate health and childcare services; inadequate life skills; inadequate resources and facilities for menstrual health management; lack of water and sanitation; inadequate school access; poor policy/legal environment; inability to afford tuition and fees; inability to afford school materials; and lack of adequate food *(66)*. The review concluded that there is strong evidence of the effectiveness of interventions for only three of these barriers: inability to afford tuition and fees, lack of adequate food, and insufficient academic support. It reported promising evidence for the effectiveness of interventions for three more: lack of water and sanitation, inadequate school access, and inability to afford school materials.

SDG 4 on inclusive, equitable, quality education and lifelong learning includes a target aiming to ensure that all girls and boys complete 12 years of education by 2030. UNESCO stresses that access to education must be matched with quality education and sets out five dimensions of quality – learners, environments, content, processes and outcomes – as well as indicators for measuring quality *(67)*.

The 2011 edition of the guideline included a PICO question to determine if expanding the availability of education for girls is effective in delaying marriage among girls under age 18. The systematic review process at that time did not find any evidence that met the inclusion criteria. The GDG noted population-level data and ungraded evidence that demonstrated

a positive, protective relationship between the level of schooling and age of marriage. The GDG noted that methodological flaws, such as lack of randomization, lack of control groups and/or lack of baseline data limited the ability to attribute outcomes to the interventions. However, the GDG decided that there were health, social and economic benefits to girls enrolling in school, staying in school and completing schooling. Based on this, it made the following strong recommendation: "Increase educational opportunities for girls through formal and non-formal channels to delay marriage until 18 years of age". Alongside this, it highlighted the need for research in this area, as follows: "Undertake research to assess the impact of improved educational availability and school enrolment on the age of marriage".

PICO question

Do interventions to improve the availability and/or quality of educational opportunities for girls and young women reduce child marriage? For further details on PICO question 1.4 (including populations and secondary outcomes), refer to **Annex 4**.

Summary of the evidence

Seventeen studies from assessments of 28 national policy changes and three experimental interventions were ultimately included in the review for this PICO question, of which four were RCTs, one was a QES and 12 were observational studies/natural experiments.

Four RCTs from Kenya, India and Zimbabwe provided high-certainty evidence regarding the effect of life skills curricula and/or support to stay in school on reductions in child marriage. Specifically, two found significant reductions in child marriage, and one found mixed results across intervention arms. The fourth RCT did not find a significant intervention effect, although the lack of impact may be related to the low prevalence of child marriage in the study's target age group.

One multi-site QES from Burkina Faso, Ethiopia and the United Republic of Tanzania provided very-low-certainty evidence regarding the effect of the provision of school materials on reductions in child marriage. Specifically, it found a non-significant reduction in child marriage.

Finally, 12 observational studies/natural experiments from Bangladesh, Benin, Burkina Faso, Burundi, Cameroon, Colombia, the Democratic Republic of the Congo, Ethiopia, Ghana, Indonesia, Kenya, Lesotho, Liberia, Malawi, Mozambique, Namibia, Rwanda, Türkiye, Uganda, the United Republic of Tanzania, Zambia and Zimbabwe provided very-low-certainty evidence regarding the effect of improved availability of educational opportunities (through school construction, tuition fee elimination, scholarships, and stipend programmes) on reductions in child marriage. Specifically, seven found significant and large reductions in child marriage over time, two showed significant but small reductions in child marriage, one found mixed results across settings, and two did not find significant intervention-attributable effects.

Overall, these studies suggest that policies to improve access to education and/or remove barriers to schooling have a broad positive impact on both educational and child marriage outcomes. Several studies demonstrated the importance of investing in improved access to secondary school or programmes that address the transition to secondary school. Additionally, evidence supports targeting the most marginalized segments of the population to close opportunity gaps in access to education.

Notably, no studies assessed the harms and/or unintended consequences of interventions to improve the availability and/or quality of educational opportunities aimed at preventing child marriage.

Certainty of the evidence for the recommendation

In summary, the available evidence was of very low to high certainty.

Rationale for the strength and direction of the recommendation

The GDG made a strong recommendation in favour of this intervention based on the certainty of the evidence available and their expert consensus. They clarified that the specification of 12 years of quality education aligns with guidance from UNESCO *(67)*. Additionally, while the GDG formulated the recommendation to include all adolescents, they emphasized that interventions should prioritize the most marginalized segments of the population to promote equity and more efficiently close opportunity gaps. Alongside this, the GDG highlighted that girls who have dropped out of school, including due to marriage or pregnancy, should be permitted, encouraged and supported to re-enter education, including alternatives to formal education, where

appropriate. Finally, while the recommendation focuses on ensuring girls complete 12 years of quality education, the GDG recognized that boys also face barriers to school performance and completion; thus, they emphasized that efforts need to be made to ensure all children receive at least 12 years of quality education *(68)*.

The GDG noted that the intervention is likely to be acceptable to girls, their families and the broader community, but there may be reservations from some who oppose girls' and women's education. Additionally, while the intervention has been demonstrated to be feasible in some contexts, the GDG commented that the intervention may raise concerns among policy-makers due to financial and human resource implications. Overall, there was strong consensus among the GDG members that the intervention would promote gender equality and promote equity, more generally. Thus, the GDG decided that the benefits of the intervention far outweigh its potential harms.

3.1.5 Recommendation 1.5

Recommendation 1.5	WHO recommends the implementation of interventions aimed at the economic empowerment of girls to improve their financial literacy, access to savings, and employment skills and prospects, and to expand alternatives to marriage before age 18. **(Strong recommendation; moderate-certainty evidence)**

Background

The WHO Guideline Steering Group examined the effects of interventions to improve the economic empowerment of girls aimed at preventing child marriage.

There is growing investment in, research on and action for improving the well-being of adolescent girls in LMICs. There are several relevant conceptual and operational frameworks in the public arena. A recent World Bank publication on this subject proposed that early marriage, early fertility and low educational attainment are tightly linked; and that efforts to delay marriage and fertility, and increase educational attainment, could contribute to strengthening human capital, improving health outcomes for adolescent girls and their future children, increasing girls' and women's empowerment, and reducing the risk of violence. It then posited that this could break the intergenerational transmission of poverty. Concerning the subject of this PICO question – in other words, economic empowerment – the World Bank publication discussed the evidence on job opportunities, information about job opportunities, vocational training, life skills building, mentoring and empowerment programmes *(69)*.

The 2011 edition of the guideline included a PICO question to determine if efforts to inform and empower adolescents are effective in delaying marriage among girls under age 18. However, neither the systematic review process nor the GDG's discussion on this PICO question at that time addressed economic empowerment. The 2011 edition also included a PICO question to determine if expanding the availability of livelihood opportunities for girls was effective in delaying marriage among girls under age 18. The systematic review process at that time did not identify any studies that met the inclusion criteria. The GDG discussed ungraded evidence regarding interventions to improve the livelihoods of adolescent girls in relation to delaying marriage. While the interventions were effective at delaying marriage among girls under 18 years of age, the GDG noted weaknesses in study designs, as well as challenges in implementing these interventions. They also noted that while there were potential benefits of such interventions, there were also potential harms. Given this, the GDG decided not to make a recommendation for action. Instead, it highlighted the need for research in the following area: *"Undertake research on the feasibility of interventions to improve the livelihoods of adolescent girls as well as their impact on delaying their age of marriage"*.

PICO question

Do the following types of interventions that improve the economic empowerment of girls reduce child marriage?

- savings
- bundled services *(70)*
- demand-driven job services
- childcare services
- rural electrification
- land rights
- microcredit
- business management training
- networks and mentors, and/or
- integrated services for farming

For further details on PICO question 1.5 (including comparators and secondary outcomes), refer to **Annex 4**.

Summary of the evidence

Eleven studies from 11 interventions were ultimately included in the review for this PICO question, including six RCTs, three QESs, and two observational studies/natural experiments. For the purpose of analysis, interventions were divided into the following categories: (i) financial supports and services (i.e. girls' clubs in safe spaces with provision of information and resources including savings accounts, life skills and livelihood training, and access to microfinance); (ii) human capital development (i.e. financial literacy and business management training); and (iii) social infrastructure (i.e. childcare, networks and mentors, job services, and career resources).

With regard to prevention of child marriage, one RCT from Zambia provided very-low-certainty evidence regarding the effect of financial supports and services interventions on reducing child marriage. Specifically, it did not find a significant intervention-attributable effect. One QES from Bangladesh provided very-low-certainty evidence regarding the effect of financial supports and services interventions on reducing child marriage. Specifically, it found a non-significant reduction in child marriage when control variables were included to establish comparability of treatment and comparison groups.

Meanwhile, four RCTs from Bangladesh, Ethiopia, Liberia and Uganda provided moderate-certainty evidence regarding the effect of human capital development interventions on reducing child marriage, all of which found significant reductions in child marriage. Four QESs from Bangladesh, Ethiopia and India provided very-low-certainty evidence regarding the effect of human capital development interventions on reducing child marriage. Specifically, two found significant reductions in child marriage, one found a significant delay in marriage but not in overall reductions in child marriage, and one found a non-significant reduction in child marriage.

Finally, three RCTs from India, Liberia and Zambia provided moderate-certainty evidence regarding the effect of social infrastructure interventions on reducing child marriage, two of which found significant reductions in child marriage and one of which found a non-significant reduction in child marriage. Three QESs from Bangladesh, Ethiopia and India provided very-low-certainty evidence regarding the effect of social infrastructure interventions on reducing child marriage, all three of which found reductions in child marriage with inconclusive significance due to concerns regarding sample comparability. One observational study/natural experiment from Bangladesh provided very-low-certainty evidence regarding the effect of social infrastructure interventions on reducing child marriage. Specifically, it found a significant reduction in child marriage.

With regard to girls' employment, their access to and/or control over resources, and/or their economic autonomy, three RCTs from India, Uganda and Zambia provided moderate-certainty evidence regarding the effect of interventions to improve financial literacy. Specifically, one found a significant increase in girls' economic assets, and three found significant increases in girls' income-generating activities and/or paid employment. One observational study/natural experiment from Bangladesh provided very-low-certainty evidence regarding the effect of interventions to expand employment opportunities for girls. Specifically, it found a significant increase in female labour force participation.

In summary, the strongest quality evidence demonstrated that interventions focused on improving livelihood skills, including financial literacy, had a significant impact on reducing child marriage and increasing girls' employment, access to and/or control over resources, and/or economic autonomy.

Notably, no studies assessed harms and/or unintended consequences of interventions to improve the economic empowerment of girls.

Certainty of the evidence for the recommendation

In summary, the available evidence was of very low to moderate certainty.

Rationale for the strength and direction of the recommendation

The GDG made a strong recommendation in favour of this intervention based on the certainty of the evidence available and their expert consensus. The GDG emphasized the importance of both individual-level and societal-level interventions to improve the economic empowerment of girls. Taking contextual factors into account, the GDG noted that it may be important to complement such interventions with gender-synchronized interventions to engage boys and men to support girls' economic empowerment, to prevent harms and/or unintended consequences *(56)*. Finally, the GDG commented that while the GRADE process downgrades the certainty of evidence generated from studies that utilize natural experiment designs, in the case of this PICO question, such studies provided unique insight into the scalability and sustainability of the intervention.

The GDG noted that the intervention is likely to be acceptable to girls, their families and the broader community, but there may be reservations from some opposed to girls' and women's employment and economic autonomy. Additionally, the intervention has been implemented at scale in some settings and has been found to be feasible. However, the GDG commented that implementing the intervention will require financial investment. Overall, there was strong consensus among the GDG members that the intervention would promote gender equality and advance equity, more generally. Thus, the GDG decided that the benefits of the intervention far outweigh its potential harms.

3.1.6 Recommendation 1.6

Recommendation 1.6	WHO recommends the formulation and implementation of laws that restrict marriage before age 18, consistent with human rights standards. **(Conditional recommendation; very-low-certainty evidence)**

Background

The WHO Guideline Steering Group examined the effects of laws aimed at preventing child marriage. International human rights laws and standards are clear in their opposition to child marriage. Article 16, paragraph 2, of the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) provides that "the betrothal and the marriage of a child shall have no legal effect" *(71)*. Article 24, paragraph 3 of the Convention on the Rights of the Child (CRC) provides that state parties should "take all effective and appropriate measures with a view to abolishing traditional practices prejudicial to the health of children" *(72)*.

Both the UNFPA–UNICEF Global Programme to End Child Marriage and Girls Not Brides stress the importance of having a minimum age of marriage, as this legally protects children from abuse, harm, violence and exploitation. Laws to address child marriage should be part of a comprehensive legal and policy framework that addresses its root causes, including gender inequality.

Criminalization is defined as the act of turning an activity into a criminal offense by making it illegal. In the context of child marriage, criminalization involves classifying the action as a criminal offense and attaching persecution and sanctions (such as jail or a fine). This has been shown to have negative consequences for girls, their families and communities, in addition to pushing child marriage underground *(73, 74)*.

Laws alone, however, are not enough to end child marriage. Too often governments use laws to respond to social issues without also putting in place the comprehensive policies and programmes needed to support social change, strengthen systems and make them more responsive, and address the drivers of the practice. Any implementation of child marriage

laws should be based on consultation with civil society organizations, put girls' rights at the centre including by acknowledging their evolving capacities to make autonomous decisions about their lives, and complement and support community-based efforts to change social norms and gender stereotypes that drive child marriage.

The 2011 edition of the guideline included a PICO question to determine if efforts directed at political leaders and/or planners, including those leaders at the community level, have resulted in the formulation of laws and policies to make marriage for girls before age 18 illegal, and another PICO question to determine if efforts directed at these stakeholders are effective in enforcing laws prohibiting marriage for girls before age 18. The systematic review process at that time did not identify any studies that met the inclusion criteria. The GDG observed that efforts to formulate laws and policies, and to enforce and monitor them, are unlikely to be addressed by intervention studies. The GDG also noted that such actions could have both beneficial and harmful outcomes. Despite the limited evidence and the potential harms, the GDG concluded that ongoing efforts are needed to promote laws prohibiting marriage before 18 years of age as an important measure to fulfil girls' rights and to prevent early pregnancy. The GDG issued the following strong recommendation: *"Encourage political leaders, planners and community leaders to formulate and enforce laws and policies to prohibit the marriage of girls before 18 years of age"*. It also highlighted the need for research in this area, as follows: *"Undertake research to identify effective interventions that result in the formulation, enforcement and monitoring of laws and policies, including unintended harmful consequences"*.

PICO question

Does the existence of child marriage prevention laws in line with those recommended by international treaty bodies, such as the CRC and CEDAW, reduce child marriage? For further details on PICO question 1.6 (including comparators and secondary outcomes), refer to **Annex 4**.

Summary of the evidence

Three studies from 24 national-level policy change interventions were ultimately included in the review for this PICO question, all of which were observational studies/natural experiments.

All three studies from (i) Benin, Bhutan, Kazakhstan, Mauritania, Nepal and Tajikistan, (ii) Ethiopia and (iii) Albania, Benin, Democratic Republic of the Congo, Egypt, Ethiopia, Guinea, Jordan, Kazakhstan, Liberia, Madagascar, Maldives, Namibia, Nepal, Peru, Sierra Leone and Togo, provided very-low-certainty evidence regarding the effect of laws on the minimum age of marriage on reductions in child marriage. Specifically, two found mixed effects across population groups, with significant reductions in child marriage among adolescents in urban but not rural areas in one, and significant reductions in child marriage among younger adolescents but not older adolescents in the other. The third found mixed results across settings and follow-up time points. None described or examined the effect of different penalties or punishments.

In summary, the evidence review suggested that the presence of child marriage laws is not consistently associated with a reduction in child marriage and, where there are statistically significant effects, they are only found for certain subsets of the population. Additionally, evidence suggested that the introduction of age-at-marriage laws may be associated with an initial decline in child marriage, but that this impact may not be sustained over time.

Notably, no studies assessed awareness and/or support for child marriage prevention laws, their application, nor their harms and/or unintended consequences.

Certainty of the evidence for the recommendation

In summary, the available evidence was of very low certainty.

Rationale for the strength and direction of the recommendation

The GDG made a conditional recommendation in favour of this intervention for two reasons. First, they noted that although child marriage laws have been widely implemented, the evidence on their effectiveness was limited. Second, the GDG commented on the absence of data from the evidence review on potential harms and/or unintended consequences of child marriage prevention laws, given programmatic experience suggesting that such laws have the potential to push child marriage underground and/or criminalize young people's sexuality and/or those involved.

The GDG agreed that the implication of the second concern is not that child marriage prevention laws should not be established, but that their formulation and implementation need careful consideration. Specifically, they emphasized that laws should be formulated according to human rights standards, notably those laid out by the CRC and CEDAW, among others, with the objective of prevention and response rather than punishment. Additionally, the GDG members discussed the challenge of harmonizing relevant laws and policies, especially those regarding the legal age of marriage, consent to sexual activity, and consent to receive SRHR services, as well as customary and/or traditional laws and informal unions. Given this complexity, the GDG agreed that efforts to formulate and implement child marriage prevention and response laws should be placed within a broader context of comprehensive legal reform *(73, 74)*. Further, the GDG reiterated that legal and policy reform should not be implemented on its own, but should be complemented with the other interventions recommended in the guideline.

Overall, the GDG decided that there is a balance of benefits to harms, because laws can be used to communicate the position and the rationale of governments, can have a powerful signaling effect in society, can create the provisions for further policy-making to address the drivers of child marriage, and can lead to the allocation of human and financial resources. This is in line with the approach used by other WHO guidelines in issuing recommendations regarding laws and policies *(37, 75)*.

Finally, the GDG discussed that the limitation of the evidence review to English-language literature may have resulted in the exclusion of trends in certain regions such as Latin America, where informal unions among young people are now the norm and where specific groups (e.g. Indigenous communities) have been stigmatized because of their particular norms and practices.

3.1.7 Good practice statement 1.1

Good practice statement 1.1	Political, governmental, religious, traditional and other influential leaders should be mobilized to support the prevention of child marriage and promotion of girls' rights.

Background

The WHO Guideline Steering Group examined the effects of interventions directed at political, governmental, religious, and traditional leaders, as well as other influential leaders and groups in the community on preventing child marriage.

As discussed in relation to Recommendation 2, it is clear that while building personal, social and economic assets in adolescent girls is important, this by itself is often not sufficient to enable them to make decisions by and for themselves about when and with whom to marry. This may be especially relevant in contexts where marriage is considered a protective social institution. These individual efforts need to be combined with effective approaches to identify and address influential individuals, networks and institutions around them *(53)*. Research has shown that community leaders can hugely influence decisions made by families and communities in both positive and negative ways *(76)*.

The 2011 edition of the guideline included a PICO question to determine if efforts directed at political leaders and/or planners, including those at the community level, have resulted in the formulation of laws and policies to make marriage for girls before age 18 illegal. It also included a PICO question to determine if efforts directed at these stakeholders are effective in enforcing laws prohibiting marriage for girls before age 18. The systematic review process at that time did not identify any studies that addressed these questions. The GDG observed that efforts to formulate laws and policies and to enforce and monitor their enforcement are unlikely to be addressed by intervention studies. The GDG also noted that such actions could have both beneficial and harmful outcomes. Despite the limited evidence and the potential harms, the GDG concluded that ongoing efforts are needed to promote laws prohibiting marriage before 18 years of age as an important measure to fulfil girls' rights and to prevent early pregnancy. The GDG issued a strong

recommendation as follows: *"Encourage political leaders, planners, and community leaders to formulate and enforce laws and policies to prohibit the marriage of girls before 18 years of age"*. It also highlighted the need for research, as follows: *"Undertake research to identify effective interventions that result in the formulation, enforcement, and monitoring of laws and policies, including unintended harmful consequences"*.

PICO question

Do interventions to mobilize political, governmental, religious, traditional and/or other leaders reduce child marriage? For further details on PICO question 1.7 (including comparators and secondary outcomes), refer to **Annex 4**.

Summary of the evidence

Four studies from three interventions (including one multi-country study in three countries) were ultimately included in the review for this PICO question. As is standard practice using the GRADE methodology, interventions that combined interventions to mobilize political, governmental, religious, traditional, and/or other leaders with other interventions were included in the review, but the certainty of such evidence was downgraded.

One RCT from Nepal provided very-low-certainty evidence regarding the effect of community sensitization with leaders on reductions in child marriage. Specifically, it did not find a significant intervention-attributable effect.

One QES from Burkina Faso, Ethiopia and the United Republic of Tanzania provided very-low-certainty evidence regarding the effect of community dialogues with leaders on reductions in child marriage. Specifically, it found significant reductions in child marriage. Additionally, two observational studies/natural experiments from India provided very-low-certainty evidence regarding the effect of a policy mandating reserved seats for women in local government on reductions in child marriage. Specifically, the studies found a significant reduction in child marriage, increased age at first marriage, and a delay in the timing of marriage ceremonies.

One RCT from Nepal provided very-low-certainty evidence regarding the effect of community sensitization with leaders on increases in supportive social norms related to preventing child marriage and commitment to taking action to prevent child marriage. Specifically, it found a significant improvement in supportive social norms. Additionally, two observational studies/natural experiments from India provided very-low-certainty evidence regarding the effect of a policy mandating reserved seats for women in local government on supportive social norms related to the value of preventing child marriage and commitment to acting to prevent child marriage. Specifically, the studies found a statistically significant impact on gender gaps in aspirations related to norms on child marriage in the years following the enactment of the gender quotas policy.

Notably, no studies assessed the harms or unintended consequences of mobilizing political, governmental, religious, traditional, and/or other leaders to reduce child marriage.

Certainty of the evidence for the good practice statement

In summary, the available evidence was of very low certainty.

Rationale for the good practice statement

The GDG issued a good practice statement in favour of this intervention. The GDG noted that a wide range of interventions are implemented in this area, targeting different groups of influential leaders and using a variety of approaches. However, the GDG also noted that there is limited evidence of effectiveness of these interventions, which is to be expected given the nature of the intervention. Nevertheless, they concluded that there was high certainty of the potential benefits of this intervention and that it had a low likelihood of harms. Additionally, the GDG agreed that not including the intervention in efforts to prevent child marriage and promote girls' rights would be contrary to practice norms.

The GDG noted that what constitutes an influential leader will vary by context. While common examples might include political, religious, and traditional leaders, influential leaders could also include business or thought leaders, youth influencers, athletes, actors, musicians, social media influencers, and others. Additionally, taking into account contextual factors, the GDG noted that it may be especially helpful to mobilize female leaders to prevent child marriage and promote girls' rights. Regardless of the type of leader, there is firstly a need to understand their individual interests, motivations and perspectives as they pertain to child marriage

and to engage them in a dialogue with tailored messaging, and to try to reach and influence them using multiple channels.

However, members of the GDG cautioned that the involvement of influential leaders can have harms and/or unintended consequences when leaders lack knowledge or have misconceptions about the harms of child marriage and/or have unsupportive attitudes towards its prevention. Therefore, the GDG emphasized that implementers should consider working to sensitize and secure the support of such leaders, rather than to universally engage them or involve them. Likewise, it was noted that efforts should be made to ensure that such interventions do not inadvertently reinforce the power and authority of unsupportive leaders, thereby perpetuating gender stereotyping and the occurrence of child marriages.

In such cases where agreement is not possible, a difficult but pragmatic choice may need to be made to leave them out.

The GDG noted that based on programmatic experience, the intervention is likely to be both acceptable to influential leaders and feasible to implement. It could be implemented with limited resources where necessary. If the intervention is effective in mobilizing influential leaders, it has the potential to promote gender equality and rights. While the GDG noted that some influential leaders may not make a positive contribution, there was strong consensus among the GDG members that the intervention would promote gender equality and advance equity, more generally. Thus, the GDG decided that the benefits of the intervention far outweigh its potential harms.

3.1.8 Good practice statement 1.2

Good practice statement 1.2	Efforts to address the needs and rights of women and girls should recognize and address the specific needs and rights of ever-married girls and those in formal or informal unions.

Background

The WHO Guideline Steering Group examined the effects of interventions to improve the health and social well-being of married girls.

As noted by UNFPA and UNICEF, "Girls who marry before 18 are more likely to experience domestic violence and less likely to remain in school. They have worse economic and health outcomes than their unmarried peers, which are eventually passed down to their own children, straining a country's capacity to provide quality health and education services. Child brides often become pregnant during adolescence, when the risk of complications during pregnancy and childbirth increases; these complications continue to be the leading cause of death among older adolescent girls. The practice can also isolate girls from family and friends, taking a heavy toll on their mental health" *(11, 77)*. Additionally, married girls are more likely to experience rapid repeat pregnancies, with increased risks of negative outcomes for both mother and child. Two systematic reviews of approaches to respond to the health and social needs of married girls reached three conclusions *(78, 79)*. First, despite awareness of the harmful health and social consequences of child marriage, married girls and boys remain an overlooked population in programming. Second, the limited interventions targeting married adolescents are geographically concentrated in sub-Saharan Africa and South Asia, implemented at a small scale, and focused on SRH or maternal health to the neglect of other areas, including voice and agency, violence prevention, economic livelihoods, schooling, and rights and access to legal support. Third, there is a lack of programmatic attention to boys and men in the context of child marriage responses. Additionally, a subsequent landscape review and literature review to identify responses to the particular needs of young mothers concluded that "despite the fact that many pregnancies and deliveries occur among adolescents, maternal and newborn health efforts are rarely tailored to the needs of adolescents and their newborns" *(80)*. This lack of action is matched by the lack of evidence on interventions to respond to their needs and fulfil their rights *(81)*.

The 2011 edition of the guideline did not include any PICO questions on addressing the needs and rights of ever-married girls and girls in formal or informal unions.

PICO question

Do interventions to improve the health and social well-being of married girls mitigate the impact of child marriage on health and/or social outcomes? For further details on PICO question 1.8 (secondary outcomes), refer to **Annex 4**.

Summary of the evidence

Six studies from six interventions were ultimately included in the review for this PICO question. Of note, the majority of the included studies did not disaggregate their results by marital status. Additionally, there is a large body of literature aimed at addressing the health and social well-being of married women, some of whom were married before the age of 18. However, the search strategy intended to identify interventions that were designed to specifically address the needs of those married before the age of 18.

With regard to health outcomes, one RCT from Bangladesh provided very-low-certainty evidence regarding the effect of interactive group sessions and awareness-raising campaigns on the mitigation of the impact of child marriage on health outcomes. Specifically, it found significant reductions in gender-based violence and increases in attitudes against gender-based violence among married adolescents 15–19 years of age. Additionally, four QESs from Uganda, India, Ethiopia and Niger provided very-low-certainty evidence regarding the effect of community awareness-raising interventions that utilized mass media and educational approaches. Specifically, two found significant improvements in behaviours related to SRHR, two showed significant increases in knowledge about SRHR, and two showed significant improvements in attitudes about SRHR.

With regard to social outcomes, one RCT from the Islamic Republic of Iran provided low-certainty evidence regarding the effect of cognitive therapy sessions on the mitigation of the impact of child marriage on social outcomes. Specifically, it found significant improvements in sexual quality of life. Additionally, one QES from Uganda provided very-low-certainty evidence regarding the effect of a multi-component mass media intervention in post-conflict settings. Specifically, it found significant improvements in equitable gender roles among older and newly married adolescent girls and boys.

Notably, no studies measured outcomes related to the health, education and/or social well-being of the children of married girls, nor the harms and/or unintended consequences of such interventions.

Certainty of the evidence for the good practice statement

In summary, the available evidence was of very low to low certainty.

Rationale for the good practice statement

The GDG issued a good practice statement in favour of this intervention. The GDG members agreed that the evidence was not sufficient for a strong recommendation. However, while efforts to prevent child marriage continue, there was unanimous consensus among the GDG that there is an urgent need for more attention to the needs of girls who are married before age 18. While efforts to build the evidence base on specific interventions to address the long-term and intergenerational consequences of child marriage continue, the GDG asserted that there is a sufficient level of confidence from an equity, rights and non-discrimination perspective to support the implementation of interventions aimed at addressing these needs. Therefore, the GDG agreed that a good practice statement would be most appropriate.

The GDG noted that the intervention is likely to be acceptable to girls, their partners and other family members and the broader community. There is emerging evidence of feasibility. Given that this good practice statement calls for existing programmes and policies to be made more responsive to this group (rather than for separate/dedicated initiatives to be designed and implemented), there is likely to be limited additional human and financial resource requirements. Overall, there was strong consensus among the GDG that the intervention would promote gender equality and advance equity, more generally.

While there was a desire among the GDG members to provide greater specificity regarding the types of interventions that should be used to respond to the health and social needs and rights of married girls, they agreed that it was not possible to do so given the available evidence. Thus, the GDG decided to issue a

good practice statement regarding the integration of the needs and rights of ever-married girls and girls in formal or informal unions in interventions aiming to address the needs and rights of broader populations of girls and women.

Finally, while the evidence largely focused on the effects of such interventions on SRHR outcomes, the GDG emphasized that married girls have other health and social needs, such as those related to mental health, that could be addressed by such interventions.

3.1.9 Good practice statement 1.3

Good practice statement 1.3	Adolescents, including those who are ever married or in formal or informal unions, should be meaningfully engaged in the design, implementation, monitoring and evaluation of efforts to address their needs and rights.

Background

The WHO Guideline Steering Group examined the effects of meaningful engagement of adolescents in the design, implementation and/or monitoring and evaluation of programmes aimed at preventing child marriage and/or responding to the needs and rights of married girls.

Meaningful adolescent engagement is defined as an inclusive, intentional, mutually respectful partnership between adolescents and adults whereby power is shared, respective contributions are valued, and adolescents' ideas, perspectives, skills and strengths are integrated into the design and delivery of programmes, strategies, policies, funding mechanisms, and organizations that affect their lives and their communities, countries and the world *(82)*. Meaningful adolescent engagement challenges practices of exclusion and token engagement, and is guided by the following five principles: rights-based; transparent and informative; voluntary and free from coercion; respectful of young people's views, backgrounds and identities; and safe *(82, 83)*.

The 2011 edition of the guideline did not include any PICO questions on the meaningful engagement of adolescents in the design, implementation and/or monitoring and evaluation of child marriage policies or programmes.

PICO question

Does meaningful engagement of adolescents in the design, implementation and/or monitoring and evaluation of programmes reduce child marriage? For further details on PICO question 1.9 (including comparators and secondary outcomes), refer to **Annex 4**.

Summary of the evidence

Four studies from four interventions were ultimately included in the review for this PICO question. Most of the interventions described in these studies were focused on peer education. As is standard practice using the GRADE methodology, interventions that combined approaches to meaningfully engage adolescents with other interventions were included in the review, but the certainty of such evidence was downgraded.

Two RCTs from Bangladesh and Nepal provided moderate-certainty evidence regarding the effect of girl-led movement-building, community activities, and social norm change on the reduction of child marriage. Specifically, both found non-significant reductions in child marriage. A third RCT from Bangladesh provided very-low-certainty evidence regarding adolescent engagement in a peer education programme on the reduction of child marriage. Specifically, it also found a non-significant reduction in child marriage.

Additionally, one QES from India provided very-low-certainty evidence regarding the effect of adolescent engagement in a peer education programme on the reduction of child marriage. Specifically, it did not find a significant intervention-attributable effect.

Notably, no studies measured the outcomes of community engagement in efforts to prevent child marriage, the acceptability and appropriateness of programmes, nor harms and/or unintended consequences.

Certainty of the evidence for the good practice statement

In summary, the available evidence was of very low to moderate certainty.

Rationale for the good practice statement

The GDG issued a good practice statement in favour of this intervention. It agreed that the evidence was not sufficient for a strong recommendation. However, there was consensus that the interventions encompassed by this good practice statement offer more benefit than harm, and that not including such interventions in efforts to prevent child marriage or mitigate its effects among adolescents is outside practice norms. Thus, the GDG agreed that a good practice statement would be most appropriate.

The GDG noted that the intervention is likely to be acceptable to girls, their families and the broader community. While meaningful engagement of adolescents will require human and financial resources, it considered such interventions to be feasible in most contexts. Overall, there was strong consensus among the GDG that the intervention would promote gender equality and advance equity, more generally.

There was some debate among the members of the GDG about whether the word "engage" was sufficiently strong; it ultimately decided to retain it given consensus in the field about the term "meaningful adolescent engagement". Additionally, of all the implementation stages, the GDG highlighted that meaningful engagement of adolescents is potentially most critical in the design stage and in monitoring and evaluation for accountability purposes through a human rights-based approach *(84)*. Finally, it was noted that meaningful engagement of adolescents requires additional time, effort and funding, and that this should be accounted for in workplans and budgets and encouraged and supported by agencies that provide technical and financial support.

3.2 Increasing access to, uptake of, and continued use of contraception among adolescents

Table 3.2 Summary of recommendations and good practice statements

Recommendation 2.1a	WHO recommends the implementation of gender-transformative behaviour change interventions with adolescents to strengthen their ability to make decisions about their contraceptive use. **(Strong recommendation; moderate-certainty evidence)**
Recommendation 2.1b	WHO recommends the implementation of interventions to shift gender and other social norms to support contraceptive decision-making and access to, uptake of, and continued use of contraception among adolescents. **(Strong recommendation; moderate-certainty evidence)**
Recommendation 2.2	WHO carried forward the recommendations in the *WHO guideline on self-care interventions for health and well-being, 2022 revision* relevant to adolescents' access to, uptake of, and continued use of contraception *(85)*. These recommendations include: Self-administered injectable contraception should be made available as an additional approach to deliver injectable contraception for individuals of reproductive age. **(Strong recommendation; moderate-certainty evidence)** Over-the-counter oral contraceptive pills (OCPs) should be made available without a prescription for individuals using OCPs. **(Strong recommendation; very-low-certainty evidence)** Over-the-counter emergency contraceptive pills should be made available without a prescription to individuals who wish to use emergency contraception. **(Strong recommendation; moderate-certainty evidence)** The consistent and correct use of male and female condoms is highly effective in preventing the sexual transmission of HIV; reducing the risk of HIV transmission both from men to women and women to men in serodiscordant couples; reducing the risk of acquiring other sexually transmitted infections (STIs) and associated conditions, including genital warts and cervical cancer; and preventing unintended pregnancy. Provide up to one year's supply of pills, depending on the woman's preference and anticipated use. Programmes must balance the desirability of giving women maximum access to pills with concerns regarding contraceptive supply and logistics. The resupply system should be flexible, so that the woman can obtain pills easily in the amount and at the time she requires them.

Recommendation 2.3	WHO recommends the implementation of interventions to reduce financial barriers related to access to, uptake of, and continued use of contraception among adolescents. **(Conditional recommendation; very-low-certainty evidence)**
Recommendation 2.4	WHO recommends the implementation of accurate and safe digital health interventions for adolescents as part of sexual and reproductive health (SRH) programming. **(Conditional recommendation; low-certainty evidence)**
Good practice statement 2.1	Political, governmental, religious, traditional and other influential leaders should be mobilized to support the access to, uptake of, and continued use of contraception among adolescents.
Good practice statement 2.2	Interventions to improve the quality of health services should be implemented to improve access to, uptake of, and continued use of contraception among adolescents.
Good practice statement 2.3	Enabling laws and policies on age, marital status, and consent procedures in relation to sexual activity, access to sexual and reproductive health (SRH) services and access to specific contraceptive methods, should be coherently formulated and implemented to improve access to, uptake of, and continued use of contraception among adolescents.
Good practice statement 2.4	Adolescents should be meaningfully engaged in the design, implementation, monitoring and evaluation of efforts to address their contraceptive needs and rights.

A single systematic review of peer-reviewed journal publications was conducted in three English-language databases to inform the development of the updated recommendations on increasing access to, uptake of, and continued use of contraception among adolescents. This was supplemented by a secondary search for articles included in other reviews and reference lists of included articles. The systematic review included 6051 unique references, of which 216 were retained for the full-text review. Thirty-four studies were ultimately included in the overall review.

3.2.1 Recommendations 2.1a and 2.1b

Recommendation 2.1a	WHO recommends the implementation of gender-transformative behaviour change interventions with adolescents to strengthen their ability to make decisions about their contraceptive use. **(Strong recommendation; moderate-certainty evidence)**
Recommendation 2.1b	WHO recommends the implementation of interventions to shift gender and other social norms to support contraceptive decision-making and access to, uptake of, and continued use of contraception among adolescents. **(Strong recommendation; moderate-certainty evidence)**

Background

The WHO Guideline Steering Group examined the effects of interventions to: (i) empower girls to make decisions about their fertility and contraceptive use, and to change their perceptions regarding the role and status of women; and (ii) shift social norms and behaviours regarding adolescent fertility and contraceptive decision-making, as well as wider social norms such as the role and status of women, among parents/guardians, boys (as peers or partners), men (as partners or fathers) and/or the broader community.

Social norms, including in relation to contraceptive use, are defined as:

> "the perceived informal, mostly unwritten, rules that define acceptable and appropriate actions within a given group or community, thus guiding human behaviour. They consist of what we do, what we believe others do, and what we believe others approve of and expect us to do" *(86)*.

The failure to conform to such norms brings about sanctions, ranging from:

> "slight displeasure to active or even extreme punishment … depending on how important or central to social life a norm is, how entrenched it is, and what sort of real or perceived harm disobedience creates" *(87)*.

Gender norms are a subset of social norms that are learned and internalized early in life and that refer to:

> "collective beliefs and expectations within a community or society, at a given point in time, about what behaviours are appropriate for women and girls and men and boys, and the relation and interactions between them" *(86)*.

> "[Gender norms] sustain a hierarchy of power and privilege that typically favours what is considered male or masculine over that which is female or feminine, reinforcing a systemic inequality that undermines the rights of women and girls and restricts opportunity for women, men, and gender minorities to express their authentic selves" *(88)*.

In particular, men and boys have a role to play as partners in creating a gender-equitable environment that benefits the lives of women and girls, as well as their own. The perceived roles of men and boys in gender and development work have shifted over time: initially they were invisible; then they were seen as promiscuous, violent perpetrators; over time, there was growing understanding of them as socially constructed within wider contexts of power relations and dynamics of masculinities (including as victims); and today, there is greater recognition that men also have interests in ending gender inequalities (e.g. violence, in health) from self-interest to broader perspectives based on equality and rights *(56)*.

Finally, gender-transformative behaviour change interventions are defined as interventions that seek to challenge gender inequality by addressing its root causes and transforming harmful gender norms, roles and relations through progressive changes in power relationships between women and men as a means to achieve health for all *(89, 90)*.

The 2011 edition of the guideline included a PICO question on interventions related to gender norms regarding contraceptive decision-making. However, the systematic review process at that time did not find evidence that met the inclusion criteria. Thus, the 2011 edition of the guideline highlighted the need for

research in this area, as follows: *"Identify feasible and effective interventions that aim to involve adolescent and adult males in decisions about contraceptive use by partners as well as by themselves, including interventions that aim to transform gender norms."*

PICO questions

- Do interventions to empower girls to make decisions about their fertility and contraceptive use, and to change their perceptions regarding the role and status of women and girls, increase adolescents' new or continued use of a modern contraceptive method, their contraceptive method of choice and/or dual methods?
- Do interventions to shift social norms and behaviours regarding adolescent fertility and contraceptive decision-making, as well as wider social norms such as the role and status of women and girls, among parents/guardians and/or the broader community, increase adolescents' new or continued use of a modern contraceptive method, their contraceptive method of choice and/or dual methods?
- Do interventions to shift social norms and behaviours regarding adolescent fertility and contraceptive decision-making, as well as wider social norms such as the role and status of women and girls, among boys (as peers and/or partners) and/or men (as partners or fathers), increase adolescents' new or continued use of a modern contraceptive method, their contraceptive method of choice, dual methods and/or male methods?

For further details on PICO questions 2.1a, 2.1b and 2.1c (including populations, comparators and secondary outcomes), refer to **Annex 4**.

Summary of the evidence

Nine studies from eight interventions were identified in the review for these PICO questions. Of these, seven studies from six interventions were ultimately included in the analysis, including three RCTs and four observational studies/natural experiments. All of the studies examined such interventions in the context of multi-component interventions, and several sought to change norms among multiple groups (e.g. girls, parents, communities, and boys and/or men). While standard practice with the GRADE methodology would be to downgrade the certainty of such evidence, the GDG argued that this procedure should not apply to such interventions given established theoretical underpinnings and consensus in the field that multi-component interventions are best practice for shifting gender and other social norms.

Among these studies, three RCTs in Colombia (among a general adolescent population), Zambia (among adolescents in school) and Niger (among married adolescents) provided very-low- to low-certainty evidence regarding the effect of such interventions on new or continued use of a modern contraceptive method, adolescents' contraceptive method of choice and/or dual methods. One of the RCTs found a significant increase in modern contraceptive use, one found a significant increase in modern contraceptive use at last sex but did not find significant intervention effects for modern contraceptive use in the last three months, and one did not find a significant intervention effect for consistent condom use.

Some studies additionally examined the effects of such interventions on adolescents' agency, autonomy and self-efficacy regarding contraceptive use. Specifically, one RCT in Zambia (among adolescents in school) provided moderate-certainty evidence regarding the absence of a significant intervention-attributable effect. Additionally, three observational studies in the Democratic Republic of the Congo (among 10- to 14-year-olds and first-time mothers) and Uganda (among unmarried adolescents and first-time parents) provided very-low-certainty evidence. One showed a significant improvement in contraceptive self-efficacy; one showed significant reductions in embarrassment to seek contraception among out-of-school girls but did not find significant intervention effects on embarrassment when accessing contraception among in-school girls and on embarrassment when accessing condoms; and one did not find significant intervention effects in contraceptive agency and self-efficacy.

Finally, one observational study in the Democratic Republic of the Congo (among first-time mothers) provided very-low-certainty evidence regarding the effect of such interventions on supportive norms regarding adolescent contraceptive use. Specifically, it found significant improvements in two measures of supportive social norms, and did not find significant intervention-attributable effects on two other measures of supportive social norms.

Notably, no studies measured the outcomes of adolescents' access to contraception, reproductive coercion or harms and/or unintended consequences.

Certainty of the evidence for the recommendation

In summary, the available evidence was of very low to moderate certainty.

Rationale for the strength and direction of the recommendation

The GDG made two strong recommendations in favour of the interventions based on the certainty of the evidence available and its expert consensus. Of note, it issued only one recommendation in response to PICOs 2.1b and 2.1c given their complementary focus on gender and other social norms.

With regard to Recommendation 2.1a, the GDG debated whether certain audiences would be receptive to the term "gender-transformative" due to its potential conflation with gender transition and other concerns of lesbian, gay, bisexual, transgender, queer/questioning, intersex or asexual (LGBTQIA+) persons. However, it was agreed that the term should be retained in the recommendation and defined as per the WHO definition: "a gender-transformative approach is one that addresses the root causes of gender-based health inequities through interventions that challenge and redress harmful and unequal gender norms, roles, and unequal power relations that privilege men over women" *(91)*.

With regard to Recommendation 2.1b, the GDG discussed the wide variation in the content, quality and conceptual underpinnings of gender and other social norm interventions and emphasized the need for more research to determine what specific interventions and intervention approaches are most effective in shifting gender and other social norms. Additionally, the GDG noted that measurement of norms is still nascent and more work is needed to develop and validate measures and methodologies for different types of norms in various settings under the framework of behaviour change.

The systematic review team for the questions on adolescent contraceptive use clarified that the studies included in the review aimed to address specific gender and other social norms rather than broad norms as articulated in the recommendation. However, the GDG noted that while there are some similarities across different contexts, there are also specificities by context. Given this, they concluded that the recommendation should use broad language. Further, the GDG strongly emphasized that such interventions should be tailored to the specific gender and other social norms and contexts in which they are implemented, and that attention be given to the ways that such norms differentially impact subgroups of adolescents. The GDG also debated whether the recommendation should use the terms "shift", "change" or "address norms"; they agreed that the guideline should not be perceived as suggesting that change should be imposed and opted to use "shift" in alignment with consensus in the field *(92)*. Additionally, the GDG debated whether to include language about the "role and status of women and girls", as in the PICO questions, but preferred to use gender-neutral language to avoid a heteropatriarchal framing.

With regard to both recommendations, the GDG noted that the interventions are likely to be acceptable to girls. Some parents/guardians, men and boys, and the broader community may welcome these interventions, while others may resist them because they feel threatened by girls' growing agency in decision-making and shifts in gender and other social norms. Additionally, while the interventions have been demonstrated to be feasible in various contexts, questions have been raised regarding their quality, intensity and duration. Thus, sufficient human and financial resources will be required to ensure adequate implementation and to reach marginalized populations. Overall, there was strong consensus among the GDG members that the interventions would promote gender equality and advance equity, more generally. Thus, the GDG decided that the benefits of the interventions outweigh their potential harms.

3.2.2 Recommendation 2.2

Recommendation 2.2

WHO carried forward the recommendations in the *WHO guideline on self-care interventions for health and well-being, 2022 revision* relevant to adolescents' access to, uptake of, and continued use of contraception *(85)*. These recommendations include:

Self-administered injectable contraception should be made available as an additional approach to deliver injectable contraception for individuals of reproductive age.

(Strong recommendation; moderate-certainty evidence)

Over-the-counter oral contraceptive pills (OCPs) should be made available without a prescription for individuals using OCPs.

(Strong recommendation; very-low-certainty evidence)

Over-the-counter emergency contraceptive pills should be made available without a prescription to individuals who wish to use emergency contraception.

(Strong recommendation; moderate-certainty evidence)

The consistent and correct use of male and female condoms is highly effective in preventing the sexual transmission of HIV; reducing the risk of HIV transmission both from men to women and women to men in serodiscordant couples; reducing the risk of acquiring other sexually transmitted infections (STIs) and associated conditions, including genital warts and cervical cancer; and preventing unintended pregnancy.

Provide up to one year's supply of pills, depending on the woman's preference and anticipated use. Programmes must balance the desirability of giving women maximum access to pills with concerns regarding contraceptive supply and logistics. The resupply system should be flexible, so that the woman can obtain pills easily in the amount and at the time she requires them.

Background

The WHO Guideline Steering Group examined the effects of contraceptive self-care interventions, specifically over-the-counter (OTC) availability of hormonal contraceptives (including emergency contraception [EC]), availability of subcutaneous depot medroxyprogesterone acetate (DMPA-SC) and self-injection training, and direct-to-consumer contraception.

Self-care is defined as "the ability of individuals, families and communities to promote health, prevent disease, maintain health, and cope with illness and disability with or without the support of a health worker" *(85)*. Self-care interventions, in turn, are tools that support self-care; these include evidence-based, high-quality drugs, devices, diagnostics and/or digital interventions that can be provided fully or partially outside formal health services and can be used with or without the direct supervision of health-care personnel *(85)*.

While people around the world have practiced self-care for centuries, including in relation to fertility, childbearing and contraception, its potential for increasing self-determination, self-efficacy, autonomy and engagement in health for self-carers and caregivers, and for mitigating the global shortage of health workers, has received increased recognition in the last decade *(85)*. The utility of self-care SRH

interventions for adolescents, in particular, has been emphasized given the stigma, discrimination, lack of autonomy, and reprisals they frequently face in accessing such services *(93)*.

The 2011 edition of the guideline included a PICO question on efforts to make hormonal contraceptive methods, including EC, available OTC. However, no specific intervention was recommended at that time due to insufficient evidence. Thus, the 2011 edition of the guideline highlighted the need for research in this area, as follows: *"Undertake research to identify feasible and effective interventions to improve the availability of over-the-counter hormonal contraceptives to adolescents"*.

PICO question

Do the following interventions to expand opportunities for self-care increase adolescents' new or continued use of a modern contraceptive method or their contraceptive method of choice:

- availability of hormonal contraceptives (including EC) OTC (i.e. without prescription)
- availability of DMPA-SC and training on self-injection and/or
- availability of contraceptives direct to consumer?

For further details on PICO question 2.2 (secondary outcomes), refer to **Annex 4**.

Summary of the evidence

No studies in the review met the inclusion criteria for this PICO question.

Rationale for the recommendation

While no studies were identified that examined these interventions among adolescents and met the inclusion criteria, there are existing WHO recommendations regarding self-care interventions for contraception that are relevant for all individuals of reproductive age (i.e. 15–49 years). Thus, the GDG decided that the existing WHO recommendations on self-care interventions for family planning should be carried forward for adolescents *(85)*.

The GDG noted that the primary objective of the *WHO guideline on self-care interventions for health and well-being, 2022 revision* was to provide evidence-based recommendations on key public health self-care interventions, including for advancing health, with a focus on underserved populations and settings with limited capacity and resources in the health system *(85)*. The GDG emphasized that adolescents are a key underserved population given the considerable barriers they face to accessing contraceptive services. For example, the GDG noted that the guideline explicitly states that OTC EC pills are likely to increase access, reduce discrimination and support human rights, especially among adolescent girls and young women.

The GDG cautioned, though, that the contraceptive methods specified in these recommendations may not be the methods of choice for all adolescents in all contexts. They thus emphasized that self-care opportunities such as those mentioned in the recommendations be complemented with efforts to ensure the availability of the full range of modern methods of contraception. Alongside this, the GDG called for further research on the feasibility, acceptability and effectiveness of other self-care interventions for contraception, for which there was not yet sufficient evidence.

Overall, the GDG noted that the interventions are likely to be overwhelmingly acceptable to adolescents. Some parents/guardians, partners and the broader community may welcome these interventions, while others may resist them because of prevailing social norms regarding adolescent sexuality and childbearing. Some contraceptive self-care interventions may be more feasible than others, and most will require financial resources from providers and, if fees are charged, from adolescents. There was strong consensus among the GDG members that the interventions would promote gender equality and advance equity, more generally. Thus, the GDG decided that the benefits of the interventions outweigh their potential harms.

3.2.3 Recommendation 2.3

Recommendation 2.3	WHO recommends the implementation of interventions to reduce financial barriers related to access to, uptake of, and continued use of contraception among adolescents. **(Conditional recommendation; very-low-certainty evidence)**

Background

The WHO Guideline Steering Group examined the effects of interventions to address financial barriers related to access to, uptake of, and continued use of contraception among adolescents.

Adolescents typically have fewer financial resources than adults; thus the cost of services poses an important barrier to adolescent contraceptive use, especially in settings where contraception is not subsidized or free *(94)*.

The 2011 edition of the guideline included a PICO question on efforts to reduce the financial cost of contraceptives for adolescents. The systematic review at that time identified low-quality evidence, mostly from high-income contexts, in support of such interventions. The 2011 edition of the guideline thus issued the following conditional recommendation: *"Implement interventions to reduce the financial cost of contraceptives to adolescents"*. Additionally, it highlighted the need for research in this area, as follows: *"Undertake research on the feasibility, sustainability and impact of reducing the financial cost of contraceptives specifically to adolescents"*.

PICO question

Do the following interventions to address financial barriers to contraceptives increase adolescents' new or continued use of a modern contraceptive method or their contraceptive method of choice:

- availability of vouchers
- free/reduced cost of contraceptives
- social marketing and/or social franchising and
- insurance-based programmes?

For further details on PICO question 2.3 (secondary outcomes), refer to **Annex 4**.

Summary of the evidence

Four studies from two interventions were identified in the review for this PICO question. Three of the studies evaluated the effect of vouchers and one evaluated the effect of unconditional cash transfers. Broader social protection schemes were excluded from the analysis, as were interventions that addressed financial barriers to condoms alone. As is standard practice using the GRADE methodology, studies that evaluated interventions to reduce financial barriers that were combined with other interventions (e.g. health worker trainings) were included in the review, but the certainty of such evidence was downgraded.

Two observational studies from Cambodia and Nicaragua provided very-low-certainty evidence regarding the effect of vouchers on adolescents' new or continued use of a modern contraceptive method or their contraceptive method of choice. Specifically, one found a significant increase in the uptake of a contraceptive method (type not specified), and the other did not find an intervention-attributable effect on the use of long-acting reversable contraception.

Additionally, two observational studies from one intervention in Nicaragua provided very-low-certainty evidence regarding the effect of vouchers on adolescents' perceptions of the quality of care. Specifically, one found significant improvements in satisfaction with the care they received, and the other found non-significant improvements in satisfaction.

Finally, one observational study in Nicaragua conducted subgroup analyses with different groups of adolescents. It provided very-low-certainty evidence that sexually active adolescents who were not already pregnant and/or mothers had higher satisfaction with vouchers compared to adolescents who were not yet sexually active or who were already pregnant and/or mothers.

Notably, no studies measured the outcomes of adolescents' access to contraception, nor harms and/or unintended consequences.

Certainty of the evidence for the recommendation

In summary, the available evidence was of very low certainty.

Rationale for the strength and direction of the recommendation

The GDG made a conditional recommendation in favour of this intervention, based on the certainty of the evidence available and their expert consensus.

The GDG considered narrowing the scope of the recommendation to vouchers, given that most of the evidence that met the inclusion criteria for the review pertained to this type of intervention. However, they agreed that vouchers may not be the most appropriate type of financial support in all settings and shared programmatic experience suggesting other options may be feasible and effective. The GDG members also debated whether the recommendation should specify "reduce", "remove" or "address financial barriers"; they agreed on the latter, with the rationale that "reduce" is not sufficiently strong language and "remove" is not feasible in all settings (e.g. in the private sector, which adolescents in some settings prefer). The GDG considered including the term "affordability" in the recommendation, but agreed it was redundant, as affordability is a domain of accessibility.

Overall, the GDG noted that this intervention is likely to be overwhelmingly acceptable to adolescents and the broader community. Additionally, they noted that the intervention has been implemented at scale in some settings and found to be feasible. The GDG emphasized that interventions to reduce financial barriers should be consistent with the WHO's *Global standards for quality health-care services for adolescents*, and should be implemented alongside interventions to address other barriers to adolescent contraceptive use and complemented by rigorous monitoring and evaluation to expand the evidence base *(95)*. While there was no evidence available regarding the cost of such interventions, the GDG agreed that the cost would depend on the context and the specific contraceptive methods involved. Regardless, the intervention will require financial resources from providers and, if fees are charged, from adolescents. Regarding voucher schemes, specifically, the GDG discussed some evidence – albeit that which did not meet the inclusion criteria – suggesting that these schemes are not sustainable unless continually funded by governments. Despite this, there was strong consensus among the GDG members that the intervention would promote gender equality and advance equity, more generally. Likewise, the GDG members noted that, alongside improving access to contraceptive services, such interventions also serve to increase demand. Thus, the GDG decided that the benefits of the intervention outweigh its potential harms in some but not all contexts.

3.2.4 Recommendation 2.4

Recommendation 2.4	WHO recommends the implementation of accurate and safe digital health interventions for adolescents as part of sexual and reproductive health programming. **(Conditional recommendation; low-certainty evidence)**

Background

The WHO Guideline Steering Group examined the effects of digital interventions on adolescents' access to, uptake of, and continued use of contraception.

Digital health is defined as the systematic application of information and communications technologies, computer science, and data to support informed decision-making by individuals, the health workforce, and health systems, to strengthen resilience to disease and improve health and wellness *(96)*. It encompasses eHealth, or the use of information and communications technology in support of health and health-related fields; mHealth, or the use of mobile wireless technologies for public health; and emerging areas, such as the use of advanced computing sciences in big data, genomics and artificial intelligence *(97)*.

There is growing consensus that the strategic and innovative use of digital health interventions will be an essential enabling factor to achieve universal health coverage (UHC) and the 2030 Agenda for Sustainable Development, given their potential to overcome geographical inaccessibility of health care in under-resourced settings *(98)*. However, the rapid

proliferation of digital health has also raised concerns regarding the quality of such interventions, their data privacy and security capabilities, and diversion of resources from alternative, non-digital approaches *(99)*. Likewise, its potential for exacerbating inequities has also been raised in the context of the digital divide, or "the gap between populations and regions that have access to modern information and communications technology and those that do not or have restricted access" *(98)*. Thus, WHO and others have called for digital health interventions to be developed and implemented in a way that is ethical, safe, secure, reliable, equitable and sustainable, and that incorporates principles of transparency, accessibility, scalability, replicability, interoperability, privacy, security and confidentiality *(98, 99)*.

The 2011 edition of the guideline did not included a PICO question on digital interventions related to increasing use of contraception by adolescents.

PICO question

Do the following digital interventions for clients increase adolescents' new or continued use of a modern contraceptive method or their contraceptive method choice:

- targeted and untargeted communication to persons
- person-to-person communication and
- on-demand communication with persons?

For further details on PICO question 2.4 (comparators and secondary outcomes), refer to **Annex 4**.

Summary of the evidence

Seven studies from six interventions were identified in the review for this PICO question. Of these, four studies from four interventions were ultimately included in the analysis, including three RCTs and one observational study. Three of the studies evaluated the effect of on-demand communication with persons, and two evaluated the effect of targeted communication to persons; no studies evaluated the effect of person-to-person communication nor digital contraceptive counselling interventions.

One RCT in Tajikistan provided very-low-certainty evidence regarding the effect of digital interventions on adolescents' new or continued use of a modern contraceptive method or their contraceptive method of choice. Specifically, it showed a non-significant increase in contraceptive use.

Three RCTs in Tajikistan, Peru and Kenya provided very-low- to moderate-certainty evidence regarding the effect of digital interventions on adolescents' correct knowledge about contraception methods, their side-effects, return to fertility, and sources of contraception. Specifically, one of these studies found a significant reduction in myths and misconceptions, and two found non-significant increases in knowledge.

One RCT in Tajikistan provided very-low- to low-certainty evidence regarding the effect of digital interventions on adolescents' agency to negotiate with their partner, obtain contraception and manage side-effects. Specifically, it did not show a significant intervention-attributable effect. Additionally, one observational study in Kenya and Brazil provided very-low-certainty evidence in this area. Specifically, it showed an increase in adolescents' agency, but statistical significance tests were not presented.

Notably, no studies measured the outcome of harms and/or unintended consequences.

Certainty of the evidence for the recommendation

In summary, the available evidence was of very low to moderate certainty.

Rationale for the strength and direction of the recommendation

The GDG made a conditional recommendation in favour of this intervention for two reasons. First, GDG members noted that the available evidence was limited. In particular, they raised concerns regarding the absence of data on harms and/or unintended consequences of digital interventions given programmatic experience suggesting that such interventions can be susceptible to misinformation and bias (especially in the context of artificial intelligence), and raised issues regarding data protection, privacy and safety. Second, they agreed that a strong recommendation or good practice statement would be inappropriate given equity considerations in the context of the digital divide. The GDG highlighted programmatic experiences from the COVID-19 pandemic, in which digital interventions were beneficial in some contexts and for some populations, but not for others.

Despite these concerns, the GDG agreed that digital interventions, when complemented with other intervention approaches, present a new and

promising opportunity to improve access to, uptake of, and continued use of contraception among adolescents. Finally, in making its decision the GDG acknowledged the following existing WHO recommendation applies to adolescents: *"WHO recommends digital targeted client communication for behaviour change regarding sexual, reproductive, maternal, newborn and child health, under the condition that concerns about sensitive content and data privacy are adequately addressed" (97).*

Overall, the GDG noted that the intervention is likely to be acceptable to adolescents, their families and the broader community, although some may have concerns, such as those regarding safety, data privacy and security. The GDG agreed that digital interventions are likely to be feasible in a growing number of settings, and that while upfront costs will be required for the design and development of the interventions, ongoing resource requirements are likely to be modest. Finally, while the intervention has the potential to increase access to contraceptive information and services for those adolescents with access to digital technology, the GDG emphasized that it could exacerbate gender and other inequities in the context of the digital divide. As such, the GDG endorsed the principle of improving digital literacy as part of wider efforts to improve health literacy, as exemplified by its inclusion in the 2018 update of the *International Technical Guidance on Sexuality Education (31)*. Thus, they decided that the benefits of the intervention outweigh the potential harms for some but not all adolescents.

3.2.5 Good practice statement 2.1

Good practice statement 2.1	Political, governmental, religious, traditional and other influential leaders should be mobilized to support the access to, uptake of, and continued use of contraception among adolescents.

Background

The WHO Guideline Steering Group examined the effects of interventions directed at political, governmental, religious and traditional leaders, as well as other influential leaders and groups in the community on adolescents' access to, uptake of, and continued use of contraception.

Political, governmental, religious and traditional leaders, as well as other influential leaders and groups in the community, play a critical role in shaping an enabling or restrictive environment for adolescents to access and use contraception, through their influence on formalized rules, informal regulations and community norms.

The 2011 edition of the guideline included a PICO question on efforts directed at community members and leaders to increase access to contraceptives for adolescents. The systematic review process at that time did not find any studies that met the inclusion criteria. However, the 2011 edition issued the following strong recommendation on the basis of expert opinion, notably focused on community members rather than leaders: *"Undertake interventions to influence community members to support access to contraceptives for adolescents"*.

Additionally, it highlighted the need for research in this area, as follows: *"Undertake research to identify and evaluate interventions that influence community members' support for access to contraceptives for adolescents"*.

PICO question

Do interventions directed at political, governmental, religious and traditional leaders, as well as other influential leaders and groups in the community, increase adolescents' new or continued use of a modern contraceptive method, their contraceptive method of choice and/or dual methods? For further details on PICO question 2.5 (secondary outcomes), refer to **Annex 4**.

Summary of the evidence

Seven studies from seven interventions were identified in the review for this PICO question. However, all seven studies were multi-component and only met the inclusion criteria when applied broadly. Likewise, the information about the interventions directed at leaders was limited. Given this, the ability to ascertain the impact of the interventions directed at political, governmental, religious and traditional leaders on the outcomes of interest is also limited.

Certainty of the evidence for the good practice statement

In summary, there was no available evidence that could be used to directly inform this recommendation.

Rationale for the good practice statement

The GDG issued a good practice statement in favour of this intervention. While the evidence on this topic continues to be limited, the GDG had high certainty regarding the importance of this intervention. There was consensus that the intervention does more benefit than harm, and that not including it in efforts to increase access to, uptake of, and continued use of contraception among adolescents would be contrary to practice norms.

The GDG emphasized that this good practice statement should not be seen as a downgrade from the 2011 edition of the guideline, in which there was the following strong recommendation: *"Undertake interventions to influence community members to support access to contraceptives for adolescents"*. This change from a strong recommendation to a good practice statement is primarily due to very low certainty regarding the effects of these interventions on the outcomes of interest based on the currently available evidence. With this in mind, the GDG reiterated WHO's assertion that, in terms of implementation, good practice statements should be viewed as equivalent to strong recommendations.

The GDG noted that what constitutes an "influential leader" will vary by context. While common examples might include political, governmental, religious and traditional leaders, influential leaders could also include business or thought leaders, youth influencers, athletes, actors, musicians, social media influencers and others. Regardless of the type of leader, there is primarily a need to understand their individual interests, motivations and perspectives as they pertain to adolescent contraceptive use to reach them with tailored messages through multiple channels, and to engage them in dialogue.

However, members of the GDG cautioned that the involvement of influential leaders can result in harms and/or unintended consequences when such leaders have misconceptions about adolescent contraceptive use and related issues and/or have unsupportive attitudes towards it. Therefore, the GDG emphasized that efforts should be made to sensitize and increase support from such leaders, rather than to universally engage or involve them. Likewise, it was noted that efforts should be made to ensure that such interventions do not inadvertently reinforce the power and authority of unsupportive leaders, thereby perpetuating and reinforcing barriers to contraception. In cases where agreement is not possible, a difficult but pragmatic choice may need to be made to leave them out.

The GDG noted that, based on programmatic experience, the intervention is likely to be both acceptable to influential leaders and feasible to implement. It could be implemented with limited resources where necessary. While the GDG noted that some influential leaders may not make a positive contribution, there was strong consensus that the intervention would promote gender equality and advance equity, more generally. Thus, the GDG decided that the benefits of the intervention far outweigh its potential harms.

3.2.6 Good practice statement 2.2

Good practice statement 2.2	Interventions to improve the quality of health services should be implemented to improve access to, uptake of, and continued use of contraception among adolescents.

Background

The WHO Guideline Steering Group examined the effects of interventions to improve the quality of contraceptive services on adolescents' access to, uptake of, and continued use of contraception.

The delivery of high-quality health-care services has long been recognized as a central goal of health systems worldwide. However, evidence from high-, middle- and low-income countries alike shows that services for adolescents are highly fragmented, poorly

coordinated and uneven in quality *(95)*. In 2012, WHO defined adolescent-friendly health services as those that are accessible, acceptable, equitable, appropriate and effective *(100)*. In 2014, WHO issued guidance on ensuring human rights in the provision of contraceptive information and services, including for adolescents, by delivering such information and services in a way that ensures fully informed decision-making, respects dignity, autonomy, privacy and confidentiality, and is sensitive to individuals' needs and perspectives *(101)*. In 2015, WHO also published global standards for high-quality health services for adolescents, namely related to adolescents' health literacy, community support, appropriate packages of services, provider competencies, facility characteristics, equity and non-discrimination, data and quality improvement, and adolescents' participation *(95)*.

The 2011 edition of the guideline included a PICO question on efforts to improve health services to increase adolescents' access to contraceptive information and services. On the basis of a number of graded studies and expert opinion, the 2011 edition of the guideline issued the following strong recommendation: *"Implement interventions to improve health service delivery to adolescents as a means of facilitating their access to and use of contraceptive information and services"*.

PICO question

Do interventions to improve the following aspects of quality of services (drawn from WHO's *Global standards for quality health-care services for adolescents (95)*) increase adolescents' new or continued use of a modern contraceptive method or their contraceptive method of choice:

- appropriate package of services
- provider competencies and lack of bias
- facility characteristics
- equity and non-discrimination and
- data and quality improvement?

For further details on PICO question 2.6 (secondary outcomes), refer to **Annex 4**.

Summary of the evidence

Eight studies from eight interventions were identified in the review for this PICO question. Two studies evaluated the effect of interventions to address appropriate packages of services, four evaluated the effect of interventions to address provider competencies and bias, one evaluated the effect of interventions to address facility characteristics, and one evaluated the effect of interventions to address data and quality improvement. No studies evaluated the effect of interventions on equity and non-discrimination.

Most of these studies examined the effects of such interventions on adolescents' uptake of and/or continued use of a modern contraceptive method or their contraceptive method of choice. With regard to appropriate packages of services, one observational study in Ethiopia (among unmarried adolescents) provided very-low-certainty evidence regarding the effect of interventions to address appropriate packages of services; specifically, it did not find a significant intervention-attributable effect on contraceptive use.

With regard to provider competencies and bias, one RCT in Burkina Faso, Pakistan and the United Republic of Tanzania provided moderate-certainty evidence regarding the effect of interventions to address provider competencies and bias; specifically, it showed a significant increase in contraceptive use in one country, a non-significant increase in the second country, and no significant intervention-attributable effect in the third country. One observational study in Malawi provided very-low-certainty evidence regarding the effect of interventions to address provider competencies and bias; specifically, it showed an increase in contraceptive use but statistical significance tests were not presented. Subgroup analysis from one observational study in Uganda also provided very-low-certainty evidence regarding the effect of interventions to address provider competencies and bias; specifically, it showed an increase in contraceptive use among older adolescents (15–19 years) but not for younger adolescents (10–14 years), but, again, statistical significance tests were not presented.

With regard to facility characteristics, one observational study in Kenya provided very-low-certainty evidence regarding the effect of interventions to address facility characteristics; specifically, it showed an increase in the number of services delivered to adolescent clients, but statistical significance tests were not presented.

Finally, with regard to data and quality improvement, one non-randomized trial in Kenya provided very-low-certainty evidence regarding the effect of interventions to address data and quality improvement, specifically using community scorecards; it did not find a significant intervention-attributable effect.

Two studies also examined the effect of such interventions on adolescents' perceptions regarding the quality of care. With regard to appropriate packages of services, one observational study in India provided very-low-certainty evidence regarding the effect of interventions to address appropriate packages of services; specifically, it showed an improvement in perceived quality of care, but statistical significance tests were not presented. Additionally, with regard to provider competencies and bias, one observational study in Bangladesh provided very-low-certainty evidence regarding the effect of interventions to address provider competencies and bias; specifically, it showed significant improvements in quality of care.

Notably, no studies measured the outcome of adolescents' access to contraception, nor harms and/or unintended consequences.

Certainty of the evidence for the good practice statement

In summary, the available evidence was of very low to moderate certainty.

Rationale for the good practice statement

There was substantial debate among the GDG members about whether this recommendation should be a good practice statement or a strong recommendation. While many members expressed a preference for it to be a strong recommendation, the GDG agreed that the evidence was not sufficient. However, there was consensus that the interventions encompassed by this good practice statement do more good than harm, and that not including such interventions in efforts to increase contraceptive use among adolescents would be contrary to practice norms. Thus, the GDG agreed that a good practice statement would be most appropriate.

The GDG emphasized that this good practice statement should not be seen as a downgrade from the 2011 edition of the guideline, in which there was the following strong recommendation: *"Implement interventions to improve health service delivery to adolescents as a means of facilitating their access to and use of contraceptive information and services"*. This change from a strong recommendation to a good practice statement is primarily due to the very low to moderate certainty regarding the effects of these interventions on the outcomes of interest based on the currently available evidence. With this in mind, the GDG reiterated WHO's assertion that, in terms of implementation, good practice statements should be viewed as equivalent to strong recommendations *(39)*.

Overall, the GDG noted that the intervention is likely to be acceptable to adolescents, their families and the broader community, although those who do not support adolescent contraceptive use may be opposed to it. While improving the quality of health services will require human and financial resources, the GDG emphasized that a growing number of countries have a history of implementing interventions to improve the quality of health services for adolescents generally, and in relation to contraceptive use. Thus, they considered the intervention to be feasible in most contexts. Importantly, the GDG highlighted the relevance of this good practice statement for both the public and private health sectors, given that the private sector is an important source of contraception for many adolescents *(102)*. Finally, there was strong consensus among the GDG members that the intervention would promote gender equality and advance equity, more generally.

3.2.7 Good practice statement 2.3

Good practice statement 2.3	Enabling laws and policies on age, marital status and consent procedures in relation to sexual activity, access to sexual and reproductive health services and access to specific contraceptive methods, should be coherently formulated and implemented to improve access to, uptake of, and continued use of contraception among adolescents.

Background

The WHO Guideline Steering Group examined the effects of enabling laws and policies on age, marital status and consent procedures on adolescents' access to, uptake of, and continued use of contraception.

States are obliged under human rights law to adopt legal and policy measures to ensure access of all individuals, including adolescents, to affordable, safe and effective contraceptives *(103)*. However, many countries continue to restrict adolescents' access to contraceptive services on the basis of age and/or marital status *(104)*. Likewise, contradictory laws and policies and legal exceptions related to adolescent contraceptive use, as well as adolescent sexual activity more generally, create confusion and dissuade adolescents from seeking contraception and health workers from providing it *(105)*.

The 2011 edition of the guideline included two PICO questions on the formulation of laws and policies to increase access to contraceptive information and services and EC for adolescents. The systematic review process at that time did not find studies that met the inclusion criteria. However, the 2011 edition of the guideline issued the following strong recommendation on the basis of human rights and expert opinion: *"Undertake efforts with political leaders and planners to formulate laws and policies to increase adolescent access to contraceptive information and services, including emergency contraceptives"*. Additionally, it highlighted the need for research in this area, as follows: *"Undertake research to identify feasible and effective interventions that result in the formulation of such laws and policies"*.

PICO question

Does the existence and/or proper application and implementation of enabling laws and policies on the following issues related to sexual activity, access to SRH services, and access to specific contraceptive methods, increase adolescents' uptake of and/or continued use of a modern contraceptive method or their contraceptive method of choice:

- age
- marital status and
- consent procedures?

For further details on PICO question 2.7 (including populations and secondary outcomes), refer to **Annex 4**.

Summary of the evidence

One study from one intervention was identified in the review for this PICO question. This observational study in Ethiopia provided low-certainty evidence regarding the effect of such laws and policies on adolescents' uptake of and/or continued use of a modern contraceptive method or their contraceptive method of choice. Specifically, it showed an increase in contraceptive use and postpartum contraceptive use among married adolescents, but statistical significance tests were not presented.

Notably, no studies measured the outcomes of adolescents' access to contraception, their agency and/or autonomy to make decisions about contraceptive use, or harms and/or unintended consequences.

Certainty of the evidence for the good practice statement

In summary, the available evidence was of low certainty.

Rationale for the good practice statement

The GDG issued a good practice statement in favour of this intervention. They agreed that the evidence was not sufficient for a strong recommendation. However, there was consensus that the intervention encompassed by this good practice statement does more good than harm, and that not including the intervention in efforts to increase contraceptive use among adolescents would be contrary to practice norms. Thus, the GDG agreed that a good practice

statement would be most appropriate. This is in line with the approach used by other WHO guidelines in issuing recommendations regarding laws and policies *(37, 75)*.

The GDG emphasized that this good practice statement should not be seen as a downgrade from the 2011 edition of the guideline, in which there was the following strong recommendation: *"Undertake efforts with political leaders and planners to formulate laws and policies to increase adolescent access to contraceptive information and services, including emergency contraceptives"*. This change from a strong recommendation to a good practice statement is primarily due to the low certainty regarding the effects of these interventions on the outcomes of interest based on the currently available evidence. With this in mind, the GDG reiterated WHO's assertion that, in terms of implementation, good practice statements should be viewed as equivalent to strong recommendations.

The GDG noted the absence of data from the evidence review on potential harms and/or unintended consequences of such laws and policies, given programmatic experiences of harms in contexts where there are discrepancies between laws and policies and/or where they penalize adolescents who engage in sexual activity or seek contraceptive services before a particular age or outside the context of marriage. The GDG members agreed that the implication of these concerns is not that such laws and policies should not be established, but that the way they are formulated and implemented needs careful consideration. Specifically, they discussed that laws and policies should be formulated according to human rights standards, notably those laid out by the CRC and CEDAW, with the objective of assuring health and well-being rather than punishment. Likewise, the GDG emphasized that legal and policy reform should not be implemented on its own, but should be complemented with the other interventions recommended in this guideline.

Overall, the GDG agreed that the intervention is likely to be acceptable to adolescents, their families and the broader community, although those who do not support adolescent contraceptive use may be opposed to it. Enabling laws and policies on these issues have been formulated and implemented in many countries, demonstrating their feasibility. Finally, there was strong consensus among the GDG that the intervention would promote gender equality and advance equity, more generally.

3.2.8 Good practice statement 2.4

Good practice statement 2.4	Adolescents should be meaningfully engaged in the design, implementation, monitoring and evaluation of efforts to address their contraceptive needs and rights.

Background

The WHO Guideline Steering Group examined the effects of meaningful engagement of adolescents in the design, implementation and/or monitoring and evaluation of programmes aimed at increasing adolescents' access to, uptake of, and continued use of contraception.

Meaningful adolescent engagement is defined as an inclusive, intentional, mutually-respectful partnership between adolescents and adults whereby power is shared, respective contributions are valued, and adolescents' ideas, perspectives, skills and strengths are integrated into the design and delivery of programmes, strategies, policies, funding mechanisms and organizations that affect their lives and their communities, countries and the world *(82)*. It challenges practices of exclusion and token engagement, and is guided by the following five principles: rights-based; transparent and informative; voluntary and free from coercion; respectful of young people's views, backgrounds and identities; and safe *(82, 83)*.

The 2011 edition of the guideline did not include a PICO question on the meaningful engagement of adolescents in the design, implementation and/or monitoring and evaluation of contraceptive services or programmes.

PICO question

Does meaningful engagement of adolescents in the design, implementation and/or monitoring and evaluation of programmes increase adolescents' uptake of and/or continued use of a modern contraceptive method and/or their contraceptive method of choice? For further details on PICO question 2.8 (including comparators and secondary outcomes), refer to **Annex 4**.

Summary of the evidence

No studies were identified in the review for this PICO question, as no studies compared interventions with meaningful engagement of adolescents to interventions without meaningful engagement. Some studies from other PICO questions included meaningful engagement of adolescents as part of multi-component intervention strategies, compared with no intervention. However, the information about what was done to engage adolescents was limited. Given this, the ability to ascertain the impact of the intervention on the outcomes of interest is also limited.

Certainty of the evidence for the good practice statement

In summary, there was no available evidence to directly inform this recommendation.

Rationale for the good practice statement

The GDG issued a good practice statement in favour of this intervention. The GDG members agreed that the evidence was not sufficient for a strong recommendation. However, there was consensus that the intervention encompassed by this good practice statement does more good than harm, and that not including the intervention in efforts to increase contraceptive use among adolescents would be contrary to practice norms. Thus, the GDG agreed that a good practice statement would be most appropriate.

The GDG noted that the intervention is likely to be acceptable to adolescents, their families and the broader community. While meaningful engagement of adolescents will require human and financial resources, the GDG considered such interventions to be feasible in most contexts. Overall, there was strong consensus among the GDG members that the intervention would promote gender equality and advance equity, more generally.

Of all the implementation stages, the GDG highlighted that meaningful engagement of adolescents is potentially the most critical in the design stage and in monitoring and evaluation for accountability purposes through a human rights-based approach *(84)*. Finally, it was noted that meaningful engagement of adolescents requires additional time, effort and funding, and that this should be accounted for in workplans and budgets, and encouraged and supported by agencies that provide technical and financial support.

CHAPTER 4

Analytic framework for selecting evidence-based interventions for implementation

4. Analytic framework for selecting evidence-based interventions for implementation

Putting oneself in the shoes of a policy-maker or programme manager, how could one make use of these numerous recommendations and good practice statements to prevent early pregnancy and poor reproductive outcomes among adolescents in a way that is most appropriate and responsive to the needs of their countries and contexts?

The second edition of the *Global accelerated action for the health of adolescents (AA-HA!): guidance to support country implementation*, published in 2023 by WHO, and developed by WHO in partnership with UNAIDS, UNESCO, UNFPA, UNICEF, UN WOMEN, the World Food Programme and the Partnership for Maternal, Newborn and Child Health (PMNCH), sets out a useful step-by-step process for responding to this question *(106)*.

4.1 Setting priorities in adolescent health programmes

Chapter 4 of *AA-HA!* calls for national and subnational governments to identify and address adolescent health and well-being programming priorities because:

- the scope for adolescent health and well-being programmes is very broad;
- the nature, scale and impact of adolescent health and well-being needs are unique in each country; and
- all governments face resource constraints, and so they must make difficult choices to ensure that resources are used most effectively *(106)*.

It calls for the process of national prioritization to be explicit, transparent and involve all relevant stakeholders across key sectors, and that this process should include:

- a needs assessment to identify which conditions have the greatest impact on adolescent health, well-being and development, both among adolescents by age, sex and part of the country and among those most vulnerable;
- a landscape analysis of existing adolescent health and well-being programmes, policies, legislation, capacity and resources within the country, as well as a review of current global and local guidance on evidence-based interventions; and
- setting priorities by applying explicit criteria such as the magnitude and public health importance of the issue; the potential to address the needs of vulnerable populations and poorly served groups; the existence of effective, appropriate and acceptable interventions to reduce priority burdens; and the feasibility of delivering the intervention(s) and potential to go to full scale *(106)*.

The case for investing in adolescent health is described in detail in the *AA-HA!* guidance *(106)*; it focuses on the following five key messages.

- Adolescents have a fundamental right to health, and yet they bear a substantial proportion of the global disease and injury burden.
- Investments in adolescent health and well-being bring a triple dividend of health and well-being

benefits – for adolescents now, for adolescents in the future, and for the next generation.
- Investments in adolescent health and well-being bring substantial economic benefits and enhance human and social capital.
- Adolescents are not simply old children or young adults, they have particular needs.
- The 2030 Agenda for Sustainable Development cannot be achieved without investment in adolescent health and well-being.

The case for investing in adolescent SRH, and specifically in prevention of early pregnancy and poor reproductive outcomes among adolescents, has also been articulated in detail elsewhere *(1, 107-109)*. These arguments emphasize the costs and consequences of adolescent pregnancy, including maternal and infant morbidity and mortality, disruptions to educational attainment, limitations to future employment opportunities, and perpetuated cycles of poverty and inequality. Likewise, they describe the powerful and far-reaching positive impact of delayed pregnancy on the health and well-being of adolescents and the next generation, as well as on broader gender equality and social progress. Addressing this issue is essential to realizing the full potential of adolescents and achieving sustainable development outcomes.

Once consensus has been reached on the need for and importance of preventing early pregnancy and poor reproductive outcomes among adolescents, the next step is to set priorities within this objective. An important point of departure is that adolescent girls and boys are a diverse group at different stages of personal development, and living and developing in different social, economic and cultural contexts. These differences reinforce the need to understand the realities of key subgroups of adolescents and to tailor our approaches to their needs, preferences and contexts *(110)*.

Armed with the findings of the levels of child marriage and adolescent contraceptive use and the determinants of these conditions/behaviours among different groups, one could then make choices from the menu of recommendations and good practice statements in these guidelines. The two frameworks described below can facilitate well-informed and well-considered decision-making.

4.1.1 Choosing from a menu of proven interventions to prevent child marriage to address the principal drivers of child marriage in a setting/context

A framework developed by Population Council provides a useful basis for matching interventions to the determinants of child marriage in a setting. It sets out five categories of factors that contribute to child marriage, and then five categories of interventions to address them *(53)*.

The framework proposes that two **distal drivers** (social norms and attitudes, and poverty and economic factors) underlie three more **proximal factors** that lead to child marriage (lack of agency, lack of opportunity, and fear of girls' sexuality and pregnancy). These drivers operate at community, household and individual levels, and each of these drivers is likely to affect some girls and their families more than others. For example, in a highly conservative middle-class family living in a big city, prevailing social norms may be a far more important driver than economic constraints. Further, some or all of these drivers could intersect and compound their effects.

In addition, in a family living in an impoverished peri-urban community, family poverty may be amplified by lack of educational and work opportunities in the community. These drivers may also influence short-, medium- and long-term outcomes for girls and their families. For example, poverty, lack of agency and lack of opportunity could worsen the family's economic situation, potentially leading to psychological distress and/or intimate partner violence.

Interventions to address the drivers of child marriage, meanwhile, are placed in five broad categories:
- **empowerment programmes** which aim to increase girls' agency and equip them with knowledge and skills to avoid child marriage;
- **community engagement programmes** which aim to address social norms by sensitizing parents and community members to the risks of child marriage;
- **educational interventions** which encourage support for continued education as an alternative to marriage;
- **economic support programmes** which aim to alleviate pressures and offer financial incentives for

certain behaviours, such as delaying marriage and keeping girls in school; and

- **legal or policy interventions** which aim to create a legal and policy environment that makes child marriage more difficult.

As discussed above, the drivers of child marriage vary between and within settings, and interventions that are effective in one context may be less effective in another. A clear understanding of the drivers in a particular context can contribute to a better-informed choice of a package of interventions from the available menu. For example, in the context of economic hardship caused by an intense and prolonged drought, an economic support programme combined with an educational intervention may be more effective than laws and policies or an empowerment programme on its own.

4.1.2 Choosing from a menu of proven interventions to increase access to, use of, and continued use of contraception among adolescents based on an understanding of the drivers of non-/low use in a setting/context

A framework developed by the International Center for Research on Women (ICRW) provides a useful basis for matching interventions to promote the uptake of contraception with an understanding of the decisions that individuals and couples make and the context in which these decisions occur. It sets out three demand-side and two supply-side factors influencing contraceptive decision-making by adolescents, and proposes interventions to address each *(111)*.

Demand-side factors

Desire to avoid, delay, space or limit childbearing

In contexts in which early childbearing within or outside marriage/union is socially accepted or even encouraged, early pregnancy is likely to be intended and wanted. Thus, efforts to increase contraceptive awareness and access are likely to have little effect on their uptake. Rather, initiatives that address poverty and social disadvantage, including lack of access to education and employment opportunities, are required. These efforts should be combined with complementary efforts to reduce child/early marriage, which is a major contributor to adolescent childbearing.

Desire to use contraception

Some adolescents do not desire to use contraception because of fear of side-effects, because they mistakenly believe it could prevent them from getting pregnant in the future, and/or because they believe that its use conflicts with their traditions and religious directives. In this context, information and education on contraception are required, including efforts to understand and address myths and misconceptions.

Agency to use contraception

Some adolescents lack the agency, self-assurance and/or independence to use contraception. They may be reluctant to admit that they are sexually active or embarrassed to seek contraception. They may face opposition from their partners or influential family members such as mothers-in-law, who – in some settings – can overrule decisions they make. In such contexts, efforts to build adolescent girls' abilities to make decisions and negotiate decisions about childbearing and contraceptive use are required, as are efforts to engage and support their male partners in shared decision-making. Depending on the social context, young men may also lack the confidence and independence to seek contraception. That is why, alongside efforts to reach young people, complementary efforts are needed to build support for contraceptive use among family and community members.

Supply-side factors

Access to contraceptive services

In some settings, laws and policies prevent the provision of contraception based on age or marital status. Further, adolescents may be unaware about where (or when) contraceptives are available, unable to reach a contraceptive service-delivery point, or unable to afford them. Barriers such as inaccessible service locations and cost negatively affect adolescents as well as adults. However, they disproportionally affect adolescents, as they often have limited ability to move around and financial autonomy to pay for service fees and transport. In such contexts, efforts to enable adolescents to access contraceptive services are required.

Provision of quality adolescent-friendly services

In many contexts, health workers have knowledge gaps and misconceptions about contraceptive service provision. They may believe that contraceptive methods, and especially long-acting methods,

should not be used by adolescents who have not yet had a child. They may not be aware that when adolescents use contraceptives, they are more likely to use them for shorter periods than adults, and are more likely than adults to discontinue use because they are particularly sensitive to side-effects. They may also not be aware that adolescents are at higher risk of rapid repeat pregnancies because of lack of awareness and misconceptions about return to fertility. Health workers may also lack the knowledge and skills to respond to the specific needs of adolescents. In particular, they may lack the knowledge or skills to assess the cognitive, psychological and social situation of their adolescent clients, and to offer contraception as a means of achieving their life goals, using approaches such as motivational interviewing and aspirational counselling. Finally, in many contexts, health workers believe that it is wrong for adolescents to be sexually active before marriage. Together, these challenges translate into judgemental and disrespectful behaviour.

4.2 Balancing efforts to achieve global targets with efforts to understand and respond to local needs

Programme managers face different and competing pressures. On the one hand, they are asked to step up implementation efforts to achieve SDG targets. On the other hand, the differing drivers of child marriage and adolescent contraceptive use in different settings point to the need for local responses. How could a programme manager at a district or subdistrict level ensure that the response they are putting in place is appropriately tailored to their specific local context, and at the same time is in line with calls from the national, regional and global levels? The HIV approach of "know your epidemic, tailor your response" provides a useful model *(112)*.

For HIV prevention, this approach recognized that there was no single global HIV epidemic, but rather, a multitude of diverse epidemics. The strategy thus involved the following: understanding the drivers in each setting, prioritizing or phasing responses accordingly, setting measurable targets, tailoring prevention plans, and using strategic information to stay on course.

For adolescent pregnancy prevention, this would similarly require a recognition that there are many "hotspots", each with its own complicated set of intersecting drivers. At the same time, as Wilson and Halperin *(113)* have stressed, the approach should seek to avoid the following pitfalls of the HIV model:

- overcomplicating tailored approaches to the point where one is unable to act decisively
- over-reliance on mathematical modelling without careful triangulation
- ensuring that responses are grounded in evidence so as to avoid compromising rigour and
- knowing how to bring about social and normative change to address cross-cutting drivers.

Nevertheless, the model provides useful lessons for developing adolescent pregnancy prevention strategies that include clear targets for different scenarios or patterns of child marriage at the local level, with transparent leadership, coordination and accountability at national and global levels.

4.3 Employing an explicit and directive equity focus to leave no one behind

Around the world, adolescents from some families and communities are being left behind in progress on child marriage and prevention of adolescent pregnancy *(4)*. They include those who live in remote rural areas or in deprived peri-urban areas; those from poor families; those with little education; those from historically marginalized groups; those with disabilities; and those affected by conflict and displacement. While a focus on the drivers of child marriage and adolescent contraceptive use at the local level can contribute to identifying the differing ways in which adolescents in different families and communities are affected, there is still a risk that those who are most marginalized could be left behind. Numerous tools are available in the public arena to integrate an equity focus into monitoring and evaluation efforts. Two examples are WHO's *Inequality monitoring in sexual, reproductive, maternal, newborn, child and adolescent health* and WHO's *Innov8 approach for reviewing national health programmes to leave no one behind (114, 115)*.

WHO's *Inequality monitoring in sexual, reproductive, maternal, newborn, child and adolescent health*

provides a step-by-step manual to strengthen and build capacity for quantitative monitoring of inequality *(114)*. It begins in **Step 1** with efforts to determine the scope of monitoring and to decide in **Step 2** upon the best available data. Programme managers are then guided in **Step 3** to perform data analyses, in **Step 4** to report findings, and in **Step 5** to translate knowledge into action. The step-by-step manual is complemented with a companion workbook with exercises to guide the process of inequality monitoring in sexual, reproductive, maternal, newborn, child and adolescent health, and a template to map potential data sources.

WHO's *Innov8 Approach* aims to support operationalization of the concept of leaving no one behind, by making policies and programmes more equity-oriented, rights-based and gender-responsive, while addressing critical social determinants of health *(115)*. It guides users through a review and decision-making process to be undertaken by a multidisciplinary team, often comprising representatives from national and sub-national health authorities, research institutes, civil society and non-governmental organizations, and other sectors. It begins with the completion in **Step 1** of a diagnostic checklist and an articulation in **Step 2** about how the programme is expected to produce the desired results (a "programme theory"). Using available evidence, **Steps 3 and 4** respectively identify the sub-populations not being reached by or benefiting less from the programme and the factors that prevent or hinder and facilitate effective coverage, serving to test the "programme theory". In **Step 5**, the mechanisms underpinning these barriers and generating inequities and discrimination are examined. In **Step 6**, the review team considers how to overcome these barriers and challenges including through the enhancement of intersectoral action and social participation. A transformative redesign proposal is developed in **Step 7** that includes a set of action-oriented, targeted recommendations for adjustments to make the programme more equity-oriented, rights-based and gender-responsive and to address critical social determinants. **Step 8** looks at how to monitor the proposed programme enhancements and to adjust the ongoing monitoring and evaluation framework to ensure sustained attention to leaving no one behind. The Innov8 approach has been used in relation to a range of programme areas – including adolescent health – in a variety of settings. It has been adapted, tailored to and aligned with country-specific and programmatic contexts and existing review processes.

4.4 Monitoring and evaluating programmes and projects to prevent child marriage and improve the health and well-being of married girls, and to improve access to, uptake of, and continued use of contraception by adolescents

A useful framework that can be used to monitor and evaluate policies and programmes is the *International Health Partnership (IHP+) Common Monitoring and Evaluation Framework (116, 117)*. Using this framework, a policy-maker or programme manager is guided to set out indicators in five categories:

- inputs (e.g. financing, human resources)
- processes (e.g. supply chain and mechanisms for sharing information)
- outputs (e.g. availability of services and interventions and their quality)
- outcomes (e.g. intervention coverage and prevalence of risk behaviours) and
- impact (e.g. health impact and system efficiency).

With regard to evaluation, the *AA-HA!* guidance recommends that policy-makers and programme managers use the *Development Assistance Committee criteria (118)*, namely:

- relevance (i.e. consistency with the overall policy or programme goal and its desired impact);
- effectiveness (i.e. reasons for achievement, or not, of the policy or programmes' main objective[s]);
- efficiency (i.e. cost of resources – whether high or low – to achieve results);
- impact (i.e. the difference the policy or programme made to beneficiaries); and
- sustainability (i.e. the likelihood that policy or programme benefits will continue in the absence of external support).

The *AA-HA!* guidance proposes a core set of adolescent health indicators, for the purpose of harmonizing efforts around adolescent health measurement and reporting, some of which relate to adolescent SRH *(106)* (**see Box 4.1**).

Box 4.1 Recommended indicators for monitoring and evaluating adolescent sexual and reproductive health

The *Global Accelerated Action for the Health of Adolescents (AA-HA!): Guidance to Support Country Implementation* proposes a core set of adolescent health indicators, for the purpose of harmonizing efforts to measure and report adolescent health, some of which relate to adolescent SRH *(106)*. Most of these indicators are in the categories of outcomes or impact. Indicators in the categories of inputs, processes and outputs will need to be defined based on the specific intervention and context in which it will be implemented, taking into account practical considerations and the available data sources.

Domain 1: Social, cultural, economic, educational and environmental determinants of health

- Proportion of female adolescents (15–19 years) who make their own informed decisions regarding sexual relations, contraceptive use and reproductive health care

Domain 2: Health behaviours and risks

- Proportion of adolescents (15–19 years) who had their first sexual intercourse before 15 years of age, by sex
- Proportion of adolescents (10–19 years) who used a condom at last sexual intercourse, by age group (10–14, 15–19 years) and sex
- Proportion of adolescents (10–19 years) who used a contraceptive (modern method) at last sexual intercourse, by method used, age group (10–14, 15–19 years), and sex
- Proportion of adolescents (10–19 years) who have their need for contraception satisfied with modern methods, by age group (10–14, 15–19 years) and sex
- Proportion of live births to female adolescents (10–19 years) attended by skilled health personnel, by age group (10–14, 15–19 years)
- Proportion of female adolescents (10–19 years) who were aware of menstruation before menarche, by age group (10–14, 15–19 years)

Domain 3: Policies, programmes and laws

- Existence of national standards for delivery of health services to adolescents (10–19 years)
- Existence of national policy exempting adolescents (10–19 years) from user fees for specified health services in the public sector, by type of service
- Absence of legal age limit for married and unmarried adolescents (10–19 years) to provide consent, without spousal/parental/legal guardian consent, for specified adolescent health services, by marital status and type of service

Domain 4: Systems performance and interventions

- Proportion of 15-year-old adolescents covered by human papillomavirus (HPV) vaccine (last dose in schedule), by sex
- Proportion of schools that offered life skills-based HIV and sexuality education during the previous academic year

Domain 6: Health outcomes and conditions

- Number of new cases of STIs among adolescents (10–19 years), by age group (10–14, 15–19 years) and sex
- Proportion of adolescents (10–19 years) who experienced physical violence during the past 12 months, by perpetrator (parents/caregivers, teachers, other adults, intimate partners, peers), age group (10–14, 15–19 years) and sex
- Proportion of adolescents (10–19 years) who experienced contact sexual violence during the past 12 months, by perpetrator (parents/caregivers, teachers, other adults, intimate partners, peers), age group (10–14, 15–19 years) and sex
- Adolescent (10–19 years) birth rate, by age group (10–14, 15–19 years)
- Proportion of female adolescents (10–19 years) who have undergone female genital mutilation/cutting, by age group (10–14, 15–19 years)

Source: Marsh et al., 2022 (119).

References

References[3]

1. Sully E, Biddlecom A, Darroch J, Riley T, Ashford L, Lince-Deroche N et al. Adding it up: investing in sexual and reproductive health 2019. New York: Guttmacher; 2020 (https://www.guttmacher.org/report/adding-it-up-investing-in-sexual-reproductive-health-2019).

2. Births by five-year age group of mother, region, subregion and country, annually for 1950–2100 [website]. United Nations Department of Economic and Social Affairs (https://population.un.org/wpp/downloads?folder=Standard%20Projections&group=Fertility).

3. World Population Prospects, 2022 Revision: age-specific fertility rates by region, subregion and country, 1950–2100 (births per 1,000 women) [website]. United Nations Department of Economic and Social Affairs; 2022 (https://www.un.org/development/desa/pd/content/World-Population-Prospects-2022).

4. Motherhood in childhood: the untold story. New York: United Nations Population Fund; 2022 (https://www.unfpa.org/sites/default/files/pub-pdf/MotherhoodInChildhood_report.pdf).

5. Zambia Demographic and Health Survey 2018. Lusaka and Rockville: Zambia Statistics Agency, Zambia Ministry of Health and ICF International; 2019 (https://dhsprogram.com/pubs/pdf/FR361/FR361.pdf).

6. Philippines National Demographic and Health Survey 2017. Quezon City and Rockville: Philippine Statistics Authority and ICF International; 2018 (https://dhsprogram.com/pubs/pdf/FR347/FR347.pdf).

7. Chung HW, Kim EM, Lee JE. Comprehensive understanding of risk and protective factors related to adolescent pregnancy in low- and middle-income countries: a systematic review. J Adolesc. 2018;69:180-8 (https://doi.org/10.1016/j.adolescence.2018.10.007).

8. Yakubu I, Salisu WJ. Determinants of adolescent pregnancy in sub-Saharan Africa: a systematic review. Reprod Health. 2018;15(1):15 (https://doi.org/10.1186/s12978-018-0460-4).

9. Neal S, Channon AA, Chandra-Mouli V, Madise N. Trends in adolescent first births in sub-Saharan Africa: a tale of increasing inequity? Int J Equity Health. 2020;19(1):151 (https://doi.org/10.1186/s12939-020-01251-y).

10. Petroni S, Steinhaus M, Fenn NS, Stoebenau K, Gregowski A. New findings on child marriage in sub-Saharan Africa. Ann Glob Health. 2017;83(5-6):781-90 (https://doi.org/10.1016/j.aogh.2017.09.001).

11. Child marriage. In: UNICEF Data [website]. New York: United Nations Children's Fund; 2023 (https://data.unicef.org/topic/child-protection/child-marriage).

12. Akwara E, Chandra-Mouli V. Good progress in a number of areas of ASRH, but there is much more that needs to be done. Sex Reprod Health Matters. 2023;31(1):2266657 (https://doi.org/10.1080/26410397.2023.2266657).

13. Is an end to child marriage within reach? Latest trends and future prospects. 2023 update. New York: United Nations Children's Fund; 2023 (https://data.unicef.org/resources/is-an-end-to-child-marriage-within-reach).

14. Towards ending child marriage: global trends and profiles of progress. New York: United Nations Children's Fund; 2021 (https://data.unicef.org/resources/towards-ending-child-marriage/).

15. Liang M, Simelane S, Fortuny Fillo G, Chalasani S, Weny K, Salazar Canelos P et al. The state of adolescent sexual and reproductive health. J Adolesc Health. 2019;65(6s):S3-15 (https://doi.org/10.1016/j.jadohealth.2019.09.015).

16. Herat J, Plesons M, Castle C, Babb J, Chandra-Mouli V. The revised international technical guidance on sexuality education – a powerful tool at an important crossroads for sexuality education. Reprod Health. 2018;15(1):185 (https://doi.org/10.1186/s12978-018-0629-x).

3 All references were accessed on 10 June 2024, unless otherwise indicated.

17. Chandra-Mouli V, Akwara E. Improving access to and use of contraception by adolescents: what progress has been made, what lessons have been learnt, and what are the implications for action? Best Pract Res Clin Obstet Gynaecol. 2020;66:107-18 (https://doi.org/10.1016/j.bpobgyn.2020.04.003).

18. Hidden in plain sight: a statistical analysis of violence against children. New York: United Nations Children's Fund; 2014 (https://data.unicef.org/resources/hidden-in-plain-sight-a-statistical-analysis-of-violence-against-children/).

19. Sardinha L, Yüksel-Kaptanoğlu I, Maheu-Giroux M, García-Moreno C. Intimate partner violence against adolescent girls: regional and national prevalence estimates and associated country-level factors. Lancet Child Adolesc Health. 2024;8(9):636-46 (https://doi.org/10.1016/S2352-4642(24)00145-7).

20. The health of young people: a challenge and a promise. Geneva: World Health Organization; 1993 (https://iris.who.int/handle/10665/37353).

21. Chandra-Mouli V, Ferguson BJ, Plesons M, Paul M, Chalasani S, Amin A et al. The political, research, programmatic, and social responses to adolescent sexual and reproductive health and rights in the 25 years since the International Conference on Population and Development. J Adolesc Health. 2019;65(6s):S16-40 (https://doi.org/10.1016/j.jadohealth.2019.09.011).

22. Tracking progress [website]. International Institute for Sustainable Development; 2024 (https://sdg.tracking-progress.org/indicator/3-7-2-adolescent-birth-rate/).

23. The Sexual and Reproductive Health and Rights score card for the Southern African Development Community [website]. Hera; 2021 (https://www.hera.eu/news/the-sexual-and-reproductive-health-and-rights-srhr-scorecard-of-the-southern-african-development-community-sadc).

24. WHO guidelines on preventing early pregnancy and poor reproductive outcomes among adolescents in developing countries. Geneva: World Health Organization; 2011 (https://iris.who.int/handle/10665/44691).

25. Engel D, Plesons M, Chandra-Mouli V, Chalasani S, Akwara E. Not on pause: responding to the sexual and reproductive health needs of adolescents during the COVID-19 crisis. Technical brief. New York: United Nations Population Fund; 2020 (https://www.unfpa.org/resources/responding-sexual-and-reproductive-health-needs-adolescents-during-covid-19-crisis).

26. FP2030 Global Strategy. Washington (DC): FP2030; 2024 (https://www.fp2030.org/fp2030-strategy-document/).

27. Financing for results to improve ASRH and wellbeing: entry points for action. Washington (DC): International Bank for Reconstruction and Development/ Global Financing Facility; 2022 (https://www.globalfinancingfacility.org/sites/default/files/GFF-Financing-results-improve-ASRHR_0.pdf).

28. HIV information note. Allocation period: 2023–2025. Geneva: The Global Fund; 2022 (https://www.theglobalfund.org/media/4765/core_hiv_infonote_en.pdf).

29. Bose K, Martin K, Walsh K, Malik M, Nyachae P, Sierra ML et al. Scaling access to contraception for youth in urban slums: the Challenge Initiative's systems-based multi-pronged strategy for youth-friendly cities. Front Glob Womens Health. 2021;2:673168 (https://doi.org/10.3389/fgwh.2021.673168).

30. World Health Organization, Commonwealth Medical Association Trust, United Nations Children's Fund. Orientation programme on adolescent health for health-care providers. Geneva: World Health Organization; 2006 (https://iris.who.int/handle/10665/42868).

31. United Nations Educational, Scientific and Cultural Organization (UNESCO), Joint United Nations Programme on HIV/AIDS (UNAIDS), United Nations Population Fund (UNFPA), United Nations Children's Fund (UNICEF), United Nations Entity for Gender Equality and the Empowerment of Women (UN Women), World Health Organization (WHO). International technical guidance on sexuality education: an evidence-informed approach. Paris: UNESCO; 2018 (https://doi.org/10.54675/UQRM6395).

32. UNFPA, UNESCO, UNICEF, UNAIDS, WHO. International technical and programmatic guidance on out-of-school comprehensive sexuality education. New York: United Nations Population Fund; 2020 (https://www.unfpa.org/featured-publication/international-technical-and-programmatic-guidance-out-school-comprehensive).

33. WHO recommendations: intrapartum care for a positive childbirth experience. Geneva: World Health Organization; 2018 (https://iris.who.int/handle/10665/260178). Licence: CC BY-NC-SA 3.0 IGO.

34. Companion of choice during labour and childbirth for improved quality of care: evidence-to-action brief, 2020. Geneva: World Health Organization; 2020 (https://iris.who.int/handle/10665/334151). Licence: CC BY-NC-SA 3.0 IGO.

35. Technical Report: WHO Guidelines for the health sector response to child maltreatment. Geneva: World Health Organization; 2019 (https://cdn.who.int/media/docs/default-source/documents/child-maltreatment/technical-report-who-guidelines-for-the-health-sector-response-to-child-maltreatment-2.pdf).

36. RESPECT women: preventing violence against women. Geneva: World Health Organization; 2019 (https://iris.who.int/handle/10665/312261). Licence: CC BY-NC-SA 3.0 IGO.

37. Abortion care guideline. Geneva: World Health Organization; 2022 (https://iris.who.int/handle/10665/349316). Licence: CC BY-NC-SA 3.0 IGO.

38. Medical eligibility criteria for contraceptive use, fifth edition. Geneva: World Health Organization; 2015 (https://iris.who.int/handle/10665/181468).

39. WHO handbook for guideline development, second edition. Geneva: World Health Organization; 2014 (https://iris.who.int/handle/10665/145714).

40. GRADE Working Group [website]. GRADE Working Group; 2024 (https://www.gradeworkinggroup.org/).

41. Malhotra A, Elnakib S. 20 years of the evidence base on what works to prevent child marriage: a systematic review. J Adolesc Health. 2021;68(5):847-62 (https://doi.org/10.1016/j.jadohealth.2020.11.017).

42. Siddiqi M, Greene ME. Mapping the field of child marriage: evidence, gaps, and future directions from a large-scale systematic scoping review, 2000–2019. J Adolesc Health. 2022;70(3s):S9-16 (https://doi.org/10.1016/j.jadohealth.2021.09.020).

43. Akl EA, Meerpohl JJ, Elliott J, Kahale LA, Schünemann HJ. Living systematic reviews: 4. Living guideline recommendations. J Clin Epidemiol. 2017;91:47-53 (https://doi.org/10.1016/j.jclinepi.2017.08.009).

44. Health promotion glossary of terms 2021. Geneva: World Health Organization; 2021 (https://iris.who.int/handle/10665/350161). Licence: CC BY-NC-SA 3.0 IGO.

45. Catalano RF, Skinner ML, Alvarado G, Kapungu C, Reavley N, Patton GC et al. Positive youth development programs in low- and middle-income countries: a conceptual framework and systematic review of efficacy. J Adolesc Health. 2019;65(1):15-31 (https://doi.org/10.1016/j.jadohealth.2019.01.024).

46. McNeely C, Blanchard J. The teen years explained: a guide to healthy adolescent development. Baltimore: Johns Hopkins Bloomberg School of Public Health; 2010 (https://publichealth.jhu.edu/sites/default/files/2023-06/ttye-guide.pdf).

47. Building girls' protective assets: a collection of tools for program design. New York: Population Council; 2016 (https://knowledgecommons.popcouncil.org/departments_sbsr-pgy/559/).

48. Building Assets Toolkit: developing positive benchmarks for adolescent girls – resource manual. New York: Population Council; 2015 (https://knowledgecommons.popcouncil.org/departments_sbsr-pgy/641/).

49. John N, Stoebenau K, Ritter S, Edmeades J, Balvin N. Gender socialization during adolescence in low- and middle-income countries: conceptualization, influences and outcomes. Innocenti Discussion Paper 2017-01. Florence: UNICEF Innocenti Global Office of Research and Foresight; 2017 (https://www.un-ilibrary.org/content/papers/25211110/17).

50. Chandra-Mouli V, Plesons M, Adebayo E, Amin A, Avni M, Kraft JM et al. Implications of the Global Early Adolescent Study's formative research findings for action and for research. J Adolesc Health. 2017;61(4 Suppl):S5-9 (https://doi.org/10.1016/j.jadohealth.2017.07.012).

51. BRAC, United Nations Population Fund (UNFPA). Adolescent empowerment at scale: successes and challenges of an evidence-based approach to young women's programming in Africa. New York: UNFPA; 2023 (https://www.unfpa.org/publications/adolescent-empowerment-scale-successes-and-challenges-evidence-based-approach-young).

52. Girl-centered program design: a toolkit to develop, strengthen and expand adolescent girls programs. New York: Population Council; 2010 (https://knowledgecommons.popcouncil.org/departments_sbsr-pgy/752/).

53. Psaki SR, Melnikas AJ, Haque E, Saul G, Misunas C, Patel SK et al. What are the drivers of child marriage? A conceptual framework to guide policies and programs. J Adolesc Health. 2021;69(6s):S13-22 (https://doi.org/10.1016/j.jadohealth.2021.09.001).

54. CRANK research meeting: transforming gender and social norms to prevent child marriage and advance gender equality. London: Girls Not Brides; 2023 (https://www.girlsnotbrides.org/learning-resources/child-marriage-research-action-network/crank-quarterly-research-meetings/crank-research-meeting-transforming-gender-and-social-norms-to-prevent-child-marriage-and-advance-gender-equality/).

55. Greene M, Levack A. Synchronizing gender strategies: a cooperative model for improving reproductive health and transforming gender relations. Washington (DC): Population Reference Bureau; 2010 (https://prb.org/wp-content/uploads/2010/10/synchronizing-gender-strategies.pdf).

56. Edström J, Hassink A, Shahrokh T, Stern E, editors. Engendering men: a collaborative review of evidence on men and boys in social change and gender equality. EMERGE Evidence Review. Promundo-US, Sonke Gender Justice and the Institute of Development Studies; 2015 (https://opendocs.ids.ac.uk/articles/report/Engendering_Men_A_Collaborative_Review_of_Evidence_on_Men_and_Boys_in_Social_Change_and_Gender_Equality/26456344?file=48236437).

57. Boyhood and child, early and forced marriages and unions: an evidence review. Washington (DC): Equimundo; 2022 (https://www.equimundo.org/resources/boyhood-and-child-early-and-forced-marriages-and-unions-an-evidence-review/).

58. Gender stereotyping: OHCHR and women's human rights and gender equality. In: United Nations Office of the High Commissioner for Human Rights (OHCHR) [website]. Geneva: OHCHR; 2024 (https://www.ohchr.org/en/women/gender-stereotyping).

59. Social inclusion summaries: conditionality in cash transfers. New York: United Nations Children's Fund; 2016 (https://www.unicef.org/easterncaribbean/media/731/file/Conditionality-in-Cash-Transfers-UNICEF%E2%80%99s-Approach-2016.pdf).

60. Özler B. Defining conditional cash transfer programs: an unconditional mess [blog]. In: World Bank Blogs; 13 May 2013 (https://blogs.worldbank.org/en/impactevaluations/defining-conditional-cash-transfer-programs-unconditional-mess).

61. Castaneda Aguilar R, Diaz-Bonilla C, Fujs T, Lakner C, Nguyen M, Viveros M et al. March 2024 global poverty update from the World Bank: first estimates of global poverty until 2022 from survey data [blog]. World Bank Blogs; 26 March 2024 (https://blogs.worldbank.org/en/opendata/march-2024-global-poverty-update-from-the-world-bank--first-esti).

62. Results briefs: rapid cash assistance to get through the crisis. In: World Bank Group [website] 13 July 2021 (https://www.worldbank.org/en/results/2021/07/13/rapid-cash-assistance-to-get-through-the-crisis).

63. Fuller AE, Zaffar N, Cohen E, Pentland M, Siddiqi A, Vandermorris A et al. Cash transfer programs and child health and family economic outcomes: a systematic review. Can J Public Health. 2022;113(3):433-45 (https://doi.org/10.17269/s41997-022-00610-2).

64. How cash transfers can contribute to ending child marriage. London: Girls Not Brides; 2021 (https://www.girlsnotbrides.org/learning-resources/resource-centre/cash-transfers-and-child-marriage/).

65. Progress on girls' access to education: what the new UNESCO data reveals [news release]. United Nations Educational, Scientific and Cultural Organization; 10 October 2023 (https://www.unesco.org/en/articles/progress-girls-access-education-what-new-unesco-data-reveals).

66. Psaki S, Haberland N, Mensch B, Woyczynski L, Chuang E. Policies and interventions to remove gender-related barriers to girls' school participation and learning in low- and middle-income countries: a systematic review of the evidence. Campbell Systematic Reviews. 2022;18(1):e1207 (https://doi.org/https://doi.org/10.1002/cl2.1207).

67. Education for all: the quality imperative. Paris: United Nations Educational, Scientific and Cultural Organization; 2004 (https://unesdoc.unesco.org/ark:/48223/pf0000137333).

68. What you need to know about UNESCO's global report on boys' disengagement from education. United Nations Educational, Scientific and Cultural Organization; 7 April 2022 (https://www.unesco.org/en/articles/what-you-need-know-about-unescos-global-report-boys-disengagement-education).

69. Begstom KA, Özler B. Improving the well-being of adolescent girls in developing countries. Policy Research working paper No. WPS 9827. Washington (DC): World Bank; 2021 (https://documents.worldbank.org/en/publication/documents-reports/documentdetail/127361635787281327/improving-the-well-being-of-adolescent-girls-in-developing-countries).

70. Rogers K, Le Kirkegaard R, Wamoyi J, Grooms K, Essajee S, Palermo T. Systematic review of cash plus or bundled interventions targeting adolescents in Africa to reduce HIV risk. BMC Public Health. 2024;24(1):239 (https://doi.org/10.1186/s12889-023-17565-9).

71. Convention on the Elimination of All Forms of Discrimination against Women. Resolution adopted by the United Nations General Assembly. New York: United Nations Office of the High Commissioner for Human Rights; 1979 (https://www.ohchr.org/en/instruments-mechanisms/instruments/convention-elimination-all-forms-discrimination-against-women).

72. Convention on the Rights of the Child. Resolution adopted by the United Nations General Assembly. New York: United Nations; 1989 (https://digitallibrary.un.org/record/80135).

73. The law and child marriage. London: Girls Not Brides; 2024 (https://www.girlsnotbrides.org/about-child-marriage/law-and-child-marriage/).

74. United Nations Population Fund (UNFPA), United Nations Children's Fund. Child marriage and the law: technical note for the Global Programme to End Child Marriage. New York: UNFPA; 2020 (https://www.unfpa.org/resources/child-marriage-and-law-technical-note-global-programme-end-child-marriage).

75. Consolidated guidelines on HIV, viral hepatitis and STI prevention, diagnosis, treatment and care for key populations. Geneva: World Health Organization; 2022 (https://iris.who.int/handle/10665/360601). Licence: CC BY-NC-SA 3.0 IGO.

76. Svanemyr J, Amin A, Robles OJ, Greene ME. Creating an enabling environment for adolescent sexual and reproductive health: a framework and promising approaches. J Adolesc Health. 2015;56(1 Suppl):S7-14 (https://doi.org/10.1016/j.jadohealth.2014.09.011).

77. Child marriage [website]. United Nations Population Fund; 2024 (https://www.unfpa.org/child-marriage).

78. El Nakib S, Ali M. Mapping the evidence on interventions that mitigate the impacts of child marriage and address the needs of child brides: a systematic scoping review. Sex Reprod Health Matters. (In press.)

79. Siddiqi M, Greene ME, Stoppel A, Allegar C. Interventions to address the health and well-being of married adolescents: a systematic review. Glob Health Sci Pract. 2024;12(4) (https://doi.org/10.9745/ghsp-d-23-00425).

80. Young, vulnerable and unattended: what we know about adolescent maternal and newborn health and opportunities for learning. Washington (DC): Save the Children; 2024 (https://resourcecentre.savethechildren.net/document/young-vulnerable-and-unattended-what-we-know-about-adolescent-and-newborn-health-and-opportunities-for-learning/).

81. Sabet F, Prost A, Rahmanian S, Al Qudah H, Cardoso MN, Carlin JB et al. The forgotten girls: the state of evidence for health interventions for pregnant adolescents and their newborns in low-income and middle-income countries. Lancet. 2023;402(10412):1580-96 (https://doi.org/10.1016/s0140-6736(23)01682-3).

82. Partnership for Maternal, Newborn and Child Health (PMNCH). Global consensus statement on meaningful adolescent and youth engagement. Geneva: World Health Organization; 2020 (https://pmnch.who.int/resources/publications/m/item/global-consensus-statement-on-meaningful-adolescent-and-youth-engagement).

83. My body, my life, my world operational guidance. Module 5: Youth leadership and participation. New York: United Nations Population Fund; 2022 (https://www.unfpa.org/sites/default/files/resource-pdf/UNFPA-MBMLMW-MOD5_EN.pdf).

84. Guidance note for applying a human rights-based approach to programming in UNFPA. New York: United Nations Population Fund; 2020 (https://www.unfpa.org/featured-publication/guidance-note-applying-HRBA-programming-unfpa).

85. WHO guideline on self-care interventions for health and well-being, 2022 revision. Geneva: World Health Organization; 2022 (https://iris.who.int/handle/10665/357828). Licence: CC BY-NC-SA 3.0 IGO.

86. Defining social norms and related concepts. New York: United Nations Children's Fund; 2021 (https://www.unicef.org/documents/defining-social-norms-and-related-concepts).

87. How changing social norms is crucial in achieving gender equality. New York: United Nations Population Fund; 2020 (https://www.unfpa.org/social-norms-change).

88. Technical note on gender norms. New York: United Nations Population Fund; 2020 (https://www.unfpa.org/resources/technical-note-gender-norms).

89. Gender mainstreaming for health managers: a practical approach. Geneva: World Health Organization; 2011 (https://iris.who.int/handle/10665/44516).

90. Gender transformative approaches to achieve gender equality and sexual and reproductive health and rights. New York: United Nations Population Fund; 2023 (https://www.unfpa.org/publications/gender-transformative-approaches-achieve-gender-equality-and-sexual-and-reproductive).

91. Engaging men, addressing harmful masculinities to improve sexual and reproductive health and rights [news release]. World Health Organization; 26 September 2019 (https://www.who.int/news/item/26-09-2019-engaging-men-addressing-harmful-masculinities-to-improve-sexual-and-reproductive-health-and-rights).

92. Passages Project: theory of change: transforming social norms for family planning and reproductive health. Washington (DC): Institute for Reproductive Health; 2020 (https://www.irh.org/wp-content/uploads/2020/04/Passages-Project-Theory-of-Change_updated_Jan_2021-1.pdf).

93. WHO, UNDP, UNFPA, The World Bank. Self-care interventions for sexual and reproductive health and rights to advance universal health coverage: 2023 joint statement by HRP, WHO, UNDP, UNFPA and the World Bank. Geneva: World Health Organization; 2023 (https://iris.who.int/handle/10665/373301). Licence: CC BY-NC-SA 3.0 IGO.

94. Adolescent-responsive contraceptive services: institutionalizing adolescent-responsive elements to expand access and choice. High Impact Practice Brief. Washington (DC): Family Planning High Impact Practices; 2021 (http://www.fphighimpactpractices.org/briefs/adolescent-responsive-contraceptive-services).

95. Global standards for quality health-care services for adolescents: a guide to implement a standards-driven approach to improve the quality of health-care services for adolescents. Geneva: World Health Organization; 2015 (https://iris.who.int/handle/10665/183935).

96. Classification of digital interventions, services and applications in health: a shared language to describe the uses of digital technology for health, second edition. Geneva: World Health Organization; 2023 (https://iris.who.int/handle/10665/373581). Licence: CC BY-NC-SA 3.0 IGO.

97. WHO guideline: recommendations on digital interventions for health system strengthening. Geneva: World Health Organization; 2019 (https://iris.who.int/handle/10665/311941). Licence: CC BY-NC-SA 3.0 IGO.

98. Global strategy on digital health 2020–2025. Geneva: World Health Organization; 2021 (https://iris.who.int/handle/10665/344249). Licence: CC BY-NC-SA 3.0 IGO.

99. Guidance on the safe and ethical use of technology to address gender-based violence and harmful practices: implementation summary. New York: United Nations Population Fund; 2023 (https://www.unfpa.org/publications/implementation-summary-safe-ethical-use-technology-gbv-harmful-practices).

100. Making health services adolescent-friendly developing national quality standards for adolescent-friendly health services. Geneva: World Health Organization; 2012 (https://iris.who.int/handle/10665/75217).

101. Ensuring human rights in the provision of contraceptive information and services: guidance and recommendations. Geneva: World Health Organization; 2014 (https://iris.who.int/handle/10665/102539).

102. Bradley SEK, Shiras T. Where women access contraception in 36 low- and middle-income countries and why it matters. Glob Health Sci Pract. 2022;10(3) (https://doi.org/10.9745/ghsp-d-21-00525).

103. Committee on Economic Social and Cultural Rights. General comment no. 22 on the right to sexual and reproductive health. New York: United Nations Economic and Social Council; 2016 (https://www.ohchr.org/en/documents/general-comments-and-recommendations/general-comment-no-22-2016-right-sexual-and).

104. Maternal, Newborn, Child, and Adolescent Health and Aging Data Portal [website]. World Health Organization; 2024 (https://platform.who.int/data/maternal-newborn-child-adolescent-ageing).

105. WHO recommendations on adolescent sexual and reproductive health and rights. Geneva: World Health Organization; 2018 (https://iris.who.int/handle/10665/275374). Licence: CC BY-NC-SA 3.0 IGO.

106. Global accelerated action for the health of adolescents (*AA-HA!*): guidance to support country implementation, second edition. Geneva: World Health Organization; 2023 (https://iris.who.int/handle/10665/373300). Licence: CC BY-NC-SA 3.0 IGO.

107. Merrick T. Making the case for investing in adolescent reproductive health: a review of evidence and PopPov research contributions. Washington (DC): Population Reference Bureau; 2015 (https://www.prb.org/wp-content/uploads/2016/01/poppov-report-adolescent-srh.pdf).

108. Greene M, Merrick T. The case for investing in research to increase access to and use of contraception among adolescents. Seattle: Alliance for Reproductive, Maternal, and Newborn Health; 2015 (https://www.rhsupplies.org/uploads/tx_rhscpublications/The_Case_for_Investing_in_Research_to_Increase_Access_to_and_Use_of_Contraception_Among_Adolescents.pdf).

109. Wodon Q, Savadogo A, Kes A. Economic impacts of child marriage: work, earnings, and household welfare brief. Washington (DC): The World Bank and International Center for Research on Women; 2017 (https://documents1.worldbank.org/curated/en/312761498512784050/pdf/116835-BRI-P151842-PUBLIC-EICM-Brief-WorkEarningsHousehold-PrintReady.pdf).

110. Muthengi E, Olum R, Chandra-Mouli V. Context matters: one size does not fit all when designing interventions to prevent child marriage. J Adolesc Health. 2021;69(6s):S1-3 (https://doi.org/10.1016/j.jadohealth.2021.09.018).

111. Glinski A, Sexton M, Petroni S. Understanding the adolescent family planning evidence base. Washington (DC): International Center for Research on Women; 2014 (https://www.icrw.org/wp-content/uploads/2016/10/FINAL-Understanding-the-Adolescent-Family-Planning-Evidence-Base-7.30.pdf).

112. Practical guidelines for intensifying HIV prevention: towards universal access. Geneva: Joint United Nations Programme on HIV/AIDS; 2007 (https://data.unaids.org/pub/manual/2007/20070306_prevention_guidelines_towards_universal_access_en.pdf).

113. Wilson D, Halperin DT. "Know your epidemic, know your response": a useful approach, if we get it right. Lancet. 2008;372(9637):423-6 (https://doi.org/10.1016/s0140-6736(08)60883-1).

114. Inequality monitoring in sexual, reproductive, maternal, newborn, child and adolescent health: a step-by-step manual. Geneva: World Health Organization; 2022 (https://iris.who.int/handle/10665/351192). Licence: CC BY-NC-SA 3.0 IGO.

115. Innov8 approach for reviewing national health programmes to leave no one behind: technical handbook. Geneva: World Health Organization; 2016 (https://iris.who.int/handle/10665/250442).

116. Health programme evaluation: guiding principles for its application in the managerial process for national health development. Geneva: World Health Organization; 1981 (https://iris.who.int/handle/10665/40674).

117. Monitoring, evaluation and review of national health strategies: a country-led platform for information and accountability. Geneva: World Health Organization; 2011 (https://iris.who.int/handle/10665/85877).

118. Principles for evaluation of development assistance. Paris: Organisation for Economic Co-operation and Development; 1991 (https://one.oecd.org/document/OCDE/GD(91)208/en/pdf).

119. Marsh AD, Moller AB, Saewyc E, Adebayo E, Akwara E, Azzopardi P et al. Priority indicators for adolescent health measurement: recommendations from the Global Action for Measurement of Adolescent Health (GAMA) Advisory Group. J Adolesc Health. 2022;71(4):455-65 (https://doi.org/10.1016/j.jadohealth.2022.04.015).

Annexes

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Annex 2. Summary of declarations of interest and the management of conflicts of interest

Name	Declaration of interest	Conflicts of interest and their management
Oluwasanmi Akintade	None declared	Not applicable
Huda Basaleem	None declared	Not applicable
Alma Virginia Camacho	None declared	Not applicable
Jean Casey	None declared	Not applicable
Caitlin Corneliess	Excluding WHO, another person or entity paid or contributed towards travel costs in connection with this WHO meeting or work	Not determined to be of sufficient concern to warrant management
Ashok Dyalchand	None declared	Not applicable
Anabel Erulkar	None declared	Not applicable
Mario Philip Festin	None declared	Not applicable
Shatha El Nakib	None declared	Not applicable
Jennifer Gassner	Employment (full-time employee of MSI Reproductive Choices, which is funded to implement programming in sexual and reproductive health [SRH], including adolescent health across 37 countries); research support, including grants, collaborations, sponsorships and other funding	Not determined to be of sufficient concern to warrant management
Margaret Greene	None declared	Not applicable
Nicole Haberland	None declared	Not applicable
Gwyn Hainsworth[a]	None declared	Not applicable

Name	Declaration of interest	Conflicts of interest and their management
Abigail Harrison	None declared	Not applicable
Nicola Jones	None declared	Not applicable
Beena Joshi	Held an office or other position, paid or unpaid, where the individual represented interests or defended a position related to the subject of the meeting or work; another aspect of the person's background or present circumstances not addressed above that might be perceived as affecting their objectivity or independence	Not determined to be of sufficient concern to warrant management
Caroline Kabiru	None declared	Not applicable
Ajay Khera	None declared	Not applicable
Cate Lane	None declared	Not applicable
Giovanna Lauro	None declared	Not applicable
Galina Lesco	None declared	Not applicable
Rebecka Lundgren	None declared	Not applicable
Matilde Maddaleno	None declared	Not applicable
Anju Malhotra	None declared	Not applicable
Donna McCarraher	None declared	Not applicable
Rajesh Mehta	None declared	Not applicable
Quamrun Nahar	None declared	Not applicable
Lemessa Oljira	None declared	Not applicable
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Callie Simon	None declared	Not applicable
Ilene Speizer	None declared	Not applicable
Klaudia Szymus	None declared	Not applicable
Seri Wendoh	None declared	Not applicable

a Observer/external partner

Annex 3. Guideline development process and methodology

The *WHO guideline on preventing early pregnancy and poor reproductive outcomes among adolescents in low- and middle-income countries, second edition* was prepared in accordance with WHO standards and methods for guideline development.

Details of the approach can be found in the *WHO handbook for guideline development, second edition (1)*. The WHO Department of Sexual and Reproductive Health and Research (SRH) led the development of this guideline. This annex gives an overview of the standards, methods and processes applied across the topics covered in this guideline.

Guideline development working groups

The SRH Department set up three working groups to perform specific guideline development functions: the WHO Guideline Steering Group, the Guideline Development Group (GDG) and the External Review Group (ERG). The members of the groups were selected to ensure a range of expertise and experience, including appropriate representation in terms of geography and gender. The following sections describe the three groups, and the names and institutional affiliations of the participants of each are listed in **Annex 1**.

The WHO Guideline Steering Group

Due to the nature of the guideline, the Guideline Steering Group included representation and expertise in sexual and reproductive health and rights (SRHR), adolescent health, gender, and human rights. Additionally, WHO representation provided expert perspectives, from the start of the guideline development process, on implementation considerations for the recommendations and good practice statements in various geographic regions.

The Guideline Steering Group, chaired by the SRH Department, led the guideline development process. The members initiated a scoping review and consultative process to define the scope of the guideline, identified and drafted the priority questions in the population, intervention, comparator and outcome(s) (PICO) format, and identified individuals to participate as a guideline methodologist and members of the systematic review teams, the GDG and the ERG. The Guideline Steering Group did not determine or agree on the final recommendations, as this is the role of the GDG as per WHO's standards and methods for guideline development. The Guideline Steering Group finalized and published the guideline, will oversee the dissemination of the guideline, and will be involved in the development of derivative products.

Guideline Development Group

The Guideline Steering Group identified and invited external (non-WHO) experts in SRHR, adolescent health, gender, and human rights to serve as members of the GDG. These experts included researchers, policy-makers, programme managers, civil society members, and young people themselves. All WHO regions were represented, and the GDG was balanced with regard to gender.

The specific tasks of the GDG included:

- reviewing the draft questions in PICO format drafted by the Guideline Steering Group;
- choosing and ranking the priority outcomes to guide the evidence reviews and focus the recommendations;
- examining the Grading of Recommendations Assessment, Development and Evaluation (GRADE)

profiles of the certainty of evidence used to inform the recommendations;
- interpreting the evidence, with explicit consideration of the overall balance of benefits and harms;
- formulating recommendations and good practice statements, taking into account benefits, harms, values and preferences, acceptability, feasibility, resource requirements, equity and other factors, as appropriate;
- identifying methodological issues and evidence gaps, and providing guidance on how to address these; and
- reviewing and approving the final recommendations prior to submission to the Guidelines Review Committee.

The GDG co-chairs had equal responsibilities and complementary expertise and perspectives in areas that were relevant to this guideline, came from two different WHO regions, and represented a gender balance. They also had experience in consensus-based processes. At the start of the first convening (described below), the nomination of the co-chairs was presented to and approved by the GDG.

The GDG convened four times throughout the guideline development process.

The first convening consisted of two 3-hour sessions held on the Zoom remote meeting platform in July 2022. Its objectives were to (i) introduce the methodologist and the members of the GDG, the systematic review teams, and the Guideline Steering Group; (ii) provide an overview of the 2011 edition of the guideline and the rationale for updating it; (iii) discuss the process that will be used to update the guideline; and (iv) review and discuss the proposed PICO questions, and agree on the final version that will be used for the guideline.

The second convening consisted of one 2-hour session held on Zoom in March 2023. Its objectives were to (i) summarize the steps undertaken thus far to update the guideline; (ii) review the PICO questions, which were finalized based on feedback received during the first convening of the GDG and shared by email in October 2022; (iii) provide an update on the current status of the evidence synthesis and appraisal processes; (iv) invite advice and suggestions from the GDG for the systematic review teams in completing the evidence reviews; and (v) provide an overview of the remaining process for updating the guideline.

The third convening took place in person over three days at the John Knox Centre in Geneva, Switzerland, in June 2023. Its objectives were to (i) review the evidence syntheses and appraisals prepared by the systematic review teams and methodologist; and (ii) decide on recommendations and/or good practice statements to be included in the updated guideline.

Finally, the fourth convening consisted of one 2-hour session held on Zoom in August 2023. Its objectives were to (i) provide an update on additional analyses conducted since the third convening of the GDG; (ii) receive feedback on the report of the third convening and agree on a process for its finalization; and (iii) discuss the remaining process for updating the guideline, including writing the guideline, developing a dissemination plan, and developing a research agenda.

External Review Group

To establish the ERG, the Guideline Steering Group requested the WHO regional advisors responsible for adolescent sexual and reproductive health and rights (ASRHR) to identify one country in their region that had made notable progress in preventing child marriage and/or increasing access to, uptake of, and continued use of contraception among adolescents. In Argentina, Bangladesh, Burkina Faso, the Republic of Moldova, the Philippines and Yemen, teams of stakeholders with expertise and interest in the promotion of ASRHR were then established. These teams consisted of health workers, researchers, policy-makers, programme managers, members of civil society, and young people themselves. The country teams were then requested to provide inputs to the guideline development process at two important junctures: (i) before the finalization of the PICO questions prepared by the Guideline Steering Group, so that the questions took into account country-level needs and priorities; and (ii) after the formulation of the recommendations and good practice statements by the GDG to provide technical feedback, identify factual errors, comment on the clarity of the language and provide input on implementation considerations. It was not within the ERG's remit to change the recommendations or good practice statements formulated by the GDG.

Declarations of interests by external contributors

All proposed GDG members were requested to submit a signed WHO declaration-of-interests form. Two members of the Guideline Steering Group independently reviewed the declaration-of-interests forms. The reviewers considered all possible conflicts of interest based on the latest guidance from the WHO Guidelines Review Committee, including placing a particular focus on possible financial or personal non-financial conflicts.

On confirmation of their eligibility to participate, all GDG members were instructed to notify the responsible technical officer of any change in relevant interests during the guideline development process, directly before each GDG convening. There were no cases of conflicts of interest that warranted any management or assessment by the WHO Office of Compliance, Risk Management and Ethics.

No member had a financial conflict of interest, and the GDG co-chairs did not present any conflicts of interest. A summary of the declaration-of-interests statements and information on how conflicts of interest were managed are included in **Annex 2**.

Defining the scope and topic areas for new recommendations and good practice statements

The Guideline Steering Group began by consulting with the target audience of the 2011 edition of the guideline to determine whether they believed an updated edition would be helpful to inform their work. There was overwhelming consensus that it would be helpful. Next, working within the general scope of the guideline, as presented in **Chapter 1, section 1.4**, while also considering the intended users and the intention of addressing both an enabling environment and specific relevant health interventions, the Guideline Steering Group mapped all existing WHO guidance relevant to preventing early pregnancy and poor reproductive outcomes among adolescents, specifically in relation to the six outcomes addressed in the 2011 edition of the guideline:

- reduce marriage before the age of 18 years
- reduce pregnancy before the age of 20 years
- increase use of contraception by adolescents at risk of unintended pregnancy
- reduce coerced sex among adolescents
- reduce unsafe abortion among adolescents and
- increase use of skilled antenatal, childbirth and postnatal care among adolescents.

The Guideline Steering Group then reviewed these and other materials to identify topic areas for which new recommendations and/or good practice statements were needed. Given that the United Nations published a revised edition of the *International technical guidance on sexuality education (2)* in 2018 and *International technical and programmatic guidance on out-of-school sexuality education (3)* in 2020, and WHO published recommendations for *Intrapartum care for a positive childbirth experience (4)* in 2018, an updated edition of the evidence-to-action brief on *Companion of choice during labour and childbirth for improved quality of care (5)* in 2020, *Guidelines for the health sector response to child maltreatment (6)* in 2019, the *RESPECT framework for preventing violence against women and girls (7)* in 2019, and *Abortion care guideline (8)* in 2022, the Guideline Steering Group decided to update the sections on the following two components:

- preventing child marriage and responding to the needs and rights of married girls; and
- improving access to, uptake of, and continued use of contraception among adolescents.

While two separate evidence synthesis and appraisal processes were conducted, the Guideline Steering Group ensured a strong link between the two components given their interrelated – and often reinforcing – nature.

Next, the specific questions to be addressed in the updated guideline within these two topics were scoped and refined through technical consultations with external experts representing a variety of stakeholder groups and geographic regions.

For the first component – preventing child marriage and responding to the needs and rights of married girls – in partnership with Girls Not Brides and the UNFPA–UNICEF Global Programme to End Child

Marriage, the SRH Department organized a technical consultation in October 2019 to review advances in research and programmatic experience since the publication of a previous set of research priorities on child marriage in 2015.

For the second component – improving access to, uptake of, and continued use of contraception among adolescents – the SRH Department organized a technical consultation in October 2019 with the Full Access, Full Choice Project at the University of North Carolina, Family Planning 2020, and the United States Agency for International Development (USAID). The aim was to identify updated research and measurement needs on adolescent contraception since the publication of the 2011 edition of the guideline. Additionally, a scoping review was carried out in collaboration with the Full Access, Full Choice Project to identify the relevant amount and type of evidence that addressed areas of interest for the second component, with the intention of determining which questions would require de novo systematic reviews, and which would require additional evidence beyond systematic reviews.

Based on these processes, the Guideline Steering Group drafted an initial list of the PICO questions, which were subsequently reviewed and finalized by the GDG and ERG, as described above.

Reviewing the evidence and formulating the recommendations

Defining and reviewing priority questions

The development of the new recommendations and good practice statements on the two components described above began with formulating the following PICO questions:

Preventing child marriage and responding to the needs and rights of married girls
1. Do interventions to empower girls by building their protective assets and/or promoting positive gender socialization reduce child marriage?
2a. Do interventions to build gender-equitable attitudes, norms and behaviours among boys (as peers and/or partners) and/or men (as partners or fathers) reduce child marriage?
2b. Do interventions to build awareness of and change attitudes and norms about child marriage, the rights of girls, and gender equality among parents/guardians of girls and boys and/or the broader community reduce child marriage?
3. Do the following types of incentives reduce child marriage: • conditional financial incentives • unconditional financial incentives (labelled or otherwise) and/or • non-financial incentives?
4. Do interventions to improve the availability and/or quality of educational opportunities for girls and young women reduce child marriage?

Preventing child marriage and responding to the needs and rights of married girls

5. Do the following types of interventions that improve the economic empowerment of girls reduce child marriage?
   - savings
   - bundled services *(9)*
   - demand-driven job services
   - childcare services
   - rural electrification
   - land rights
   - microcredit
   - business management training
   - networks and mentors and/or
   - integrated services for farming

6. Does the existence of child marriage prevention laws in line with those recommended by international treaty bodies, such as the Convention on the Rights of the Child (CRC) and the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW), reduce child marriage?

7. Do interventions to mobilize political, governmental, religious, traditional and/or other leaders reduce child marriage?

8. Do interventions to improve the health and social well-being of married girls mitigate the impact of child marriage on health and/or social outcomes?

9. Does meaningful engagement of adolescents in the design, implementation and/or monitoring and evaluation of programmes reduce child marriage?

Improving access to, uptake of, and continued use of contraception among adolescents

1a. Do interventions to empower girls to make decisions about their fertility and contraceptive use, and to change their perceptions regarding the role and status of women and girls, increase adolescents' new or continued use of a modern contraceptive method, their contraceptive method of choice and/or dual methods?

1b. Do interventions to shift social norms and behaviours regarding adolescent fertility and contraceptive decision-making, as well as wider social norms such as the role and status of women, among parents/guardians and/or the broader community, increase adolescents' new or continued use of a modern contraceptive method, their contraceptive method of choice and/or dual methods?

1c. Do interventions to shift social norms and behaviours regarding adolescent fertility and contraceptive decision-making, as well as wider social norms such as the role and status of women and girls, among boys (as peers or partners) and/or men (as partners or fathers), increase adolescents' new or continued use of a modern contraceptive method, their contraceptive method of choice, dual methods and/or male methods?

Improving access to, uptake of, and continued use of contraception among adolescents

2. Do the following interventions to expand opportunities for self-care increase adolescents' new or continued use of a modern contraceptive method or their contraceptive method of choice:
   - availability of hormonal contraceptives (including emergency contraception) over the counter (i.e. without prescription);
   - availability of subcutaneous depot medroxyprogesterone acetate (DMPA-SC) and training on self-injection; and/or
   - availability of contraceptives direct to consumer?

3. Do the following interventions to address financial barriers to contraceptives increase adolescents' new or continued use of a modern contraceptive method or their contraceptive method of choice:
   - availability of vouchers
   - free and/or reduced cost of contraceptives
   - social marketing and/or social franchising and
   - insurance-based programmes?

4. Do the following digital interventions for clients increase adolescents' new or continued use of a modern contraceptive method or their contraceptive method choice:
   - targeted and untargeted communication to persons
   - person-to-person communication and
   - on-demand communication with persons?

5. Do interventions directed at political, governmental, religious and traditional leaders, as well as other influential leaders and groups in the community, increase adolescents' new or continued use of a modern contraceptive method, their contraceptive method of choice and/or dual methods?

6. Do interventions to improve the following aspects of quality of services (drawn from WHO's *Global standards for quality health-care services for adolescents (10)*) increase adolescents' new or continued use of a modern contraceptive method or their contraceptive method of choice:
   - appropriate package of services
   - provider competencies and lack of bias
   - facility characteristics
   - equity and non-discrimination and
   - data and quality improvement?

7. Does the existence and/or proper application and implementation of enabling laws and policies on the following issues related to sexual activity, access to sexual and reproductive health services, and access to specific contraceptive methods, increase adolescents' uptake of and/or continued use of a modern contraceptive method or their contraceptive method of choice:
   - age
   - marital status and
   - consent procedures?

8. Does meaningful engagement of adolescents in the design, implementation and/or monitoring and evaluation of programmes increase adolescents' uptake of and/or continued use of a modern contraceptive method and/or their contraceptive method of choice?

Full details of the population, intervention, comparator and outcomes for each PICO question are presented in **Annex 4**.

Assessing the certainty of the evidence for recommendations

When formulating the recommendations and good practice statements, the GDG's deliberations were informed by the certainty of the available evidence and its expert opinions, in accordance with the WHO guideline development process. WHO utilizes the GRADE approach to developing recommendations *(1)*. This approach specifies four levels of certainty of evidence, which are described in **Table A3.1**.

Table A3.1 Description of the four levels of quality of evidence

Quality of evidence	Rationale
High	We are very confident that the true effect lies close to that of the estimate of the effect.
Moderate	We are moderately confident in the effect estimate; the true effect is likely to be close to the estimate of the effect, but there is a possibility that it is substantially different.
Low	Our confidence in the effect estimate is limited; the true effect may be substantially different from the estimate of the effect.
Very low	We have very little confidence in the effect estimate; the true effect is likely to be substantially different from the estimate of the effect.

The GRADE approach to appraising the certainty of quantitative evidence was used for all outcomes identified as critical for each of the PICO questions (see the **Web Annex**). Critical outcomes are those outcomes that are considered most important to individuals who are likely to be directly affected by the guideline. The rating of the outcomes was identified a priori by the GDG during the first convening. Following the completion of the evidence reviews, a GRADE Evidence-to-Decision table was prepared by the systematic review teams for each PICO question. These tables convey the judgements made by the GDG with respect to several factors, in addition to the benefits and harms and the certainty thereof, and includes the values and preferences of end users, resource use (including costs and cost-effectiveness), impact on human rights and equity, and acceptability and feasibility. The GRADE tables and the Evidence-to-Decision tables are presented in the **Web Annex**.

Determining the strength of a recommendation

A recommendation for an intervention indicates that it should be implemented; a recommendation against an intervention indicates that it should not be implemented. The strength of a recommendation – either "strong" or "conditional" – reflects the degree of confidence that the GDG has in the desirable effects of the recommendation outweighing the undesirable effects.

Desirable effects (i.e. benefits) may include beneficial health outcomes for individuals (e.g. reduced morbidity and mortality); reduced burden and/or costs for the individual, the family, the community, the programme and/or the health system; feasibility of implementation; and improved equity. Undesirable effects (i.e. harms) may include adverse health outcomes for individuals (e.g. increased morbidity

and mortality); and increased burden and/or costs for the individual, the family, the community, the programme and/or the health system. The burden and/or costs may include, for example, the resource-use and cost implications of implementing the recommendations (which end users, health workers or programmes would have to bear), and the potential legal ramifications where certain practices are criminalized.

A **strong recommendation** (for or against the intervention) is one for which the GDG is confident that the desirable effects of the recommendation clearly outweigh its undesirable effects. The higher the certainty of the evidence base, the more likely that a strong recommendation can be made. On the other hand, a conditional recommendation is one for which the certainty of the evidence base may be low or may apply only to specific groups or settings. Alternatively, a conditional recommendation may be assigned where the GDG concludes that the desirable effects of the recommendation probably outweigh the undesirable effects or are closely balanced, but is not confident about these trade-offs in all situations.

An intervention that has received a **conditional recommendation** (i.e. recommended in specific contexts or recommended only in the context of rigorous research) should be implemented only in the appropriate context and should be monitored and evaluated. Further research will be needed to address the uncertainties, and this may provide new evidence that may change a future overall assessment of the certainty of the evidence.

Good practice statements are an alternative to strong or conditional recommendations when the quality of analysed evidence is low or very low, but there is high certainty based on indirect evidence, common knowledge, and/or GDG consensus that following the recommendation would result in more benefit than harm, and/or when not following the recommendation would fall outside current practice norms. **In terms of implementation, good practice statements should be considered as equivalent to a strong recommendation; in other words, they are recommended for all or almost all populations and contexts.**

The values and preferences of end users (or potential end users), in relation to the intervention and to the acceptability to health workers or other programme staff of implementing it, contribute to determining the strength of a recommendation, along with a consideration of the relevant resource use, feasibility, human rights, gender equality and equity issues (see Table A3.2).

Table A3.2 GRADE domains considered when assessing the strength of recommendations

Domain	Rationale
Benefits and harms	When a new recommendation is developed, desirable effects (i.e. benefits) need to be weighed against undesirable effects (i.e. harms), considering any previous recommendation or another alternative. The larger the gap or gradient in favour of the benefits over the harms, the greater the likelihood of a strong recommendation.
Values and preferences	If the recommendation is likely to be widely accepted or valued highly, the greater the likelihood of a strong recommendation. If there is a great deal of variability or strong reasons that the recommended course of action is unlikely to be accepted, the greater the likelihood of a conditional recommendation.
Economic/financial implications (costs/ resource use)	Lower costs (e.g. monetary, infrastructure, equipment, human resources) or greater cost-effectiveness are more likely to support a strong recommendation.
Feasibility	The greater the feasibility of an intervention to all stakeholders, the greater the likelihood of a strong recommendation.
Equity and human rights	If an intervention will reduce inequities, improve equity or contribute to the realization of human rights, the greater the likelihood of a strong recommendation.
Acceptability	If a recommendation is widely supported by stakeholders and there is widespread acceptance for implementation within the community, the greater the likelihood of a strong recommendation.

Decision-making by the GDG

The GDG members were guided by the structured and systematic process articulated in the *WHO handbook for guideline development, second edition (1)*. All decisions were made by consensus.

The GDG reviewed the evidence in the evidence syntheses and in the GRADE Evidence-to-Decision tables and discussed the topics under consideration, facilitated by the guideline methodologist and the GDG co-chairs. The GDG meeting was designed to allow participants to consider and judge each of the GRADE domains (**see Table A3.2**) and formulate recommendations through a process of group discussion, engagement and revision. The GDG was asked to decide on the direction of each recommendation (i.e. to recommend for or against an intervention) and on the format and strength of each recommendation (i.e. strong or conditional recommendation or good practice statement) as drafted. The methodologist sometimes asked participants to raise their hands in support of each separate option; this was not a formal vote but a decision-making aid to allow the methodologist and co-chairs to gauge the distribution of opinion and subsequently work towards consensus through further discussion. The final wording of each recommendation, including an indication of its direction and strength, was confirmed by consensus among all GDG members during the meeting, and through subsequent independent review of the text. The Evidence-to-Decision tables are presented in the **Web Annex**.

Compiling and presenting the guideline content

Following the GDG fourth convening, members of the WHO Guideline Steering Group prepared a draft of the full guideline document to accurately reflect the deliberations and decisions of the GDG.

The draft guideline was sent electronically to the GDG and the ERG for review. Any further modifications that the Guideline Steering Group made to the guideline were limited to the correction of factual errors and improvement in language to address any lack of clarity. The revised version was then submitted to the Guidelines Review Committee for approval; minor requested revisions were made before final copy-editing and publication.

A description of the reviews conducted for the development of this guideline is presented in **Web Annex**. Evidence derived from the evidence reviews in support of the new recommendations and good practice statements is summarized in **GRADE tables in the Web Annex**. The Evidence-to-Decision tables are also presented in the **Web Annex**.

References for Annex 3

1. WHO handbook for guideline development, second edition. Geneva: World Health Organization; 2014 (https://iris.who.int/handle/10665/145714).
2. UNESCO, UNAIDS, UNFPA, UNICEF, UN Women, WHO. International technical guidance on sexuality education: an evidence-informed approach. Paris: United Nations Educational, Scientific and Cultural Organization; 2018 (https://doi.org/10.54675/UQRM6395).
3. UNFPA, UNESCO, WHO, UNICEF, UNAIDS, Human Reproduction Program. International technical and programmatic guidance on out-of-school comprehensive sexuality education. New York: United Nations Population Fund; 2020 (https://www.unfpa.org/featured-publication/international-technical-and-programmatic-guidance-out-school-comprehensive).
4. WHO recommendations: intrapartum care for a positive childbirth experience. Geneva: World Health Organization; 2018 (https://iris.who.int/handle/10665/260178). Licence: CC BY-NC-SA 3.0 IGO.
5. Companion of choice during labour and childbirth for improved quality of care: evidence-to-action brief, 2020. Geneva: World Health Organization; 2020 (https://iris.who.int/handle/10665/334151). Licence: CC BY-NC-SA 3.0 IGO.
6. Technical report: WHO guidelines for the health sector response to child maltreatment. Geneva: World Health Organization; 2019 (https://www.who.int/publications/m/item/who-guidelines-for-the-health-sector-response-to-child-maltreatment).
7. RESPECT women: preventing violence against women. Geneva: World Health Organization; 2019 (https://iris.who.int/handle/10665/312261). Licence: CC BY-NC-SA 3.0 IGO.
8. Abortion care guideline. Geneva: World Health Organization; 2022 (https://iris.who.int/handle/10665/349316). Licence: CC BY-NC-SA 3.0 IGO.
9. Rogers K, Le Kirkegaard R, Wamoyi J, Grooms K, Essajee S, Palermo T. Systematic review of cash plus or bundled interventions targeting adolescents in Africa to reduce HIV risk. BMC Public Health. 2024;24(1):239 (https://doi.org/10.1186/s12889-023-17565-9).
10. Global standards for quality health-care services for adolescents: a guide to implement a standards-driven approach to improve the quality of health-care services for adolescents. Geneva: World Health Organization; 2015 (https://iris.who.int/handle/10665/183935).

Annex 4. **PICO questions**

This annex presents the breakdown of all the research questions, detailing the PICOs – populations, interventions, comparators and outcomes. Please note that in the outcomes column, the primary outcomes are listed first, following by the secondary outcomes, which are distinguished by italics.

Table A4.1 Preventing child marriage and responding to the needs and rights of married girls

1	Intervention	Comparator	Outcomes	Population
1.1	Do interventions to empower girls by: • building their protective assets and/or • promoting positive gender socialization	1. No intervention 2. Interventions which do not specifically target adolescent girls (e.g. mass media, community mobilization) 3. Interventions addressing only supply-side constraints (e.g. access to health and education)	1. Reduce child marriage 2. *Increase girls' knowledge and understanding about the negative effects/consequences of child marriage* 3. *Increase girls' knowledge and understanding of adolescents' rights, and where they could seek help and support if needed* 4. *Increase girls' self-esteem and agency to assert preferences and negotiate decisions* 5. *Help girls challenge internalized feminine norms* 6. *Increase supportive social networks of peers and community members to whom they could turn for assistance* 7. *Result in harms and/or unintended consequences*	All girls[a]

1	Intervention	Comparator	Outcomes	Population
1.2a	Do interventions to build awareness of and change attitudes and norms about child marriage, the rights of girls, and gender equality among: • parents/guardians of girls and boys and/or • the broader community	1. No intervention 2. Interventions without engagement of these groups (i.e. girl-only interventions)	1. Reduce child marriage 2. *Increase knowledge and understanding of the negative effects/consequences of child marriage* 3. *Produce more equitable attitudes towards girls and boys, women and men, in terms of their roles, responsibilities, relations and sexuality* 4. *Enhance supportive social norms regarding rejection of child marriage* 5. *Result in harms and/or unintended consequences*	1. Parents/guardians[a] 2. Community[a]
1.2b	Do interventions to build gender-equitable attitudes, norms and behaviours among: • boys (as peers and/or partners) and/or • men (as partners or fathers)	1. No intervention 2. Interventions without engagement of these groups (i.e. girl-only interventions or community-wide interventions)	1. Reduce child marriage 2. *Increase knowledge and understanding of the negative effects/consequences of child marriage* 3. *Produce more equitable attitudes towards girls and boys, women and men, in terms of their roles, responsibilities, relations and sexuality* 4. *Help men challenge internalized masculine norms* 5. *Produce more gender equitable behaviours, including but not limited to division of domestic labour and shared decision-making* 6. *Result in harms and/or unintended consequences*	1. Boys[a] 2. Men[a]
1.3	Do the following types of incentives: • conditional financial incentives • unconditional financial incentives (labelled or otherwise) and/or • non-financial incentives	1. No intervention 2. Intervention without incentives 3. Interventions with incentives and another type of activity (i.e. “cash PLUS”)	1. Reduce child marriage 2. *Increase school enrolment, attendance and/or completion* 3. *Delay first pregnancy and/or birth* 4. *Result in harms and/or unintended consequences*	1. Households with a daughter under age 18 years[a] 2. Female caregiver of a daughter under age 18 years[a] 3. Girl under age 18 years[a] 4. Others involved in the approval or processing of marriages[a]

1	Intervention	Comparator	Outcomes	Population
1.4	Do interventions to improve the availability and/or quality of educational opportunities for girls and young women	No intervention	1. Reduce child marriage 2. *Increase school enrolment, attendance and/or completion* 3. *Increase self-efficacy and autonomy* 4. *Result in harms and/or unintended consequences*	1. All girls[a] 2. Married girls
1.5	Do interventions to improve the economic empowerment of girls through: • savings • bundled services *(1)* • demand-driven job services • childcare services • rural electrification • land rights • microcredit • business management training • networks and mentors, and/or • integrated services for farming	1. No intervention 2. Interventions for girls without an economic empowerment component	1. Reduce child marriage 2. *Increase initiation and/or continuation of gainful employment (including self-employment)* 3. *Increase girls' access to income and assets* 4. *Increase girls' control of and benefit from economic gains* 5. *Influence social and gender norms and attitudes about the potential for girls to contribute financially to the household through the attainment of education and employment* 6. *Increase autonomy of girls (e.g. their influence on the timing of their marriage, their choice of partner, their economic autonomy, financial decision-making)* 7. *Result in harms and/or unintended consequences*	1. All girls[a] 2. Married girls
1.6	Does the existence of child marriage prevention laws in line with those recommended by international treaty bodies, such as the CRC and CEDAW	1. No existing laws on child marriage prevention 2. Laws that are not in line with those recommended by international treaty bodies	1. Reduce child marriage 2. *Increase awareness and/or support for child marriage prevention laws* 3. *Result in harms and/or unintended consequences*	All girls[a]

1	Intervention	Comparator	Outcomes	Population
1.7	Do interventions to mobilize political, governmental, religious, traditional and/or other leaders	1. No intervention 2. Interventions without activities directed at influential leaders	1. Reduce child marriage 2. *Increase development of supportive laws and policies* 3. *Increase implementation of supportive laws and policies* 4. *Increase supportive social norms related to the value of preventing child marriage and commitment to acting to prevent child marriage* 5. *Result in harms and/or unintended consequences*	Political, governmental, religious, traditional and other influential leaders
1.8	Do interventions to improve the health and social well-being of married girls	No intervention	1. Mitigate the impact of child marriage on health outcomes, such as by improving SRH, other areas of women's health (e.g. intimate partner violence) and mental health 2. Mitigate the impact of child marriage on social outcomes, such as by increasing perceived/actual social support, autonomy, harmony and shared household decision-making 3. *Improve the health, education and/or well-being of the children of the girl/young woman* 4. *Result in harms and/or unintended consequences*	All married girls
1.9	Does meaningful engagement of adolescents in the design, implementation and/or monitoring and evaluation of programmes	1. No engagement of adolescents in the design, implementation, and/or monitoring and evaluation of programmes 2. Non-meaningful/token engagement of adolescents	1. Reduce child marriage 2. *Increase community engagement in efforts to prevent child marriage* 3. *Increase acceptability and appropriateness of programmes* 4. *Result in harms and/or unintended consequences*	All adolescents[a]

CEDAW: Convention on the Elimination of All Forms of Discrimination Against Women; CRC: Convention on the Rights of the Child; SRH: sexual and reproductive health.

Table A4.2 Improving access to, uptake of, and continued use of contraception among adolescents

2	Intervention	Comparator	Outcomes	Population
2.1a	Do interventions to empower girls to make decisions about their fertility and contraceptive use, and to change their perceptions regarding the role and status of women and girls	1. No intervention 2. Interventions which do not specifically target adolescent girls (e.g. mass media, community mobilization)	1. Increase use (new or continued) of: • a modern contraceptive method • their contraceptive method of choice • dual methods 2. *Increase access to:* • *any modern method of contraception* • *a range of contraceptive methods* 3. *Increase agency and/or autonomy to use contraception and make decisions about contraceptive use* 4. *Result in harms and/or unintended consequences*	1. All adolescents 2. 10- to 14-year-old adolescents 3. Married adolescents 4. Unmarried adolescents 5. First-time parents 6. Boys/young men 7. Adolescents with disabilities 8. Adolescents in school 9. Adolescents out of school 10. LGBTQIA+ adolescents 11. Adolescents in humanitarian crisis contexts 12. Adolescents living with HIV
2.1b	Do interventions to shift social norms and behaviours regarding adolescent fertility and contraceptive decision-making, as well as wider social norms such as the role and status of women and girls, among: • parents/guardians and/or • the broader community	1. No intervention 2. Interventions without engagement of these groups	1. Increase use (new or continued) of: • a modern contraceptive method • their contraceptive method of choice • dual methods 2. *Increase access to:* • *any modern method of contraception* • *a range of contraceptive methods* 3. *Increase supportive social norms and/or beliefs regarding contraceptive use and/or contraceptive decision-making among adolescents* 4. *Decrease reproductive coercion* 5. *Result in harms and/or unintended consequences*	1. Parents/guardians 2. Community

2	Intervention	Comparator	Outcomes	Population
2.1c	Do interventions to shift social norms and behaviours regarding adolescent fertility and contraceptive decision-making, as well as wider social norms such as the role and status of women and girls, among: • boys (as peers and/or partners) and/or • men (as partners or fathers)	1. No intervention 2. Interventions without engagement of these groups	1. Increase use (new or continued) of: • a modern contraceptive method • their contraceptive method of choice • dual methods • male methods 2. *Increase knowledge, attitudes, and/or supportive beliefs and/or social norms of boys/men regarding:* • *contraceptive use among adolescents* • *shared contraceptive decision-making* • *consent* 3. *Increase agency/self-efficacy of girls to:* • *negotiate with partner* • *obtain contraception* • *refuse sex* 4. *Decrease reproductive coercion* 5. *Result in harms and/or unintended consequences*	1. Boys 2. Men
2.2	Do the following interventions to expand opportunities for self-care: • availability of hormonal contraceptives (including emergency contraception) over the counter (i.e. without prescription) • availability of DMPA-SC and training on self-injection and/or • availability of contraceptives direct to consumer	Standard practice	1. Increase use (new or continued) of: • a modern contraceptive method • their contraceptive method of choice 2. *Increase access to:* • *any modern method of contraception* • *a range of contraceptive methods* 3. *Improve the quality of care (as perceived by adolescents)* 4. *Result in harms and/or unintended consequences*	All adolescents[b]

2	Intervention	Comparator	Outcomes	Population
2.3	Do the following interventions to address financial barriers to contraceptives: • availability of vouchers • free and/or reduced cost of contraceptives • social marketing and/or social franchising • insurance-based programmes	Standard practice	1. Increase use (new or continued) of: • a modern contraceptive method • their contraceptive method of choice 2. *Increase access to:* • *any modern method of contraception* • *a range of contraceptive methods* 3. *Improve the quality of care (as perceived by adolescents)* 4. *Result in harms and/or unintended consequences*	All adolescents[b]
2.4	Do the following digital interventions for clients: • targeted and untargeted communication to persons • person-to-person communication • on-demand communication with persons	1. No intervention 2. Non-digital intervention	1. Increase use (new or continued) of: • a modern contraceptive method • their contraceptive method of choice 2. *Increase correct knowledge about:* • *methods of contraception and their side-effects/return to fertility* • *sources of contraception* 3. *Increase agency to:* • *negotiate with partner* • *obtain contraception* • *manage side-effects* 4. *Result in harms and/or unintended consequences*	All adolescents[b]
2.5	Do interventions directed at political, governmental, religious and traditional leaders, as well as other influential leaders and groups in the community	No intervention	1. Increase use (new or continued) of: • a modern contraceptive method • their contraceptive method of choice • dual methods 2. *Increase supportive beliefs and/or social norms regarding contraceptive use among adolescents* 3. *Result in harms and/or unintended consequences*	All adolescents[b]

2	Intervention	Comparator	Outcomes	Population
2.6	Do interventions to improve the following aspects of quality of services (drawn from WHO's *Global standards for quality health-care services for adolescents (2)*): • appropriate package of services • provider competencies and lack of bias • facility characteristics • equity and non-discrimination • data and quality improvement	No intervention	1. Increase use (new or continued) of: • a modern contraceptive method • their contraceptive method of choice 2. *Increase access to:* • *any modern method of contraception* • *a range of contraceptive methods* 3. *Improve the quality of care (as objectively assessed and as perceived by adolescents)* 4. *Result in harms and/or unintended consequences*	All adolescents[b]
2.7	Does the existence and/or proper application and implementation of enabling laws and policies on the following issues related to sexual activity, access to SRH services, and access to specific contraceptive methods: • age • marital status • consent procedures	No existing/restrictive laws and policies on: • age • marital status • consent procedures	1. Increase use (new or continued) of: • a modern contraceptive method • their contraceptive method of choice 2. *Increase access to:* • *any modern method of contraception* • *a range of contraceptive methods* 3. *Increase agency and/or autonomy to use contraception and make decisions about contraceptive use* 4. *Result in harms and/or unintended consequences*	1. All adolescents 2. 10- to 14-year-old adolescents 3. 15- to 19-year-old adolescents 4. Married adolescents 5. Unmarried adolescents

2	Intervention	Comparator	Outcomes	Population
2.8	Does meaningful engagement of adolescents in the design, implementation and/or monitoring and evaluation of programmes	1. No engagement of adolescents in the design, implementation and/or monitoring and evaluation of programmes 2. Non-meaningful/token engagement of adolescents	1. Increase use (new or continued) of: • a modern contraceptive method • their contraceptive method of choice 2. *Increase access to:* • *any modern method of contraception* • *a range of contraceptive methods* 3. *Improve the quality of care (as perceived by adolescents)* 4. *Result in harms and/or unintended consequences*	All adolescents[b]

DMPA-SC: subcutaneous depot medroxyprogesterone acetate.

a Particular attention was paid to identifying evidence on the following groups of adolescents: (i) 10- to 14-year-old girls; (ii) 15- to 19-year-old girls and young women; (iii) girls living in urban areas; (iv) girls living in rural areas; (v) girls in the highest economic quintiles; (vi) girls in the lowest economic quintiles; and (vii) girls in humanitarian crisis contexts.

b Particular attention was paid to identifying evidence on the following groups of adolescents: (i) 10- to 14-year-old adolescents; (ii) married adolescents; (iii) unmarried adolescents; (iv) first-time parents; (v) boys/young men; (vi) adolescents with disabilities; (vii) adolescents in school; (viii) adolescents out of school; (ix) LGBTQIA+ adolescents; (x) adolescents in humanitarian crisis contexts; and finally (xi) adolescents living with HIV.

References for Annex 4

1. Rogers K, Le Kirkegaard R, Wamoyi J, Grooms K, Essajee S, Palermo T. Systematic review of cash plus or bundled interventions targeting adolescents in Africa to reduce HIV risk. BMC Public Health. 2024;24(1):239 (https://doi.org/10.1186/s12889-023-17565-9).

2. Global standards for quality health-care services for adolescents: a guide to implement a standards-driven approach to improve the quality of health-care services for adolescents. Geneva: World Health Organization; 2015 (https://iris.who.int/handle/10665/183935).

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