GIRLHOOD, NOT MOTHERHOOD Preventing Adolescent Pregnancy



Acknowledgements:

The author is indebted to many people: First is the Executive Adolescent Committee of the UNFPA: Drs. Akin Bankole. Fatima Juarez Carcano, Shireen Jejeebhoy, and Nicola Jones. These individuals reviewed multiple drafts and participated in teleconferences discussing the document. Their contributions are evident throughout the document. Secondly, I would like to acknowledge the tremendous work of two research assistants at the Johns Hopkins Bloomberg School of Public Health – Farah Qureshi MSPH (now a doctoral student at Harvard) and Laura Covarrubias MSPH (now at MD Anderson in Houston) – who did extraordinary work identifying and tracking down references. Third, my appreciation goes to Michelle Hindin PhD whose expertise in evaluation of effective adolescent pregnancy prevention programmes proved invaluable. Likewise, heartfelt appreciation goes to Deenah Darom who assisted with the preparation of the numerous versions of the document. Bruce Dick MD was instrumental in framing some of the key messages related to effective interventions. Sarah Brown was an invaluable critic, editor, and friend. Finally, and very significantly, I want to acknowledge the efforts on my colleagues at UNFPA—Delia Barcelona, Bruce Campbell, Kate Gilmore, Mona Kaidbey, Laura Laski, and Sylvia Wong, who has been my close colleague throughout this process. To all who assisted, my most sincere appreciation. The credit goes to you; the shortcomings are mine.

Girlhood, Not Motherhood: Preventing Adolescent Pregnancy

Published by the United Nations Population Fund UNFPA, New York

Copyright 2015 United Nations Population Fund All Rights Reserved.

United Nations Population Fund 605 Third Avenue New York, NY 10158, USA hq@unfpa.org www.unfpa.org

ISBN: 978-0-89714-986-0

A Guidance Document Prepared for UNFPA by: Robert W. Blum MD, MPH, PhD William H. Gates, Sr. Professor and Chair Department of Population, Family and Reproductive Health Johns Hopkins Bloomberg School of Public Health

All photos: Stephanie Sinclair/National Geographic Creative

Cover photo caption: Portrait of Babli Maayida, approximate age 14, in a village outside of Banswara, Rajasthan, India. "I did not like it when they said they want to get me married. I said, 'I'm very young right now and I don't want to get married. I want to study. . . . I'm a child," said Maayida.

TABLE OF CONTENTS

CHAPTER 1: Introduction
CHAPTER 2: Factors Driving Adolescent Pregnancy7
CHAPTER 3: Evidence-Based Interventions and Principles of Effective Programming11
CHAPTER 4: Programming for Adolescent on a Life Course Development Framework 14
CHAPTER 5: Using a Logic Model16
CHAPTER 6: Criteria for Inclusion in this Guidance18
CHAPTER 7: Evidence-Based Interventions Linked to a Logic Model
CHAPTER 8: Limitations
CHAPTER 9: Innovate: But Evaluate the Innovation46
CHAPTER 10: Lessons Learned from Effective Programmes
CHAPTER 11: Concluding Comments55
REFERENCES

Portrait of Carmen, 14, who is 3 months pregnant, "I was in school until 5th grade, when I got married. I have been raising my chickens to kill them when the baby is born."

FOREWORD

When a girl becomes pregnant, her present and future change radically, and rarely for the better. Her health is endangered, her education and job prospects abruptly end and her vulnerability to poverty and exclusion multiplies. Pregnancy before a girl is physically, developmentally and socially ready jeopardizes her right to a safe, successful transition into adulthood.

Seldom is the pregnancy a result of the adolescent girl's choices. Much more often it stems from her lack of choices or opportunities, and from discrimination and abuses of her human rights. A girl's pregnancy reflects the failure of those around her to protect her rights, including her right to protection from abuse, to an education that would provide her with opportunities, and to access sexual and reproductive health services and information.

Child marriage is a main contributing factor to adolescent pregnancy. Nine out of ten births to girls aged 15-19 occur within marriage. Just as these girls often have no say about whether, when, and whom they will marry, they also likely have no say about whether and when to begin childbearing.

In response to this situation, UNFPA has made girls' rights and the prevention of adolescent pregnancy a signature issue in its policy and programming efforts, so that each girl will grow up unencumbered by gender inequality and discrimination, and free to choose the path to a healthy, empowered life.

Towards that end, I am pleased to introduce *Girlhood, not Motherhood: Preventing Adolescent Pregnancy,* which presents the best available evidence and intellectual thinking on effective strategies and interventions to empower girls and reduce their vulnerability to adolescent pregnancy. Based on empirical evidence, the practical guidance presented here summarizes effective programmes that operate at multiple levels and with multiple stakeholders, including and most importantly, with the adolescent girl. The product of engagement with an Expert Advisory Group on Adolescent Pregnancy, this publication provides strategic thinking on how UNFPA can deliver on its commitment to promote the health, education and well-being of adolescent girls, especially to prevent early and unintended pregnancy.

A focus on girls is more important than ever if we are to realize the world's forward-looking Sustainable Development Agenda by 2030. It strives to provide adolescents, particularly adolescent girls, with a nurturing environment for the full realization of their rights and capabilities.

By investing in a young adolescent girl's education and health, and reducing the risk of early marriage and early pregnancy, she has greater opportunities to find a path out of poverty, lead a healthier life and become an asset to her family, community and society. When her chances of being engaged in formal work increase, she can contribute to the economic growth of her country.

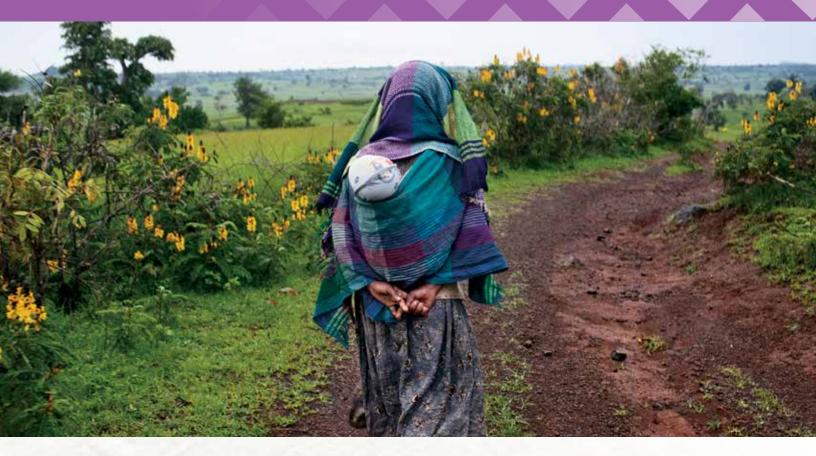
In my country, we have a saying: you cannot run on one leg.

By protecting girls' rights and enabling them to avoid adolescent pregnancy, we can make it possible for girls to live in dignity and realize their full potential as equal partners with boys. And with girls and boys on an equal footing, we can run the race toward the inclusive, gender-equitable world we all need today and for generations to come.

Dr. Babatunde Osotimehin

Executive Director UNFPA, the United Nations Population Fund

1 INTRODUCTION



Fifteen-year-old Destaye walks with her son near Bahir Dar. Destaye and her husband Addisu, 27, divide their time between working in the fields and taking care of their 6-month-old baby. Like many other young couples, she and her husband tend to the domestic, economic and personal demands of being young parents. At the time of their marriage, when Destaye was age 11, she was still in school and her husband expressed interest in letting her continue her education.

Adolescent girls are shaping humanity's present and future. Depending on their opportunities and choices, they can begin adulthood as empowered and active citizens, or become neglected, voiceless and entrenched in poverty.

In or outside of marriage, adolescent pregnancy risks derailing girls' healthy development and prevents them from achieving their full potential. Preventing too-early pregnancy is central in helping girls achieve their goals—so too, is respect for adolescents' rights. Respecting and protecting adolescents' rights entails engaging them in the decision-making process from the individual to the policy level, assuring that they are fully informed decision-makers and have the skills to voice their perspectives and priorities, and that approaches are non-coercive as well as evidence-based. Respect for adolescents' rights involves engaging the institutions charged with the protection and capacity-building of adolescents, such as health, education, social welfare, and labour.

Conversely, child marriage, coercive sexual practices, and gender-based violence are all violations of human rights. So is the denial of information, creating barriers to accessing effective contraception and safe abortion (to the extent of the law) because of a girl's age or marital status.

Adolescent pregnancy can prevent girls from exercising their rights, including the right to education and to the social supports they need for healthy development and a safe and successful transition to adulthood. The consequences of adolescent pregnancy reverberate throughout the girl's life and for generations after.

Thus, the focus of UNFPA's work to prevent too-early pregnancy is both with adolescents themselves and with the stakeholders who influence their healthy development overall, specifically their sexual and reproductive health.

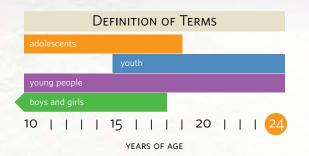
This guidance note is prepared specifically for UNFPA country offices, but we hope it will be useful to everyone concerned with early pregnancy and its consequences. Developed as a companion to the 2013 *State of World Population* Report on adolescent pregnancy **UNFPA's** vision is that every girl's right to make a safe, healthy and successful transition from adolescence into adulthood will be promoted, respected and fulfilled: that girls will grow up unencumbered by gender inequality and discrimination; violence; child marriage; adolescent pregnancy and its consequences. Girls will be empowered, educated, and healthy. They will be able to exercise their rights, including reproductive rights. They will live in dignity, with the ability and opportunity to make informed decisions about their and their communities' future.

(http://bit.ly/1FvJjxo), it is not exhaustive, but provides a set of practical guidelines based on empirical evidence. The note summarises effective programmes and provides references for fuller descriptions. While the focus is on low- and middle-income country programmes, examples of effective programmes from industrialized countries are also included.

The guidance focuses on adolescent pregnancy prevention (primary and secondary). It does not address the maternal health and other needs of pregnant adolescents.

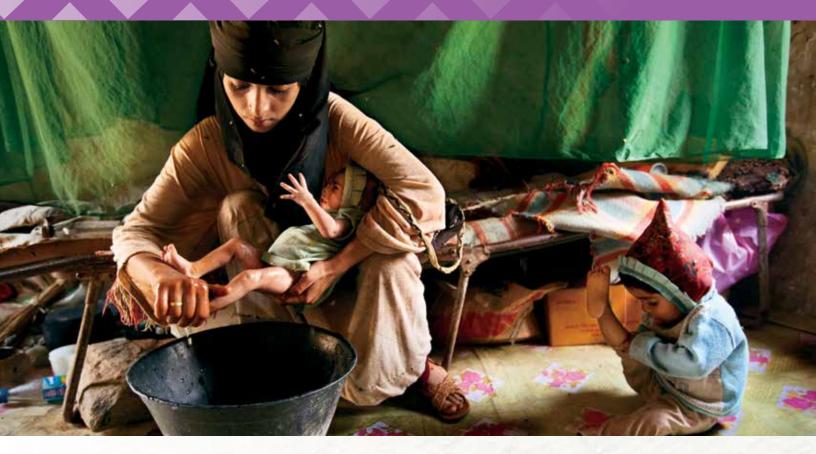
The guidance can also be used as a reference point for operationalizing components of UNFPA's global strategies on adolescents and youth and on family planning, *Choices not Chance* (http://bit.ly/1Cmw16m). The common aim is to empower girls to avoid pregnancy, reduce their vulnerability, and provide sexual and reproductive health including contraceptive services in a confidential, private and respectful manner.

The guidance speaks directly to UNFPA's Strategic Plan and the organization's goal to achieve universal access to sexual and reproductive health, realize reproductive rights, and reduce maternal mortality, in order to improve the lives of adolescents, youth, and women. The adolescent birth rate is an important indicator of progress towards this goal: the programme interventions outlined here provide possible starting points to shape programme activities with national governments and other partners.



The interventions fit within the Strategic Plan's framework of Outcome 1 (Integrated SRH) and Outcome 2 (Adolescents and Youth), complemented by ongoing activities that will be undertaken through Outcome 3 (gender equality) and Outcome 4 (population and development).

FACTORS DRIVING ADOLESCENT PREGNANCY



Asia, 14, washes her newborn at home in Hajjah while her 2-year-old daughter plays. Asia is still bleeding and ill from childbirth, yet has no knowledge of how to care for herself nor access to maternal health care.

Adolescent Birth, Contraception Prevalence and Child Marriage, by Region

Adolescent pregnancy is a global issue. Worldwide, approximately 16 million girls between the ages of 15 and 19, and two million girls under age 15, become pregnant every year. An estimated three million girls under 20 years sought abortions in 2008 in countries where abortion is illegal and unsafe (WHO, 2011). According to the WHO, half of all adolescent births occur in just seven countries: Bangladesh, Brazil, the Democratic Republic of the Congo, Ethiopia, India, Nigeria and the United States.

There has been progress over the past 60 years. In the poorest regions of the world, birth rates for 15-19 year olds in 1950-55 averaged 170 births per 1000 girls ages 15-19; in 2010 it was 106. But 106 per 1000 is still four times higher than in the high-income regions of the world. And progress is uneven: in Niger, for example, the adolescent birth rate **16 million** Worldwide, an estimated 16 million girls between 15 and

19 years old give birth

each year.

90%

90% of adolescent births among 15-19 year olds occur within marriage.



Υ In the poorest regions of the world, birth rates for 15-19 year olds is still four times higher than in the high-income regions.

in 1955 was 197 per thousand; today it is 210 (World Population Prospects, 2015).

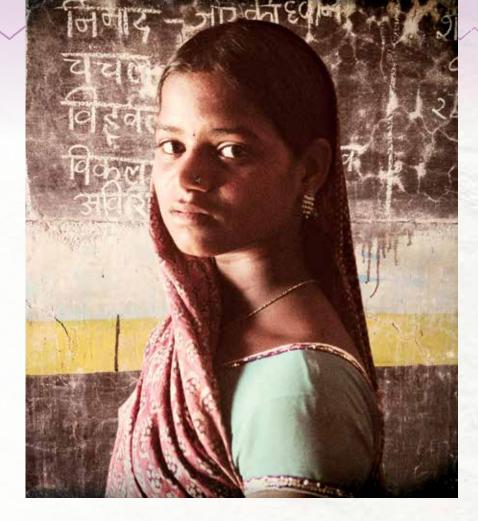
Regionally among middle- and low-income countries, adolescent birth rates range from a high of 112 per 1000 in parts of West Africa and South Asia to a low of 6 in Eastern Asia. In South Asia, the adolescent birth rate is 47 per cent while in Latin America and the Caribbean it is 73 (United Nations, The Millennium Development Goals 2015 Report).

Ninety per cent of adolescent births among 15-19 year-olds occur within marriage and according to UNFPA, one third of all women between the ages 20 and 24 years report being married as children, that is, before their 18th birthday. Unless the trend is reversed, we can expect an estimated 39,000 child marriages every day by the end of this present decade, or by 2020 (UNFPA, 2012).

In countries with very youthful populations, although the child marriage rate may not be among the highest, a very large number of girls may be involved. The same is true for adolescent pregnancy. Adolescent contraceptive prevalence rates are lower and unmet contraceptive needs greater than in any other age group.

There are only two ways for girls to prevent adolescent pregnancy—abstain from sex or use effective contraception. Where abstinence is not possible — for example because

8



Kavita Ninama, approximate age 14, in a village outside of Banswara, Rajasthan, India. "My father was saying, 'We will get her married.' I refused. I said, 'You get married!' How would I be able to study? I wanted to study more, so I refused to get married... Everything would be ruined if I got married," said Ninama.

of child marriage—then consistent use of effective contraception is essential.

Cross-national comparative statistics mask significant differences and disparities within countries. In all countries, the poorest, leasteducated girls are far more likely to become adolescent mothers than their better-off peers. This disparity robs poor girls of their rights.

Adolescent Birth Rates within Regions, by Country

The differences in adolescent birth rates among countries in the same region are substantial. For example, in sub-Saharan Africa, Burundi has an adolescent birth rate of 65 per 1000 while Niger has 210 per 1000 (World Population Prospects, 2015 Revision). We see similar variations in South Asia and South America. But whatever the variations, adolescent pregnancy is an issue in all countries of the world. Within any country, adolescent birth rates in the lowest economic quintile are substantially higher than in the highest quintile.

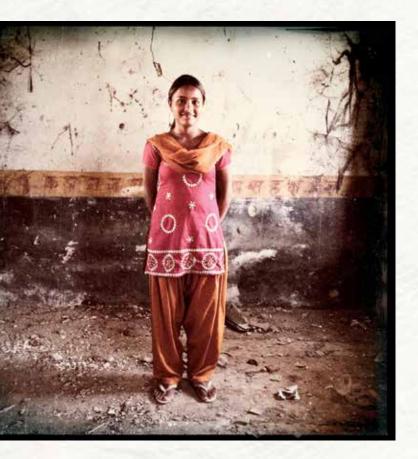
Consequences of Adolescent Pregnancy

Whether a girl is married or not, adolescent pregnancy entails considerable risk. For example, a girl who becomes pregnant under the age of 15 is at higher risk than other age-groups for placental tears; obstruction at the time of delivery; obstetric fistulae, and death. Adolescent girls who become pregnant are significantly more likely to be poor than their peers, with poorer nutrition and general health. This in turn increases the likelihood of foetal, perinatal and maternal death and disability by as much as 50 per cent (Black et al, 2008).

Unmarried pregnant adolescents face social costs, which may include rejection by their families, the end of their education, and the threat of violence. Girls may resort to unsafe abortion, even where it is illegal and highly dangerous, often involving toxic abortifacients or unsterile procedures, and performed by unskilled practitioners. The results can be sterility, physical impairment and death.

Even for girls who escape these consequences, early pregnancy may foreclose options for both them and their children, perpetuating poverty and compromising future prospects.

The sections that follow will explore what is known about effective prevention.



Rajyanti Bairwa, 17, in a village outside of Tonk, Rajasthan, India. "I came to school and told the girls 'I am about to get married' and asked the girls go to my parents and tell them not to let the marriage happen. With their help, I refused the marriage because I want to study and be something. In life I want to be a doctor," said Bairwa.

EVIDENCE-BASED INTERVENTIONS, AND PRINCIPLES OF EFFECTIVE PROGRAMMING



Manuela, 14, was married at 12 and waits with her one-year-old daughter Dani at the San Benito Youth Clinic in Peten. She travelled more than two hours to the clinic to learn about family planning.

First, some basic principles and lessons for a strong approach to preventing adolescent pregnancy:

- Take a rights-based approach: Protect and respect girls' rights, engage them in informed decision-making and address the needs of the most vulnerable as a priority.
- **Define the problem:** Do all stakeholders view adolescent pregnancy in the same way? For example, do key stakeholders see

all adolescent pregnancies as a problem, or only those pregnancies outside marriage? A careful assessment of the landscape and engagement of key stakeholders is critical.

- Have a clear focus: For example, is the focus to be on an age group? Girls only, or both boys and girls? Only vulnerable populations or others as well?
- **Don't forget boys:** adolescent boys, whether they are seen as fathers, adolescents or men, are part of the

3



Portrait of Mamta Bairwa, 17, in a village of Rajasthan, India. "It becomes very sad to have children at a young age and not be able to take care of them. If I would get married at a young age then I would not be able to study. I would not be able to write. How would I handle the education of the children? With an education, one can achieve."

problem; but they are also part of the solution. They too are undermined by harmful gender norms and attitudes.

- View adolescents as actors in development: Avoid viewing adolescents as the problem and adolescent pregnancy as a disease to be eliminated. Young people have rights, and should be partners in planning and programme implementation.
- Take a multi-level approach: Although there may be resource or political constraints, it is optimal to work at several levels concurrently – individual, family, community and policy.

- Avoid failed approaches, no matter how superficially appealing. Examples include fear-based programmes, information-only programmes, and youth recreation centres.
- Use a logic model: It is not always possible to show direct impact on pregnancy reduction. Programmes based on a clear, evidence-based logic model may address the antecedents or associated factors that predispose a young girl to pregnancy.
- Adolescent participation is important but it is also important to be clear about how it can contribute. Token participation is to be avoided; at the other extreme, participation is not the goal, but an

empowerment process for defining a useful strategy. In particular, adolescent participation is not a substitute for political commitment.

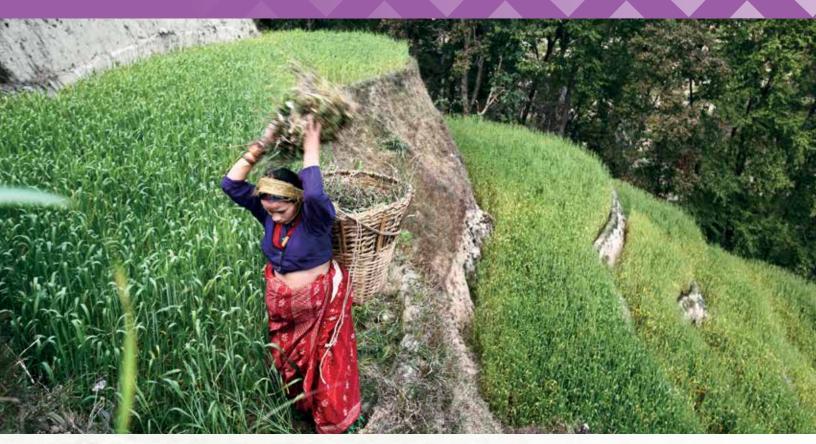
- Link pregnancy prevention to post-partum and post-abortion care, and to other primary health care, education and social support services.
- Secure the resources and commitment to take key interventions to scale: targets and realistic indicators for monitoring them are important; but achieving targets depends on sufficient resources to apply and monitor an intervention at sufficient intensity over time.
- Link with larger initiatives: Whenever possible, link initiatives with existing government strategies and priorities. More broadly, connect and align with global initiatives such as the 2030 Agenda for

Sustainable Development, Every Woman Every Child, and FP2020.

Mobilize and support partnerships: Partnerships are important to develop consensus about strategies and priorities and facilitate collaboration in advocacy and action. But it is also important not to overestimate what partnerships can achieve, nor to underestimate the time and other resources needed to mobilise and support them.

- Engage community elders, religious leaders and other respected community members, in collaboration with young people, to lead the community component of strategy.
- Avoid vacuous rhetoric: however wellmeaning, words by themselves will have no impact. Do as much as is practical, given the context and setting.

4 PROGRAMMING FOR ADOLESCENTS ON A LIFE COURSE DEVELOPMENT FRAMEWORK



A nine-month pregnant Niruta, 14, carries grass to her family's farm for the animals to graze on in Kagati Village, Kathmandu Valley, Nepal. Niruta moved in with the family of Durga, 17, and became pregnant when they were only engaged. In some circles of the more socially open Newar people, this is permissible.

The framework in Figure 1 (from Blum et al.) places adolescent pregnancy prevention in a developmental context. At its core are outcomes for adolescent girls: Engagement with learning and decent work; a sense of emotional and physical safety; a positive sense of self and self-efficacy; and the acquisition of life and decision-making skills. Adolescent pregnancy derails a girl's progress towards these goals. The model acknowledges the many influences on adolescents (individual and biological, family, peer, community and national) as they move into their second decade. It also acknowledges that healthy adolescence is predicated on respect for an adolescent's rights.

When developing programmes and services, it is important for both programme officers and policymakers to understand the influences that increase girls' risk of early and unintended pregnancy. Just as these are found at every level of the framework, an intervention at any level can shift the trajectory and improve outcomes. Implicit in the model is an understanding of the complexity of the risk factors in a given community or national context. Simple solutions to complex problems, while they may be appealing, are rarely effective. It is also critical to understand the contextspecific drivers of adolescent pregnancy. In some places the driver is child marriage; in some, poverty and lack of opportunity seem to offer few options but motherhood; in others girls seek social and adult status. Understanding the dynamics is key to effectiveness.

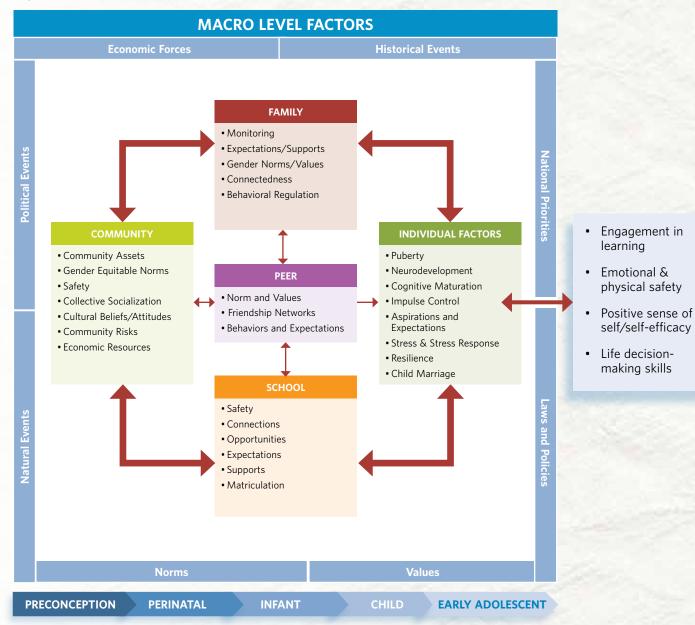


Figure 1. Life course development framework for adolescents

15



USING A LOGIC MODEL

A logic model underpins the guidance and illustrates the entry points for influencing change and bringing upon desired results from different interventions. It shows what interventions are geared at whom and at what level can lead to the desired programmatic impact, in this case, a reduction in adolescent pregnancy (see figure 2 right). The interventions in the logic model are aimed toward specific stakeholders who have influence and can play a role in supporting girls to avoid adolescent pregnancy, e.g., the 6 "Ps", including policy-makers, programme managers, parents, peers, partners, and providers (in health care, community, and education settings). Crucially, the logic model includes interventions targeted directly at girls, recognizing the importance of asset-building approaches that build their agency, decision-making skills, and other behaviors that put them on a positive path to avoid adolescent pregnancy.



INTERVENTION COMPONENTS

POLICY ENGAGEMENT

- Eliminate age and marital status requirements to access contraception
- Eliminate gender unequal laws (e.g., marriage age)
- Enact laws raising the minimum age of marriage to 18
- Make political commitment to addressing adolescent pregnancy through laws and policies
- Support secondary/post-primary education to improve literacy
- Support social protection programmes (e.g., families/vulnerable girls to stay in school through CCTs/UCTs)

COMMUNITY ENGAGEMENT

- Support stakeholder dialogue/community mobilization in support of ASRH (in conjunction with health service delivery)
- Reduce local barriers to contraceptive access and comprehensive sex education
- Reduce barriers to school retention (e.g., uniform and school fees, CCTs)
- Provide mentoring/social support to adolescents
- Initiate community dialogue on ending child marriage
- Ensure compliance with laws raising minimum age of marriage to 18

HEALTH SERVICES PROVISION

- Assure availability of contraception including condoms, hormonal and long acting reversible methods, and emergency contraception
- Train local health providers
- · Consider vouchers to enhance health service utilization

CSE/WORKING WITH PEERS/PARTNERS

- Provide comprehensive sex education (Skill building, Counseling, referral to services)
- Contraception education (Education, Distribution, Skill building)
- Support participatory learning action methodologies to address norms that reinforce gender violence, discriminatory gender norms

PARENTS/FAMILY SUPPORT

- Parent communication/counseling programmes
- Conditional/Unconditional cash transfer programmes
- · Address gender discriminatory norms and practices in family

ADOLESCENT GIRL/ASSET-BUILDING

- Life skills development
- Social support/mentors/safe spaces
- Education/Literacy
- Recreational activities
- Career counseling/Link to livelihoods
- Economic empowerment

INTERMEDIATE OUTCOMES

(Determinants by Key Stakeholders)

NATIONAL POLICYMAKERS

- Legal and policy barriers reduced and contraceptive availability increased for adolescents
- Laws banning child marriage/sexual violence enforced
- Incentivize school attendance (esp. post-primary level)

COMMUNITY PROGRAM MANAGERS

- · Adolescent attachment to one or more trusted adults in community increased
- Community norms that normalize/perpetuate child marriage, early pregnancy, sexual violence, gender bias altered
- Schools, youth-led and community organizations engaged to support girls' rights and prevent adolescent pregnancy
- Socio-economic alternatives allowing girls to delay or avoid marriage before age 18 encouraged and supported
- Comprehensive social support services for adolescents increased

PROVIDERS (Health and Education/Schools)

- Teachers/school administration encourage school enrollment/retention
- · Comprehensive sexuality education provided through different settings
- Health providers deliver information, skills and contraception that support
 informed and responsible sexual decision-making
- Adolescent access to SRH services increased

PEERS & PARTNERS

- Harmful peer norms about sex, sexuality, masculinities, gender roles and contraception changed
- Peer knowledge about sexual and reproductive health improved
- Men/young men as partners are engaged to promote gender equality and respect in relationships

PARENTS/FAMILIES

- Parental (or trusted adult figure) connectedness to adolescents increased
- Parent-child communication about sexual and reproductive health improved
- Harmful family norms and attitudes around gender, sex, child marriage, girls' schooling changed
- · Family norms that reinforce gender inequalities altered

ADOLESCENT GIRL

- Improve knowledge about SRH, contraception, and adolescent pregnancy
- · Improve self efficacy/negotiation skills
- · Reduce involvement in other risky health behaviors
- · Improve future aspirations and opportunities
- Improve school enrollment, attendance, educational attainment
- Improve school connectedness

DESIRED OUTCOMES

ADOLESCENT BEHAVIORS



Increase consistent use of contraception

	•	2
	1	
Ví,		

Reduce marriage before age 18



Delay sexual initiation



Reduce coerced sex

desired goal Reduce Adolescent Pregnancy

CRITERIA FOR INCLUSION IN THIS GUIDANCE

6



Rosario, 14, peers into the neonatal ICU of Hospital San Benito. "Our girls believe they were brought into this world to be a mother," said Dr. Daniel Alvarez a pediatrician at the hospital. "She doesn't go to school, she is not literate. At a certain age, the only escape in their mind is to get involved with a boy, and do the same thing... be a mother, be part of the cycle. That's the cycle we are trying to break. We need to give more power to women to make good choices."

As has been previously noted (WHO Guidelines on Preventing Early Pregnancy, 2011) there are significant limitations in much of the intervention research evaluating adolescent pregnancy prevention programmes. Acknowledging those limitations, there is strong evidence for some programmes that they are effective, and for others that they are promising. The logic model (Figure 2) underpins this guidance. To rate inclusion, a programme must have provided evidence either that it directly helped adolescent girls avoid unwanted pregnancy, or that it had an impact on at least one of the known antecedents of adolescent pregnancy such as early school leaving, family poverty or child marriage. This guidance rates a programme as effective if it impacts its stated objective, if the objective is associated with adolescent pregnancy reduction, and if evaluation findings reflect the highest quality of evaluation science. Highquality evaluations typically use random assignment and multiple sites including intervention and control sites, and can replicate the findings.

Effectiveness does not imply that the intervention alone will reduce adolescent pregnancy; rather, it is considered effective as one of the tools in a multi-level strategy. Nor does adopting a programme rated effective ensure success in all settings; rather, it has a better chance of success than programmes evaluated with less rigorous methods or not at all.

Evaluation using pre- and post-testing (also known as baseline and endline data collection) is not as strong as evaluation through random assignment studies, but programmes may still have merit. Such a programme may have had a positive impact or change in a single location: it might well be effective and is included in this review. Such programmes are rated *promising* when they have been replicated and studied in multiple sites, with similar positive findings.

It is important to add that resource constraints or other factors may have prevented careful evaluation. This guidance includes only programmes for which there is some evidence of impact, or at least some A programme is *effective* if it impacts its stated objective; if the objective is associated with adolescent pregnancy reduction, and if evaluation findings reflect the highest quality of evaluation science.

Programmes are rated *promising* when they have been replicated and studied in multiple sites, with similar positive findings.

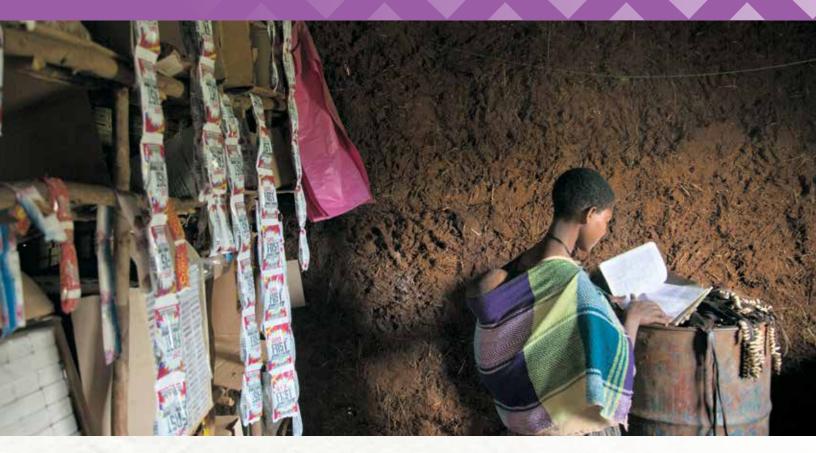
Programmes or approaches are rated *potentially promising* where there is potential for impact under certain conditions.

indication of a promising approach. Where there is potential for impact under certain conditions (e.g. gender-based violence laws if they are enforced) programmes or approaches are rated *potentially promising*.

This guidance indicates where programmes have had multiple evaluations with different findings, or where impact is reported at one point in time but not subsequently.

Many approaches have been repeatedly shown to have no effect either directly or indirectly on adolescent pregnancy, such as short term, fear-based sex education curricula. Such ineffective programmes are not included here. If they have not worked in other settings, they probably will not work in yours.

7 EVIDENCE-BASED INTERVENTIONS LINKED TO A LOGIC MODEL



Destaye, 15, looks through her old schoolbooks in the store she and her husband Addisu, 27, run out of their home near Bahir Dar, Ethiopia. At the time of their marriage, she was still in school and her husband expressed interest in letting her continue her education. After the birth of her son six-months later, however, Destaye no longer had time for classes.

This section reviews what is known about interventions, with comment on the strength of each evaluation. A word of caution is needed: Simply because an intervention has been found to be effective in one or many settings does not imply or guarantee that it will work the same way in your setting.

The section focuses on six key groups of stakeholders, from national policy level to individual level, who can foster or derail adolescent development: They are the Six Ps: Policymakers, Programme managers, Providers (including health providers and teachers), Parents, Peers and Partners.

Policymakers

Improved literacy: World Bank data show that independent of income level within country or region of the world, the higher the literacy, the lower the likelihood for an adolescent pregnancy (R. Snow, personal communication). Initiatives include: universal primary and secondary education, investing in school construction, and/or teacher training. Most of these are promising approaches (specific effective interventions are discussed in more detail below).

The section focuses on six key groups of stakeholders, from national policy level to individual level, who can foster or derail adolescent development: They are the Six Ps:

- 1. Policymakers,
- 2. Programme managers,
- 3. Providers (including health providers and teachers),
- 4. Parents,
- 5. Peers and
- 6. Partners.

Girls' Education and Adolescent Pregnancy

Girls who remain in school longer are less likely to become pregnant. Education prepares girls for jobs and livelihoods, raises their self-esteem and their status in their households and communities, and gives them more say in decisions that affect their lives. Education also reduces the likelihood of child marriage and delays childbearing, leading to healthier eventual birth outcomes.

A survey of countries to assess their progress in implementing the Programme of Action of the 1994 International Conference on Population and Development confirms that higher literacy rates among women between ages 15 and 19 are associated with significantly lower adolescent birth rates (UNFPA, 2013a)

Motherhood in Childhood: Facing the Challenge of Adolescent Pregnancy *The State of World Population 2013*

There was overwhelming evidence that higher literacy among young women aged 15-19 years is associated with a significantly lower adolescent birth rate. ...in all income groups, higher literacy among young women is associated with significantly lower adolescent birth rates.

Education of all children increases their capacity to participate socially, economically and politically, but the education of girls leads to special benefts for girls themselves, their families and communities.

When girls are educated it reduces the likelihood of child marriage and delays childbearing, leading to healthier eventual birth outcomes. Female education is consistently associated with greater use of family planning, more couple communication about family planning, and lower overall fertility.

UNFPA. 2013a. "Messages and Preliminary Findings from the ICPD Beyond 2014 Global Review." New York: UNFPA

Legislation

Few of the existing laws intended to reduce adolescent pregnancy have an evidence base sufficient to assess effectiveness.

Laws banning child marriage and eliminating the age differential for marriage between males and females:

Since the 1994 ICPD and 1995 International Conference on Women, child marriage interventions have proliferated. Lee-Rife et al. (2012) recently reviewed what works to prevent child marriage in low-income countries. They analyzed 23 programmes implemented between 1973 and 2009. The authors conclude that while laws are important, they tend rarely to be enforced, and their impact tends to be limited as a result (Child Marriage Fact Sheet 2011). These laws send a strong message that protecting the rights of vulnerable young people, and especially adolescent girls, is a

> But without enforcement and given the paucity of evaluation, laws against child marriage are at best promising approaches.

national priority. But without enforcement and given the paucity of evaluation, laws against child marriage are at best *promising* approaches.

Laws addressing sexual violence have gained increasing attention recently. While the data are not clear on the extent to which sexual violence contributes to adolescent pregnancy, there is good evidence of such a link among adult women. In Peru, women who reported sexual violence had a 1.6 odds ratio of reporting an unintended pregnancy (Cripe et. al., 2008). Similar findings have been reported in Colombia (Pallito, P, O'Campo, P., 2005). India, Haiti and the Demographic Republic of the Congo are only three of the countries that have strengthened sexual violence laws recently. These laws have not been evaluated for their effect on pregnancy prevention or any other outcome (Heise 2011). Efficacy undoubtedly resides in enforcement, like child marriage laws; but like these laws they send a message of zero tolerance for sexual and gender violence. Again like these laws, laws against sexual violence are still only promising.

Laws that make adolescents and adolescent pregnancy national priorities. The Children's Act in South Africa (Han, Bennish 2009) conferred full rights to reproductive health care (including contraceptive access and sexual and reproductive health information) on all children over the age of 12. The law requires retailers to sell condoms to those over age 12 and allows schools to distribute

free condoms to students of any age. This law has yet to be evaluated, so it is not possible to indicate the extent of impact. Numerous barriers to implementation exist (e.g., condom availability, retailer compliance, opposition from schoolgoverning bodies, adolescent temerity). It at present represents a promising approach.

The Andean Plan for the Prevention of Teenage Pregnancy (PLANEA) involves

Bolivia, Chile, Colombia, Ecuador, Peru, and Venezuela. It is funded by the Spanish International Cooperation Agency for Development with active participation by UNFPA. Positive results include increased youth participation, multi-sectoral engagement, government commitment and young people's access to SRH interventions. Colombia has institutionalized the programme throughout the country, and 90 per cent of funding comes from the government. Whether or not it has an impact has yet to be determined but an important step in adolescent pregnancy prevention is to acknowledge that it is a national priority. This approach is promising.

Conditional and Unconditional Cash Transfer Programmes

Some of these programmes focus on school enrolment and retention, and on poverty reduction (e.g., Bolsa Escola/ Bolsa Familia in Brazil and Food for Education Programme in Bangladesh);

Every year a young woman remains in school after age 11, the risk of unplanned pregnancy declines.

others such as Opportunidades in Mexico make financial support for the family conditional on school enrolment, health clinic visits and nutritional services. Still others, such as a programme in the Philippines, incorporate community education and awareness. While most such programmes were not developed with reduction of adolescent pregnancy in mind, the evidence is strong that school enrolment and school retention have a major impact on adolescent pregnancy. The World Bank, for example, has shown that for every year a young woman remains in school after age 11, the risk of unplanned pregnancy declines by 7 per cent per year for adolescent girls through the primary school years, and 6 per cent annually throughout secondary school (Ferre, 2009). A number of conditional cash transfer programmes are effective; we will discuss these more below.

Programme Managers

This section includes multi-sectoral (comprehensive) programmes, mentoring, health services and school-based programmes.

Multi-Sectoral and Comprehensive Approaches

Berhane Hewan (Light for Eve) is an effective programme that began in Ethiopia as a pilot project between 2004 and 2006 in the Mosebo community, Amhara region; the model has expanded and reached over 10,000 girls in 12 communities. It is a rural version of the national Ethiopian programme, Expanding programmes to address the vulnerabilities of adolescent girls in rural and urban Ethiopia (Erulkar 2007). A scaling-up process is currently testing the programme component of delaying marriage among unmarried girls in Ethiopia, Kenya, Tanzania and Uganda.

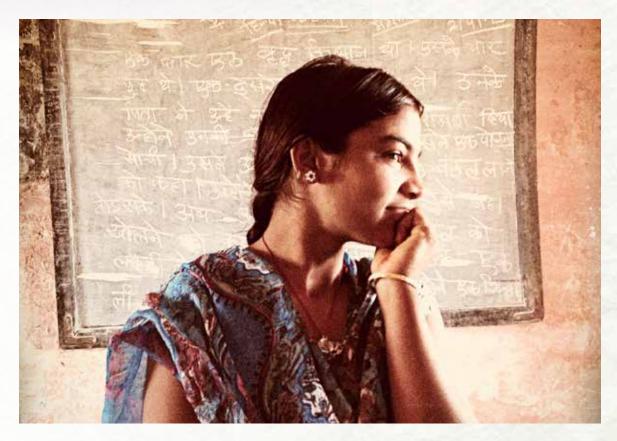
There are three objectives: To reduce the prevalence of early child marriage among adolescent girls; to create safe social spaces for the most vulnerable and isolated girls, including access to education; and to increase the use of reproductive health services among sexually experienced girls (Erulkar 2007). There are four core components:

 Support to stay in school or convening in groups outside of school including nonformal education and livelihoods skills;

- Social mobilization of adolescent girls 10-19 into groups led by female mentors;
- Community conversation and mobilization to address social and cultural norms about early marriage and reproductive health issues affecting girls;
- Economic incentives (conditional cash transfers, CCT) such as free school materials and the presentation of a goat to each girl and her family at the end of the programme.

Using a randomized assignment of participants, the original pilot evaluation found that girls 10-14 years old in the intervention group were three times more likely to be in school than those in the comparison group. Additionally, using a pre-post evaluation design, 98 per cent of girls 10-14 years old were attending school after the intervention as compared to 71 per cent at baseline; there was a 21 per cent reduction in illiteracy as compared to baseline; girls were 90 per cent less likely to be married; the proportion of ever-married young girls decreased from 10 per cent at baseline to 2 per cent at the end (Erulkar 2007), (Mekbib 2010). The learning from this programme is now being scaled up through UNFPA's Adolescent Girl Initiative, to be replicated in 12 countries.

Development Initiative Supporting Healthy Adolescents or DISHA (India). This *effective* programme combines community-level initiatives of mentoring and community dialogue with the scaling up of health services and comprehensive sex education, contraception



Portrait of Naaku Maayida, 15, in a village outside of Banswara, Rajasthan, India. "If I would get married it would not feel good. With marriage, children happen, I would have to do the home chores, I would have to fetch water. My parents were illiterate when they had kids," said Maayida.

education and provision, and life skills training at the individual level. This programme works in 176 participating villages in India to create youth groups and resource centres where adolescents can learn about SRH and receive SRH services, as well as training relevant to future livelihoods. The programme also trains local health providers on delivering youth-friendly care; organizes volunteers to dispense modern family planning; utilizes peer educators; holds counselling sessions, and includes a communication strategy aimed at discussing the role of youth in society with local adults. Using a quasi-experimental design with control groups, after two years the evaluation showed that age of marriage increased from 15.9 to 17.9 and contraceptive use increased by nearly 60 per cent for married youth. Attitudes toward child marriage (belief that people should not marry before the age of 18 years) changed for both males (66 per cent pre-programme to 94 per cent post-programme) and females (60 per cent to 87 per cent) (Kanesathasan 2012).

PRACHAR project (India): PRACHAR was implemented in three districts of Bihar, India in 2002. For four years, 19 collaborating

agencies carried out agreed interventions, each in 25 to 35 villages. The programme had three goals: improving the health of mothers and children, improving economic well-being of the participants, and delaying both first and, for those with one child, second births. The target group was married couples where the wife was under 25 and there was no more than one child in the home. The goal was to delay first birth to age 21 and to space the second birth to not less than three years after the first. The programme had both an individual and a community education component (Wilder et al, 2005), with family planning services provided by health care providers. Using a quasi-experimental design, intervention and comparison communities were selected purposively; and data were collected at both baseline and endline approximately two years after the intervention was initiated. Evaluation results showed that initial contraceptive use was very low at all sites. Demand for contraception rose by 15 per cent in the intervention communities but there was no change in the comparison groups. At followup contraceptive use had increased at all sites; however, the odds of using contraception were 3.8 times greater in the intervention community (Daniel, et. al., 2008). This is a promising intervention, although a longerterm follow-up has yet to be completed to assess whether the programme achieved its goals. What can be said after two years is that the programme impacted attitudes and increased contraceptive use over the programme period.

Carrera/Children's Home Society Programme

(USA): Begun in 1984, the purpose of this effective programme is to provide young people with comprehensive supportive services related to sexuality, health, education, work and lifestyle (Philliber 2002). The programme began as an after-school programme for young people aged 13-15 years and up. Since 2007, there is also an in-school version of the programme. Both versions work year round and incorporate "parallel family systems" to empower young people, emphasizing the importance of building long-term connections with significant adults (Philliber Research Associates 2010); (Philliber 2002). Currently, it reaches over 2000 young people in the United States.

The Carrera programme defined seven components for understanding young people's needs and influences on their health and development: education; employment; family life and sexuality education; mental health; medical and dental care; self expression, and lifetime individual sports. (Philliber Research Associates, 2010), (Philliber, 2002)

Using a randomized control trial, the evaluation found that compared with the control group, female participants were: 40 per cent less likely to ever have been pregnant; 50 per cent less likely to ever have given birth; more than twice as likely to have used a hormonal contraceptive at last intercourse, and significantly more likely not to agree to sex under pressure. The findings were not as positive for males, for while it improved their sexual knowledge it did not reduce their risk of becoming a father or increase use of condoms (Philliber Research Associates 2010). The evaluation suggests that the programme has a positive effect on high school completion and college enrolment.

Geracao Biz (Busy Generation) in Mozambique (Hainsworth et al. 2009). This potentially promising programme has three components: clinical youth-friendly services; in-school interventions; and communitybased outreach. The multi-sectoral nature of the programme — engaging policymakers, health care providers, educators and community stakeholders, as well as youth themselves - was considered a key contributing factor in the increase in health service use, as well as in elevating the importance of sexual and reproductive health needs of young people. The programme began in 1999 and was steadily scaled up until it operated in all districts. Available data go through 2008. Through this multi-pronged approach, both contraceptive knowledge and contraceptive use grew - increasing from 36 per cent to 60 per cent over two years. The difficulty with assessing the effectiveness of this programme is the lack of evaluation data.

Mentorship

Most mentorship programmes are targeted toward educational remediation or social supports and not to adolescent pregnancy prevention *per se*. One is described here because it is the best-researched programme of its kind and has been shown to have a The multi-sectoral nature of the programme—engaging policymakers, health care providers, educators and community stakeholders, as well as youth themselves—was considered a key contributing factor in the increase in health service use, as well as in elevating the importance of sexual and reproductive health needs of young people.

direct impact on academic achievement and alcohol use, both of which are antecedents of adolescent pregnancy. So too, it represents a prototype community-school partnership.

Big Brothers/Big Sisters (USA) is the most effective mentorship programme in the United States, serving over 220,000 6-18 year-olds through 440 agencies. It is a developmental mentoring programme with the goal of connecting high-need children and adolescents to pro-social adults. Adults are required to commit at least three hours per week for a minimum of one year. Evaluation has used random assignment with longitudinal follow-up looking at impact in eight areas including: scholastic competency; educational expectations; academic achievement; social acceptance; parent trust; risk avoidance; truancy, and presence of a special adult (Herrera 2012).

The evaluation showed that compared with controls, participants not only had higher educational aspirations, but higher grades as well. Likewise, there were statistically significant changes in the attitudes of programme participants toward alcohol consumption, drug use and skipping school. In the original 1995 evaluation programme participants were 55 per cent less likely to use drugs, 27 per cent less likely to drink alcohol, and 52 per cent less likely to skip school than

WHO Definition of Youth-Friendly Health Services (YFHS)

VVVV

- Privacy ensured
- Convenient hours
- Competent staff
- Respect for youth
- Package of essential services available
- Sufficient supply of commodities and drugs
- Range of contraceptives offered
- Emphasis on dual protection/condoms (male and female)
- Referrals available
- Confidentiality ensured
- Waiting time not excessive
- Affordable fees
- Separate space and/or hours for youth

their non-participating peers (Tierney 1995). While its impact on adolescent pregnancy has not been evaluated, it clearly has been shown to impact antecedents of adolescent pregnancy.

3 Providers

Health Services

A number of strategies have been used to increase access to and quality of adolescent health services. Access to sexual and reproductive health services has a positive impact on young people's ability to obtain contraception, which in turn reduces unplanned adolescent pregnancies. The question is, what are the best strategies to accomplish this? And, given that most adolescent pregnancies take place within marriage, what are the most effective strategies for reaching married adolescents?

While intuitively appealing, to date there is little evaluation research on the overall impact of these characteristics on adolescent pregnancy, let alone the independent contribution of each. The evaluations that have been done do not support the notion that "if you build it they will come". In 2005, Gao evaluated the Shanghai Youth Friendly Health Services Project and concluded first, that the provision of such services alone, without comprehensive sex education, is not likely to impact adolescent pregnancy rates. Second, in-school clinical services were more effective in reaching adolescents than community-based services. In 2003 Mmari et. al. reported their assessment of YFHS in Lusaka, Zambia and found that while there was a modest increase in adolescents' use of health services, community attitudes held back adolescent utilization. More recently, a third evaluation from Malawi suggests similarly that YFHS alone are insufficient to significantly increase adolescent utilization. Specifically, Munthali (2011) reported "that despite various attempts in implementation of adolescent reproductive health by a number of organizations, there is low access to youth-friendly reproductive health services among adolescents aged 14-19 in Lunzu-TA Kapeni [Malawi]. About one-third (38 per cent) of the total recruited adolescents had ever accessed YFRH services." More recent evidence suggests that training and supporting health workers, making health services friendly, and outreach educationtogether-can contribute to increased service utilization by adolescents (Denno, et al 2015). This approach is potentially promising when combined with community stakeholder commitment and other strategies such as the competitive voucher scheme.

Competitive Voucher Scheme (Nicaragua)

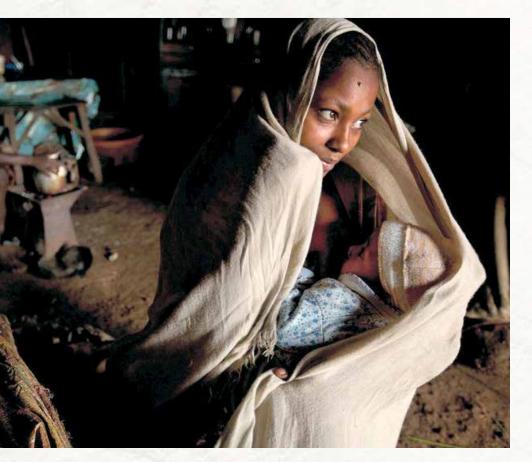
This *promising* programme distributed vouchers for SRH care for a year to disadvantaged youth in Managua, Nicaragua in four markets, outside 19 public schools, house-to-house, on streets, and in clinics. Vouchers were valid for three months, and could be transferred to another adolescent in greater need. Vouchers could be used to cover one consultation and one follow-up visit The evaluations that have been done do not support the notion that "if you build it they will come".

for: counselling, family planning, pregnancy testing, antenatal care, STI treatment, or any combination. In addition to providing youth with a pamphlet on adolescent health and two condoms, participating NGOs also trained clinic staff on counselling, adolescent sexuality, and sexual abuse (Muewissen 2006). The evaluation suggests that voucher use was associated with greater use of SRH care; knowledge of contraceptives; knowledge of STIs, and condom use.

Contraceptive Technologies

While discussion of contraceptive technologies is beyond the scope of this guide, it is worth highlighting two methods: long-acting reversible contraceptives (LARCs) and emergency contraception (EC).

WHO's Medical Eligibility Criteria for Contraceptive Use (2015, 5th edition) has classified LARCs such as IUDs or implants as safe for adolescents. While pills or condoms require daily or pre-sex compliance, and Depo-provera requires injections every three months, LARCS have much higher typical use effectiveness in addition to their long duration of use. The pregnancy rate for the copper IUD is 2 per cent over 10 years. The Mirena IUD is more than 99 per cent effective for five years. The Nexplanon implant, a single flexible rod inserted in the upper arm, is more than 99 per cent effective for three years. Fertility returns after these devices are removed, an important consideration for adolescents. Research in St. Louis, Missouri, USA found that where adolescents were offered a wide choice of methods free of cost, they were attracted to LARCs (Winner 2012). Continuation after 12 months was 86 per cent for IUDs and implants, versus 55 per cent for pills, the vaginal ring and the patch. In the state of Colorado, adolescents were offered LARC insertion immediately post partum to delay second births. The number of repeat births to Colorado teens declined 45 per cent in four years (2008-2012) with concomitant savings in Medicaid costs. If cost was not a consideration and LARCs were objectively



A teen girl breastfeeds her baby in a rural area outside Bahir Dar, Ethiopia. Her husband was maimed shortly after they were married and her lack of education means she must stay with her family indefinitely. described to teens along with other methods, LARC use among teens increased dramatically. This *effective* technology offers the adolescent a set of options that could allow her to control her own fertility with a relatively simple technology, as long as options are available for removal.

Emergency Contraception (EC): Emergency contraception is especially relevant to adolescents since they tend to have unplanned and sporadic intercourse, they are more likely to experience coerced sex than adults, and they have a harder time than adults negotiating safe sex. Additionally, they are more likely to experience contraceptive failure than adults. However, there are many barriers including limited awareness and knowledge of adolescents and providers, reluctance of health care workers to provide EC to adolescents, and legal and social restrictions against giving EC to adolescents. As of 2005, more than 100 countries had a dedicated EC pill product. One country with a strong social marketing programme for ECPs is Venezuela whose programme has been described in a case study (C. Parker 2005). At an individual level, EC is effective when taken; the problem is that it may not be obtained on every occasion of unprotected intercourse. As a population-level strategy to reduce teen pregnancy, however, the evidence is not strong and it is at best promising.

Schools

Conditional Cash Transfer (CCT) Schemes: As noted in the policymakers' section, a number of CCTs are conditioned on school attendance and retention. While CCT schemes are not directly aimed at pregnancy prevention, keeping children and especially girls in school has an impact on adolescent pregnancy. School attendance in turn increases opportunities for girls, with a further impact on unwanted pregnancy. A number of CCT schemes are *effective*.

Ethiopia's **Berhane Hewan**, previously described, includes a CCT for girls' school attendance. Participants are given school supplies, worth about \$6 a year. School attendance increased from 78 per cent to 96 per cent (Erulkar and Muthengi, 2009; Mekbib and Molla, 2010). It is not possible to determine whether the CCT, other aspects of the programme, or a combination of all were responsible, but the evidence is strong that the programme is *effective*.

Zomba Cash Transfer Programme (Malawi). This *effective* CCT provided US\$10 and school fees to girls to stay in school, or in the case of recent dropouts, to return to school. After one year, comparing programme participants with controls, the probability of getting married was reduced by 40 per cent, the probability of getting pregnant was reduced by 30 per cent, and the incidence of first sex by 38 per cent (Baird, 2009).

This programme experimentally evaluated a second unconditional cash transfer. It was based on the premise that girls engage in a range of sexual behaviours driven in part "While the CCT was most effective at keeping girls in school, the unconditional cash transfer was the more effective at preventing early marriage and pregnancy."

by poverty; and if there could be modest alleviation of their dire economic condition then their sexual behaviours too would change. What the researchers found was that while the CCT was most effective at keeping girls in school, the *unconditional* cash transfer was the more effective at preventing early marriage and pregnancy (Baird, 2011). This *promising* approach warrants further evaluation.

CCTs and School Enrolment: Evidence supporting the impact of CCTs on education is strong. In a review of the literature on CCTs done in 2008, Parker reported that Nicaragua's *Red de Proteccion* Social increased school enrolment by nearly 18 per cent and improved attendance by over 10 per cent for first through fourth graders. A recent meta-analysis of 15 CCTs, all in developing countries, found that on average they improve secondary school attendance by 12 per cent (Saavedra and Garcia, 2012). Relatively larger transfers, made quarterly, rather than monthly, were found to be the most effective and impacts were found to be the largest in countries with very low base enrolment/attendance rates. However, as Azevedo et al. (2012) note, "few studies investigate the potential effect of CCT programmes on the adolescent fertility rate" - and those few that do, do not all find positive relationships. Among those that have, in Mexico Stecklov et al. (2006) found that Oportunidades reduced the fertility of women under the age of 20 by 2 per cent. Darney et al. (2013), on the other hand, recently concluded that despite initial findings Oportunidades has no direct impact on adolescent fertility. But in Peru Gulemetova-Swan (2009) concluded that the programme significantly delayed sexual debut, because it delayed marriage.

Recently Cho et al. (2011) reported a small scale randomized trial aimed at keeping orphaned children in school in rural Kenya. In this trial the intervention group received comprehensive supports that included school fees, uniforms, and a "community visitor" who monitored school attendance and helped to resolve problems. The comparison group received mosquito nets and blankets, and food supplements every two weeks. After one year those that received the school supports were less likely to drop out of school, less likely to initiate early intercourse, more likely to report pro-social bonding and genderequitable relationships than peers in the control group. This is a promising intervention. In the 1990s the Bangladeshi government established Food for Education Programmes with the explicit intent of improving school attendance. As a consequence, over 90 per cent of children are enrolled in school, and gender disparities in education have been nearly eliminated (Ahmed 2007).

It is evident that CCTs impact school enrolment and school attendance; their impact on adolescent pregnancy is not clear, but evidence from other research indicates that keeping adolescents in school delays early marriage, reduces pregnancy and improves educational outcomes. We will look more closely at Mexico's Opportunidades in the Family section below.

Comprehensive Sex Education: There is emerging evidence that comprehensive sex education curricula can have an impact. In a review of 87 comprehensive sex education programmes including 29 from developing countries, (UNESCO 2009) found, "nearly all of the programmes increased knowledge, and two-thirds had a positive impact on behaviour: many delayed sexual debut, reduced the frequency of sex and number of sexual partners, increased condom or contraceptive use, or reduced sexual risk-taking. More than onequarter of programmes improved two or more of these behaviours. And most tended to lower risky sexual behaviour by, very roughly, onefourth to one-third." (Boonstra, 2011) While there is a wide range of comprehensive sexual education programmes, the best-implemented and best-evaluated are effective.

Kirby's research identified seventeen characteristics of successful curriculum-based sexuality education in three categories: development, content, and implementation of the curriculum (Kirby, 2007a, 2007b).

More recently, an analysis of evaluated CSE programmes noted that programmes that incorporate an empowerment approach emphasizing gender and rights were particularly effective in improving reproductive health outcomes (Haberland 2015a). For example, young people who have egalitarian attitudes about gender roles in their intimate relationships are more likely to delay sexual debut, use condoms, and practise contraception. A deeper analysis showed that gender and rights-based CSE programmes were five times as likely to be effective as those that did not: 80 per cent of these programmes were associated with significantly lower rates of STIs or unintended pregnancy, compared to 17 per cent of those programmes that did not address gender or power (Haberland 2015b). This approach is promising.

Life Skills Education (LSE): While not necessarily a school intervention, most lifeskills programmes are delivered in schools.

UNICEF (2012) indicates that approximately 70 countries have national-level life skills training programmes. That said, LSE is a heterogeneous category since, as the World Health Organization (1997) notes, many skills are needed for life, and they vary

depending on the cultural context. The WHO (1999) focuses on five core skills: decisionmaking and problem-solving; creative thinking and critical thinking; communication and interpersonal skills; self-awareness and empathy; and coping with emotions and stress.

Much of the focus of LSE has been on psychological skills which can protect adolescents when coupled with communication skills and awareness to avoid risky environments and behaviours. Recently, UNICEF (2010) has consolidated LSE under three general categories:

- Cognitive skills for critical thinking and problem-solving, as a basis for responsible decision-making;
- Personal skills for awareness, drive and self-management; and
- Interpersonal skills for communication, negotiation, cooperation and teamwork, and for inclusion, empathy and advocacy.

The UNICEF LSE Evaluation (2010) shows that a large array of programmes falls under the rubric of life skills education. Their effectiveness depends on factors such as: curricular focus and content; engagement of national and community stakeholders; methods of instruction; youth engagement in programme design and implementation; the target population, and instructor training. This approach is *promising*.

4 Parents

Conditional Cash Transfer Schemes

As previously noted, many CCTs are conditioned on school enrolment and attendance; however, some are explicitly intended as family supports, and may include parental education.

Opportunidades (Mexico): Originally developed under the name *Progresa*, this *effective* programme was one of the first social assistance programmes to apply a multidimensional approach to human welfare, regarding poverty as more than a lack of income, recognising links to health, education and nutrition. *Opportunidades* is a conditional cash transfer programme (CCT), in which income transfers for families are linked to three core components: education, health care and nutrition (Nino-Zarazua, 2010) (Rawlings, 2003). The programme assists over five million households, covering 93,000 rural and semi-urban districts:

- Education: Educational grants are provided from primary through secondary school.
 Support increases with grade level so as to retain older adolescents who might otherwise be working. Education grants are slightly higher for girls, to counterbalance the tendency for girls to drop out after completing primary school (Behrman 2000). In addition, school supplies are provided every six months.
- **Health:** Basic health care services for all family members are provided. Special emphasis is given to preventive health

care, provided by governmental health institutions (Parker, 2003).

 Nutrition: A fixed monthly money transfer is made to improve food consumption. Nutritional supplements are provided for children between four months and two years of age, malnourished children and pregnant women (Parker, 2003). There are additional nutrition cash supports for children under 9 years old.

Evaluation in the Oportunidades programme's three categories shows:

- Education: Higher school enrolment, especially in the transition from primary to high school, and particularly for girls (Skoufias, 2005, Holmes, 2007); lower dropout rates and improved school attainment. However, the impact on student achievement has been difficult to assess (Skoufias 2001).
- Health: Lower maternal and infant mortality rates; lower overall morbidity and incapacity; more use of public health services and less use of private services.
- Nutrition: Lower prevalence of anaemia; increased height and weight of young children; better household diets including more meat and dairy; better nutrition in children through nutrition supplements (Holmes 2007).

None of these three elements are specifically directed at adolescent pregnancy, but the programme is nevertheless likely to Programmes that incorporate an empowerment approach emphasizing gender and rights were particularly effective in improving reproductive health outcomes.

have an impact. When strategies such as poverty alleviation, educational enrolment and retention, and increased use of public health services are combined with effective contraceptive services, the likelihood of an impact on adolescent pregnancy increases substantially.

Parent Communication Programmes

There are a large number of programmes aimed at enhancing parent-adolescent communication. Some address sexual and reproductive health discussions, but many others are targeted at behavioural problems, delinquency and/or substance abuse.

Families Matter! Programme

(Vandenhoudt 2010) is an evidencebased, parent-focused intervention in eight Sub-Saharan African countries that has been widely accepted by NGOs, Evaluation showed improved parental attitudes toward sexuality education, as well as positive and sustained improvements in parenting and parent-child communication.

faith-based organizations and Ministries of Health. It was developed by the US Centers for Disease Control and Prevention to impact tobacco and alcohol use among 12 to 14 year olds, and later modified to address parent-adolescent communications around sexual health. The focus is on enhancing supervision and communication skills between parents and young people. Local male and female facilitators deliver five threehour sessions to groups of 12 to 18 parents and caregivers. In Kenya, the programme was implemented targeting 10-12 year olds and their parents and evaluated in a rural province (Vandenhoudt 2010). There it focused on parental attitudes toward adolescent sexuality. In this promising programme 94 per cent of parents attended all five sessions. Evaluation showed improved parental attitudes toward sexuality education, as well as positive and sustained improvements in parenting and parent-child communication.

Strengthening Family Programme has been used in 26 countries including the US and in Latin America. Much like Families Matter!, this programme was originally developed as an alcohol and drug abuse prevention programme. There are multiple versions for parents of different ages of children and for higher risk families. It is a family skills-building programme of 14 two-hour sessions. First developed in the United States in 1996, it reached an estimated 250,000 young people in the first decade of implementation (Maguin 2007). Since 2003 it has been adopted and implemented in at least 17 countries (Kumpfer 2008). It has had positive results in increasing family strengths and resilience and reducing problem behaviours among youth. One evaluation in Chile looked at whether it reduced sexual risk behaviours but did not demonstrate an effect, possibly because of limited follow-up time; thus, it is rated a promising approach.

5 Partners

Partner Violence Prevention

Safe Dates (USA): Safe Dates, developed by Foshee et al. (1996, 1998, 2000, 2004), was designed to prevent dating violence among adolescents ages 13-15 years. The programme focuses on changing dating violence norms, gender stereotyping and conflictmanagement skills. The initial evaluation was undertaken in the United States with 14 schools with random assignment to the intervention or control conditions. The intervention included a theatre production, 10-session curriculum and a poster competition. Baseline data indicated that 14 per cent of participants had been perpetrators of violence and 25 per cent reported having been victimized. There were no significant differences between control and intervention groups. Initial evaluation one month after the intervention found declines of 25 per cent in psychological abuse; 60 per cent in sexual abuse; and 60 per cent in physical violence in the schools that received the intervention compared with controls (Cornelius, T., Resseguie, N. 2007). There were also significant differences in gender violence norms and gender stereotyping among those who participated in the programme. One year after participation, students who were in Safe Dates remained less accepting of gender violence; however, no behavioural differences were found among the intervention and control groups (Foshee et. al., 2000). Four years after participation the findings were different: Specifically, adolescents who had been in the programme reported less physical violence, sexual violence or victimization (Foshee et. al., 2004). This is an effective programme.

In a meta-analysis of 13 adolescent partner violence prevention programmes, Ting (2009) notes that all that can really be concluded is that most programmes increased knowledge and improved attitudes, but that little behaviour change was noted and the overall change in knowledge and attitudes was relatively modest. DeGrace and Clarke (2012) note that among the few well-evaluated programmes, most show little impact. After an exhaustive search of the literature, only *Safe Dates* incorporated all nine elements of effective programmes. In another meta-analysis of adolescent partner violence prevention programmes, Whittaker et al. (2006) found only one other programme, the **Youth Relationships Project** (Wolfe, 2003; 2009), to have impacted both knowledge and behaviours. Both meta-analyses conclude that the evidence of effective interventions is limited but slowly emerging. To date there is no evidence of effective programmes from low and middle- income countries (Heise, 2011).

Safer Sex

Stepping Stones (South Africa) was implemented in 70 villages in South Africa, targeting youth 16-23 years of age. Twenty males and 20 females in each village participated, for a total of 2776 participants (1409

Principles of effective partner violence prevention programmes

- Theory driven
- Comprehensive
- Varied instructional methods
- Sufficient duration and intensity
- Positive relationships
- Appropriately timed
- Socio-culturally appropriate
- Well-trained staff
- Outcomes evaluation
 (Nation, 2003)

intervention and 1367 control). The programme entailed 17 sessions for a total of approximately 50 hours over three to twelve weeks. Evaluation used a random controlled trial and the outcome measure was HIV acquisition (Jewkes, et. al., 2006). Three out of five participants attended more than three-quarters of the sessions. While the evaluation was too early to assess effectiveness, it is evident that such programmes are feasible and promising. The authors conclude with some key lessons: "The most important underlying lesson is the need to allocate sufficient time to the processes of community mobilization, participant recruitment and retention and building an effective community advisory board."

6 Peers

Comprehensive Sex Education

Introduced under the school heading above, an example of an effective comprehensive sex education programme is also noted here since the target audience is adolescent peers.

Programa de Educacao Afetivo-Sexual

(PEAS): Um Novo Olhar (The Programme for Sexual and Emotional Education: A New Perspective) (Brazil): This sex education programme is framed from a rights perspective and is focused both on unsafe sexual practices and on positive approaches to sexuality (i.e. a "healthy and pleasurable sex life"), and integrates gender equity. It uses an interactive approach to sex education both in and out of the classroom in a way that involves teachers and health care professionals, as well as students, their families, and the community. Specifically, components of the programme are school based; however, parent involvement is a core component, as is peer support and counselling. Curriculum includes addressing sex-related issues through radio programmes; school newspapers; plays; workshops, and research projects. Evaluation assessed 4,795 youth in 20 public schools in Minas Gerais (Andrade, deMello, Sousa et. al., 2009) and found after the programme that participants reported nearly twice the likelihood of using condoms consistently and a 68 per cent increase in modern contraceptive use at last sex. Additionally, it did not result in an increase in sexual activity. This is a promising approach.

From two communities near Shanghai, China Lou et. al. (2004) reported on a sex education and reproductive health programme that included both school-going (n=923) and out-of-school youth (n=1220) ages 15-25. The evaluation followed up with 92 per cent of both the intervention and control groups 20 months after the programme. While there were no differences of contraceptive use at baseline, twenty months later the intervention group was 14.58 times more likely to use contraception at the initiation of intercourse. Similar results were found for boys and girls, suggesting this to be a promising programme. However, a follow-up in 2008 noted that without regular and ongoing intervention efforts, the effects from the programme were not sustained in the long-term (Xiawen, T 2008). It is therefore crucial to

Group education interventions can successfully influence young men's attitudes toward gender roles and lead to healthier relationships

provide community-based sex education and reproductive health services to youth on a regular and ongoing basis in order to sustain positive effects.

Promoting More Gender-equitable Norms and Behaviours Among Young Men as an HIV/AIDS Prevention Strategy (Brazil)

This programme, developed by Promundo, targets very low-income males ages 14-25 years. The programme involves a series of interactive group sessions combined with a social marketing campaign promoting condom use and reinforcing the genderequitable messages of the instruction. The evaluation compared attitudinal change (using the Gender-equitable Men's Scale) among those who received only the group instruction, compared with those who were exposed to both and with controls who received neither (Pulerwitz, et. al. 2006). Surveys were administered at baseline, 6 months and after one year. Seventy per cent were sexually active at baseline with average age of onset at 13 years; 25 per cent reported having had an STI. At both sites STI symptoms were less frequently reported after six months but reached statistical significance only at the combined site. After one year there was significant increase in condom use with casual partners for both the single and double intervention sites. The authors conclude: "group education interventions can successfully influence young men's attitudes toward gender roles and lead to healthier relationships."

This programme was replicated in Mumbai, India, with 92 males and found similar positive changes in gender inequitable norms after two months using a pre- and post-intervention comparison evaluation. Behavioural impact was less clear (Verma et al, 2006); thus, this is a *promising* approach.

Adolescent Girls

A number of interventions targeted to the individual girl have been previously discussed under other categories but noted here as well:

- Reduction of Child Marriage: Berhane
 Hewan in Ethiopia
- School enrolment and attendance: Food for Education programme in Bangladesh
- Sexual victimization: Safe Dates in the United States
- Contraceptive technologies: Long Acting
 Reversible Contraception
- Health services access: Competitive
 Voucher Scheme in Nicaragua

Programmes to End Child Marriage

There has been an increase in recent years in programmes aimed at ending child marriage; however, very few have been evaluated (Hervish & Feldman-Jacobs, 2011; Mukherjee et al 2008). The 2010 systematic review of evidence-based programmes completed by the International Centre for Research on Women (ICRW) found that half the 23 evidence-based programmes were in South Asia. These programmes used five primary strategies: empowering girls with information, skills, and support networks; educating and mobilizing parents and community members; enhancing the accessibility and quality of formal schooling for girls; offering economic support and incentives for girls and their families; and fostering an enabling legal and policy framework. Berhane Hewan (mentioned earlier), DISHA (Development Initiative on Supporting Healthy Adolescents), and Ishrag are all examples, but they are not

The strongest results were documented by programmes that worked directly with girls to empower them with information, skills and resources. all equally rigorous in their evaluation. The ICRW review concludes: "The strongest results were documented by programmes that worked directly with girls to empower them with information, skills and resources. This includes programmes such as the Maharashtra Life Skills programme in India (positive results) and Berhane Hewan in Ethiopia (positive results for the 10-14 age group)." The other programme rated as rigorously evaluated is the Zomba Cash Transfer Programme in Malawi. All of these programmes are reviewed in this report.

Ishraq (Egypt) is a promising adolescent development programme targeting girls in Egypt. The core of the programme is an adolescent development curriculum with life skills; academic skills; recreational activities; social supports; mentors, and safe spaces. Nearly 300 girls in programme villages meet four times a week for 30 months in schools or community centres for youth where female graduates of secondary school ("promoters") work as teachers, role models and advocates for the young girls. The programme aims to create safe spaces in the community for girls to come together, learn, and play, and involves a combination of life skills classes, sports, and literacy classes (Brady 2007). While the evaluation did not address adolescent pregnancy, it does address a number of factors associated with child marriage and early pregnancy. Specifically, literacy improved (92 per cent of participants who took the government literacy exam passed) as did school enrolment (nearly



A young woman woman walks through the fog in the early morning near the city of Kabilbastu, Nepal.

70 per cent of programme participants entered/re-entered school). After the programme, participants conveyed a desire to marry later and only 1 per cent reported that FGC was necessary compared with 76 per cent of non-participants. Additionally, the programme was associated with increased self-confidence (65 per cent felt "strong and able to face any problem").

Life Skills Programme in Maharashtra

(India) included weekly hour-long sessions divided into five sections: government and civil society, life skills, child health and nutrition, and health. It ran from 1996 to 2006. The focus of the programme was on

unmarried girls ages 12-18 with a particular attention on out-of-school and working girls. It involved parents in programme development and experienced teachers carried out the classes. (Pande 2006). The evaluation showed significant impact over a three year period of time. Specifically, in the community where the programme was held the median age of marriage rose from 16 to 17. The control group was four times more likely to marry before age 18. Additionally, the proportion of marriages of girls before age 18 fell to 61.8 per cent compared to 80.7 per cent at baseline. Overall, the programme reduced marriage before age 18 by 20 per cent, and appears to be promising.

Programmes to Reduce Second Births

Of the many programmes aimed at reducing repeat pregnancies, few have been implemented and evaluated in low- and middle-income countries. Black et al (2006) reported a randomized clinical trial of a successful home-based mentoring programme in the United States. The curriculum used social-cognitive theory and focused on interpersonal negotiation skills, adolescent development and parenting. The target group was 181 low-income, African American teenage mothers; and the intervention used college-educated, black, single mothers who served as mentors, presenting themselves as "big sisters." The intervention was biweekly for one year. Evaluation was done at six, 13 and 24 months. The researchers report: "At the two-year evaluation, 18 per cent of the mothers (27 of149) had given birth to a second child.... mothers in the control group were 2.5 times more likely to have given birth to a second child than mothers in the intervention group (24 per cent vs 11 per cent; odds ratio [OR]: 2.45; 95 per cent CI: 1.003-6.03: P <.05)."

In a meta-analysis of 16 programmes that used comparison groups for their evaluation (again in the United States and targeting unmarried adolescents), Corcoran and Pillai (2007) found that 19 months after the intervention there was on average an approximately 50 per cent reduction in second births among the intervention groups. Evaluation research on the **Nurse-Family Partnership** has shown that the programme has reduced second births, especially among low-income African American youth. This is an *effective* adolescent pregnancy prevention programme.

Programmes to Prevent Violence

No Means No Worldwide is a sexual assault prevention programme developed and piloted in Kenya initially to empower adolescent girls and more recently expanded to include males as well (www.nomeansnoworldwide.org). In 2013 the first report of a 6-week self-defence pilot programme was published, which showed a reduction in sexual assaults among the intervention group from 24.6 per cent to 9.2 per cent over a 10-month period, while there was no change in the comparison group. Since the original study a second publication has reported on an intervention using the same 6-week empowerment programme in four communities in the slums of Nairobi. Among 1978 young adolescent girls, the programme reported a decline in sexual assault from 17.1 per 1000 person-years at baseline to 11.1 eleven months later, with again no significant change among the comparison group. Most recently the researchers completed a randomized clinical trial of the intervention, in 14 schools (n=3406) and 15 comparison schools (n=2827) in Kisumu, Kenya. A year after the intervention on average the intervention school student reported a reduction of sexual assault from 8.3 per cent to 4.8 per cent (91.5 per cent follow-up) while in the comparison schools the decline was negligible (J. Sinclair, personal communication). This appears to be a promising programme.

Programmes to Reach Very Young Adolescents

As previously noted, a small but growing number of programmes specifically target this age group or their parents and caregivers. Yet we know that gender norms and sexual beliefs (if not behaviours) become established at this age. Specifically, interventions for very young adolescents are needed that address gender socialization and gender equity; gender-based violence, and educational retention. Especially among

Interventions for very young adolescents are needed that address gender socialization and gender equity, gender-based violence, and educational retention.

the poorest groups parents need programmes such as conditional cash transfer programmes coupled with education, holding the promise of delaying marriage.

Choices Curriculum (Nepal): Save the Children has piloted the Choices Curriculum in twelve child clubs in two communities of Nepal. The intervention focuses on gender inequality and specific steps that young adolescents can take to increase equity. The evaluation, completed by Georgetown University's Institute for Reproductive Health, used comparison communities. A total of 603 youth, divided between intervention and control sites, participated fairly equally. Evaluation included both qualitative and quantitative methods and significant differences were seen for discrimination; social image; control and dominance; violence and girls' education; gender roles, and acceptance of traditional gender norms (IRH, 2011; Lundgren, Beckman, Chaurasiya et. al., 2013). Choices Curriculum is a promising intervention.

FAM Project (Rwanda): Developed by the Institute for Reproductive Health and implemented in Rwanda in conjunction with Catholic Relief Services, this is an interactive training programme targeted to 10-14 year olds, dealing with issues such as puberty, fertility, gender norms, communications and relationships. There are two versions: My Changing Body and Cyclesmart. Evaluation of My Changing Body suggests that it increased knowledge, increased child-parent communications about sexuality and improved self-efficacy around gender roles. This is a potentially promising intervention.





Saidi, 16 and nine months pregnant, rests at her in laws home. "I was married at 15. My husband left for work in May, 4 months ago. I haven't heard from him since," she said. She gave birth the next day.

A document such as this contains certain limitations, some inherent in the process of identifying effective programmes and others inherent in the programmes themselves.

The first question is: What does effective mean? Some programmes described in this guidance have been extremely well researched, using randomized assignment and other very high-quality evaluation methodologies. Others use good but less strong methods such as pre- and post-assessment. The guidance indicates the type of evaluation used for each, to indicate the strength of the evidence. Where there is no evidence of impact on adolescent pregnancy, either directly or indirectly on one or more of the antecedents, the programme is not included. Second, some interventions have been brought to scale and others are very local. It is a question for consideration whether a programme can be replicated with fidelity and be as effective in another setting, either at national or local level.

The knowledgeable reader may ask a third question: when the evidence was mixed, why were some programmes included and not others? A programme with no evaluation evidence may work, but it is omitted if we could not find evaluations to support its inclusion. Where the data are mixed we indicate that as well.

Then again, what does it mean to "have an impact on adolescent pregnancy"? As noted

throughout, this report uses a logic model because many programmes either have not been evaluated for their direct impact on adolescent pregnancy or were never designed to have such an impact — for example, many CCTs. A logic model allowed the guidance to include interventions with an impact on the antecedents of adolescent pregnancy — such as early school leaving.

Another issue for consideration is scalability. A program may be effective but at a financial cost that precludes replication scalability. We have not undertaken a per capita cost analysis of the effective programmes reported in this document. A compilation as well as an analyses would be worthwhile.

There are also many limitations in programmes themselves:

- Many are short term. Whether their positive effects continue over time is unknown.
- Although most pregnant adolescents are married, few programmes address married girls or couples.
- Most evaluations are cross-sectional, even though longitudinal studies are often more powerful.
- Few programmes, and fewer evaluations, disaggregate those girls who choose to get pregnant from those who wish to postpone or prevent pregnancy.
- Few programmes address the antecedents of child marriage such as poverty, lack of education, lack of opportunity, and lack of voice.
- Few programmes address the needs of special populations of adolescents, such as those with disabilities and chronic diseases, migrants and refugees.
- Few programmes address the special needs and vulnerabilities of very young adolescents (10 to 14 year olds) or their parents.

9 INNOVATE: BUT EVALUATE THE INNOVATION



Tigist Chekol, 18, gets ready to perform a traditional dance during a show by the Fistula Girls Club and the Community-based Reproductive Association in Shende Village, Amhara Region, Ethiopia.

As the guidance shows, that there are effective and promising programmes at all levels of the logic model, but a lot remains to be done. A number of innovative approaches are being explored and others await exploration. As with previous generations of work, it is the exceptional programme that concurrently evaluates efficacy.

Below are descriptions of a few innovative programmes where evaluation has either not been done or is still too limited to show impact. Some target specific groups, while others use media to reach populations at highest risk for pregnancy. They are included to give the reader a sense of where some of the cutting-edge work is being done.

Mass Media

Numerous mass media programmes address adolescent sexual and reproductive health, but few have been well evaluated for impact.

East Los High (USA): A television series gaining a wide viewership among Latino - and other - adolescents in the U.S. The teen drama series first aired in 2013 and was among the top 10 shows on Hulu. com throughout its initial run. In telenovela style, one new episode was aired every weekday for a month. The series reflects growing up in East Los Angeles from the perspective of Latino adolescents. Within the context of romantic relationships, the programme deals with issues such as sexual decisionmaking; sexting; drugs and violence; the use of sex as revenge; teen pregnancy; betraval, and abstinence. The programme has just completed its first season as of this writing and an evaluation has yet to be undertaken; however, it is one of the boldest television programmes, tackling issues facing many adolescents. Producers are now making the series available on YouTube.com in order to reach a global audience. "East Los High" also has a robust social media and online presence (www.EastLosHigh.com), offering viewers a wealth of resources, information, character blogs and more to extend the conversation in digital media.

The potential for television to affect behaviour and thus have an impact on adolescent pregnancy should not be underestimated. In the spring of 1997, the Kaiser Foundation worked with the television programme *ER* to incorporate a vignette about a patient who had been a victim of date rape and who was prescribed emergency contraception (EC). The entire vignette was no more than two minutes long. Princeton Survey Research Associates assessed the impact of that brief exposure to EC among 700 regular viewers of the

> There are effective and promising programmes at all levels of the logic model; but a lot remains to be done.

television show. The evaluation used pre, post and two-month follow-up. Immediately after viewing the programme women's awareness of EC increased 17 per cent. It was estimated, given the size of the viewership that between five and six million women learned about EC as a consequence of that two-minute vignette. The researchers also found that the retention of that exposure did not last: only half retained that knowledge two months later (Kaiser Family Foundation, 1997). But half still represents over two million viewers.

Internet-Based Programmes and Social Media

As access to the Internet and technologies becomes increasingly available, a growing number of websites and mobile applications are providing sexual and reproductive health information for adolescents and youth.

Bedsider (USA): Developed by the National Campaign to Prevent Teen and Unplanned Pregnancy, this promising programme (www.Bedsider.org), is an online contraceptive support network. Launched in 2010, it is designed to make contraception easier for single women who are in need of reliable information regarding their options. The goals of Bedsider are to demystify family planning and contraceptives, to help women find the method that is right for them, to learn how to use contraception consistently and effectively, and to gradually encourage women to consider using more effective forms of contraception over time.

The site allows users to explore and compare all available methods of contraception; set up appointment reminders; view videos of their peers discussing personal experience of various methods of contraception, and view entertaining informative and humorous animated shorts that debunk myths. Users accessing the website in the United States can enter their zip code to find the closest clinic or pharmacy to get contraception over the counter. Timely features present the latest news on contraception and address common concerns about using it. In a recent randomized clinical trial of this website among over 2200 18-29 year old American females, the intervention group was shown a short video about the site and were encouraged to use it. Over a one-year period those who had used the site were 3.79 times less likely to report an unintended pregnancy. Additionally, they were 2.54 times less likely to report having had unprotected sex.

Mobile for Reproductive Health (m4RH) (Kenya, Tanzania, Rwanda): Started in 2009 by FHI360 with funding from USAID, **PROGRESS** (Programme Research for Strengthening Services) began developing the Mobile for Reproductive Health (m4RH) project, which has generated a set of text messages on family planning methods that users can access via their mobile phones. There is also a set of on-line tools for planning, designing, promoting and evaluating m4RH and related programmes. This m-health approach has been used so far in Kenya and Tanzania and has recently been deployed for adolescents in Rwanda as well. While there is no outcome research as yet, formative research in Kenya showed enthusiasm for developing a text message approach to family planning information.

I Know, I Decide (Egypt): Launched by Pathfinder in conjunction with the Egyptian Family Planning Association (EFPA) in 2013, this programme will provide comprehensive sexual and reproductive health information



Young girls frolic while fetching water outside their home in Hajjah, Yemen.

to young people in ten areas of Egypt. This project will address the particular barriers that adolescent girls face in accessing sexual and reproductive health information. Recognizing that social and gender-related barriers and constraints can often prevent them from participating in traditional life skills and peer education programmes, Pathfinder's project will provide sexual and reproductive health information for young people aged 10-24, with an emphasis on strengthening EFPA's capacity to reach girls aged 10-19, who are often underserved. As part of this project, Pathfinder will support EFPA to build a youth-friendly portal on the EFPA website. The portal will provide a wider audience of young people with additional opportunities to access educational content for sexual and reproductive health and life skills, through an innovative and interactive platform.

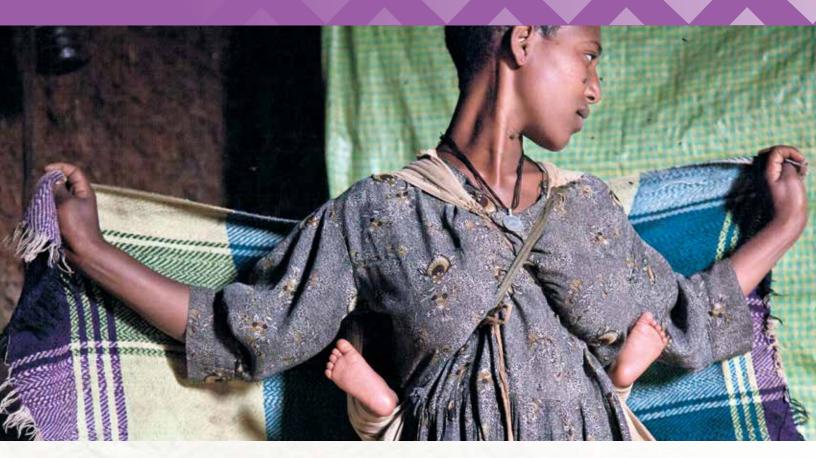
Summary of Programmes

Programme	Quality Assessment	Main location (additional locations)	Reference	Website				
POLICY MAKER								
Child marriage/ age differential laws	Potentially Promising	Low-income countries	Lee-Rife et al. (2012)	http://onlinelibrary.wiley.com/doi/10.1111/ j.1728-4465.2012.00327.x/pdf				
Laws addressing sexual violence	Potentially Promising	Several countries	Heise (2011)	http://strive.lshtm.ac.uk/resources/what- works-prevent-partner-violence-evidence- overview				
Andean Plan for the Prevention of Teenage Pregnancy (PLANEA)	Potentially Promising	Bolivia, Chile, Colombia, Ecuador, Peru, Venezuela		http://www.planandinopea.org/ (Spanish)				
Children's Act	Potentially Promising	South Africa	Han, Bennish (2009)	http://journals.plos.org/plosmedicine/ article?id=10.1371/journal.pmed.1000006				
PROGRAMME MANAGER								
Geracao Biz	Potentially Promising	Mozambique	Hainsworth et al. (2009)	http://www.who.int/maternal_child_ adolescent/documents/9789241598354/ en/				
Development Initiative Supporting Healthy Adolescents (DISHA)	Effective	India	Kanesathasan (2012)	http://www.icrw.org/files/publications/ Catalyzing-Change-Improving-Youth- Sexual-and-Reproductive-Health-Through- disha-an-Integrated-Program-in-India- DISHA-Report.pdf				
PRACHAR Project	Promising	India	Wilder et al. (2005); Daniel et al. (2008)	http://www.pathfinder.org/publications- tools/pdfs/PRACHAR_Advancing_Young_ Peoples_Sexual_and_Reproductive_ Health_and_Rights_in_India.pdf				
Carrera/ Children's Home Society Programme	Effective	USA	Philliber (2002); Philliber Research Associates (2010)	http://stopteenpregnancy. childrensaidsociety.org/				
Big Brothers/Big Sisters Mentorship	Effective	USA	Herrera (2012); Tierney (1995)	http://www.bbbs.org				
PROVIDERS (HEALTH SERVICES AND SCHOOLS)								
Youth Friendly Health Services	Potentially promising	China, Zambia	Gao (2005); Mmari (2003); Munthali (2011) Denno (2015)	http://www.path.org/publications/files/ HIV_ChinaYRH_shanghai_eval.pdf http://www.jahonline.org/article/S1054-				
Competitive Voucher Scheme	Promising	Nicaragua	Muewissen (2006)	139X(14)00424-8/abstract http://www.biomedcentral.com/1471- 2458/6/204/				
Long Acting Reversible Contraceptives	Effective	USA	Winner (2012)	http://www.nejm.org/doi/full/10.1056/ NEJMoa1110855				
Emergency Contraceptives	Effective (individual); Promising (population)	Venezuela	C. Parker (2005)	http://ec.princeton.edu/references/ecps- adolescents.pdf				
Zomba Cash Transfer Programme	Effective	Malawi	Baird (2009, 2011)	http://intl-qje.oxfordjournals.org/ content/126/4/1709.full				
Comprehensive Sex Education	Effective	Multinational	UNESCO (2009); Boonstra (2011) Haberland (2015a)	http://unesdoc.unesco.org/ images/0018/001832/183281e.pdf http://www.jahonline.org/issue/S1054- 139X(14)X0004-2				

Bold= effective programme

Programme	Quality Assessment	Main location (additional locations)	Reference	Website
Empowerment and Livelihood for Adolescents	Promising	Uganda	Bandiera, O. et al (2012)	http://econ.lse.ac.uk/staff/rburgess/wp/ ELA.pdf
Free School Uniform	Effective	Kenya	Duflo et al. (2011)	http://www.povertyactionlab.org/ evaluation/preventing-hiv-and-teen- pregnancy-kenya-roles-teacher-training- and-education-subsidies
Comprehensive school support for adolescent orphans	Promising	Kenya	Cho et al. (2011)	http://www.ncbi.nlm.nih.gov/ pubmed/21501814
PARENTS				
Oportunidades	Effective	Mexico	Nino-Zarazua (2010); Skoufias (2001, 2005); Holmes (2007)	http://evaluacion.oportunidades.gob. mx:8010/index1.php
Families Matter! Programme	Promising	Kenya (several sub-Saharan nations; USA)	Vandenhoudt (2010)	http://familymatters.sph.unc.edu/index. htm
Strengthening Family Programme	Promising	USA (26 countries)	Maguin (2007); Kumpfer (2008)	http://www.strengtheningfamiliesprogram. org/
PEERS/PARTNER				
Stepping Stones	Promising	South Africa	Jewkes et al. (2006, 2008)	http://www.steppingstonesfeedback.org
Safe Dates	Promising	USA	Foshee et al. (2000, 2004); Cornelius, T., Resseguie, N. (2007);	http://www.hazelden.org/web/go/ safedates#
Programa de Educacao Afetivo-Sexual (PEAS)	Promising	Brazil	Andrade, deMello, Sousa et. al. (2009)	http://www.scielosp.org/pdf/csp/ v25n5/23.pdf
Promoting More Gender-equitable Norms and Behaviors Among Young Men as an HIV/AIDS Prevention Strategy	Promising	Brazil	Pulerwitz et al. (2006); Verma et al. (2006)	http://pdf.usaid.gov/pdf_docs/ PNADF883.PDF
ADOLESCENT GIRL				
Berhane Hewan	Effective	Ethiopia	Erulkar (2007); Mekbib (2010)	http://www.popcouncil.org/research/ building-an-evidence-base-to-delay- marriage-in-sub-saharan-africa
Ishraq	Promising	Egypt	Brady (2007)	http://www.popcouncil.org/research/ ishraq-bringing-marginalized-rural-girls- into-safe-learning-spaces-in-rural
Life Skills Programme in Maharashtra	Promising	India	Pande (2006)	http://www.icrw.org/files/publications/ Improving-the-Reproductive-Health-of- Married-and-Unmarried-Youth-in-India.pdf
No Means No Worldwide	Promising	Kenya	Sarnquist, C. et al (2014) Sinclair, J et al (2013)	http://nomeansnoworldwide.org/ research/
Nurse-Family Partnership	Effective	USA	Olds et al, 1997, 2002, 2010)	www.nursefamilypartnership.org/

10 LESSONS LEARNED FROM EFFECTIVE PROGRAMMES



Fifteen-year-old Destaye stands in her home with her son near Bahir Dar, Ethiopia. Destaye and her husband Addisu, 27, divide their time between working in the fields and taking care of their 6-month-old baby.

Policymakers

- Engagement of policymakers is key.
 Without their support national level programmes will not be successful.
- Laws have impact only to the extent to which they are enforced. They send important messages about national values. Few laws or national policies have been well evaluated for their impact.
- Most adolescent pregnancy occurs within marriage—and it is likely that most such

pregnancies are intentional to some degree. Reducing adolescent pregnancy is therefore likely to depend heavily on ending child marriage.

 Multi-sectoral programmes that work at the policy, community, parent, school and individual levels are *promising* approaches. It is not possible to disaggregate the various parts and assume that the individual components will be equally successful. Evaluations are needed to understand better the independent effects of each component and the level and sequencing of different components.

Programme Managers

- Use evidence-based programmes.
 While this does not guarantee success, programmes that have been unsuccessful elsewhere are very unlikely to be successful in your setting.
- Use theory-based programmes (e.g., a theory of adolescent development) with clearly articulated goals and objectives. These serve as a roadmap for programming. Without them, programmes are likely to founder.
- Scare tactics are very unlikely to be effective.
- Engaging adolescents in programme planning and implementation can improve programming, and often contributes to adolescent development.
- Information-based programmes alone are unlikely to be effective.
- Relationships are key—between the adults in the programme and the young people they are trying to support.

Parents

 Adolescents need and want parents in their lives. Programmes that improve communication between parents and adolescents have an indirect impact on adolescent pregnancy, apparently through their proven ability to increase parent-adolescent connections and closeness.

- To a great extent, parents determine whether their children marry at a young age. Addressing parental expectations and values is critical to delaying both marriage and adolescent pregnancy.
- Parents transmit gender norms both by what they say and by what they do. Gender inequality starts at home.
- Parental poverty and adolescent pregnancy are closely related. Programmes that support parents (e.g., CCTs, parental education and social support programmes) can help to reduce poverty, which in turn reduces adolescent pregnancy.

The central message is that there are useful steps in almost all settings. Use what is known and build on it.

Providers (Teachers and Health Care Providers)

Teachers

- Schooling is strongly associated with lower rates of adolescent pregnancy. When adolescents attend school, and are engaged in their studies, they are significantly less likely than peers to marry early or to become pregnant.
- Conditional cash transfer programmes directly affect school enrolment and attainment.
- Evidence-based life skills training programmes can help to reduce both child marriage and adolescent pregnancy.

Health Care Providers

- Youth-friendly services (YFS) alone are insufficient to increase clinic use. Support from community leaders coupled with other strategies (e.g., a voucher programme) is essential if investment in YFS is to increase adolescents' use of health services.
- Too few young married couples are reached by programmes that encourage and help them to delay both first and second pregnancies.
- Barriers that stand between adolescents and good family planning services (such as age, parental or spousal approval, or money) contribute to adolescent pregnancy, while technologies such as long-acting reversible contraception and emergency contraception help to reduce it.

Peers and Partners

- There is evidence that programmes can address gender norms and partner violence. The evidence is strong that such programmes impact attitude change; whether they change behaviour is less clear.
- Evaluations of comprehensive sex
 education curricula provide good evidence
 suggesting that they have an impact on
 both knowledge and behaviour. The positive
 effects are increased when there are strong
 links between educational programmes
 and community health and family
 planning services.

CONCLUDING COMMENTS



Throughout this guidance, there are examples of effective and promising programmes, from low- and high-income countries, and at every level from national policy to the individual girl. The decision at which level to work depends on the context and available resources: but the central message is that there are useful steps in almost all settings. Starting somewhere is preferable to doing nothing. Use what is known and build on it. Be willing to experiment and adapt, but be deliberate. Evaluate your strategy: if it does not work, try another approach. And share your data and experiences with colleagues in other places, so that we all learn together about what works and what does not, and in which settings.

Portrait of Rajyanti Bairwa, 17, in a village outside of Tonk, Rajasthan, India.

References

Ahmed, A., Babu, S. (2007) *The Impact of the Food for Education Programmes in Bangladesh.* Case Study#3-8 of the program: Food Policies for Developing Countries, Ithaca, NY: Cornell University.

Andrade, H.H.S.M., deMello, M.B., Sousa, M.H., Makuch, M.Y., Bertoni, N., & Faundes, A. (2009). "Changes in sexual behavior following a sex education programme in Brazilian public schools." *Cadernos de Saude Publica.* 25: 1168-1176.

Baird, S., McIntosh C., Özler B. (2011). "Cash or Condition: Evidence from a Randomized Cash Transfer Program." *Quarterly Journal of Economics*. Vol. 126(4), pp. 1709-1753.

Baird, S., McIntosh, C., & Ozler, B. (2009). The short-term impacts of a schooling conditional cash transfer programme on the sexual behavior of young women. Impact Evaluation Series No. 40, The World Bank.

Behrman, J. (September 2000). Literature review on interactions between health, education and nutrition and the potential benefts of intervening simultaneously in all three. (International Food Policy Research Institute).

Maureen M. Black, Margaret E. Bentley, Mia A. Papas, Sarah Oberlander, Laureen O.Teti, Scot McNary, Katherine Le and Melissa O'Connell (2006). "Trial of a Home-Based Mentoring Program Delaying Second Births Among Adolescent Mothers: A Randomized, Controlled Trial of a Home-based mentoring Programme." Pediatrics;118;e1087.

Black, R. et al, (2008). "Maternal and child undernutrition: global and regional exposures and health consequences," Lancet, 371 (9608)243-260.

Brady, M., Assaad, R., Ibrahim, B., Salem, A., Salem, R., & Zibani, N. (2007). *Providing New Opportunities to Adolescent Girls in Socially Conservative Settings: The Israq Program in Rural Upper Egypt*. New York City: The Population Council.

Cho, H.,Hallfors, D, Mbai I, Itindi, Milimo, J., Halpern, C. Iritani, B. Keeping Adolescent Orphans in School to Prevent Human Immunodeficiency Virus Infection: Evidence From a Randomized Controlled Trial in Kenya, *Journal of Adolescent Health* 48 (2011) 523-526.

Jacqueline Corcoran and Vijayan K. Pillai. (2007) "Effectiveness of Secondary Pregnancy Prevention Programmes: A Meta-Analysis." Research on Social Work Practice; 17: 5.

Cornelius, T., Resseguie, N. (2007) "Primary and secondary prevention programmes for dating violence: A review of the literature." Aggression and Violent Behavior 12 (2007) 364–375.

Daniel, E., Masilamani, M., Rahman, M. (2008) "The Effect of Community-Based Reproductive Health Communication Interventions on Contraceptive Use Among Young Married Couples in Bihar, India." International Family Planning Perspectives,34 (4):189-197 DeGrace, A, Clarke, A (2012) "Promising Practices in the Prevention of Intimate Partner Violence Among Adolescents." Violence and Victims, 27(6): 849-859.

Denno, D. et al (2015). "Effective Strategies to Provide Adolescent Sexual and Reproductive Health Services to Increase Demand and Community Support." *Journal of Adolescent Health* Special Supplement, 56: S22-S41.

Erulkar, A. S., & Muthengi, E. Evaluation of Berhane Hewan. (2007). A pilot program to promote education and delay marriage in rural Ethiopia. Population Council.

Ferre, C. (2009) Age at fist child: Does education delay fertility timing? The World Bank Policy Research Working Paper, Washington D.C. : The World Bank.

Foshee, V. A., Bauman, K. E., Arriaga, X. B., Helms, R.W., Koch, G. G., & Linder, G. F. (1998). "An evaluation of Safe Dates, an adolescents dating violence prevention program." American Journal of Public Health, 88, 45-50.

Foshee, V. A., Bauman, K. E., Ennett, S. T., Linder, G. F., Benefield, T., & Suchindran, C. (2004). "Assessing the long-term effects of the Safe Dates program and a booster in preventing and reducing adolescent dating violence victimization and perpetration." American Journal of Public Health, 94, 619–624.

Foshee, V. A., Bauman, K. E., & Greene, W. F. (2000). "The Safe Dates program: 1-year follow-up results." American Journal of Public Health, 90, 1619-1622.

Foshee, V. A., Linder, G. F., Bauman, K. E., Langwick, S. A., Arriaga, X. B., Heath, J. L., et al. (1996). "The Safe Dates Project: Theoretical basis, evaluation design, and selected baseline findings." American Journal of Preventative Medicine, 12, 39–47.

Gao. (2005). Evaluation of Youth-Friendly Services in Shanghai. Shanghai Institute of Planned Parenthood Research on behalf of the China Youth Reproductive Health Project. Beijing: CFPA and PATH:

Haberland, N (2015a). *Sexuality Education: Emerging Trends and Evidence*. Journal of Adolescent Health. 56:1 Supplement, 15-21.

Haberland, N (2015b). *The Case for Addressing Gender and Power in Sexuality and HIV Education: A Comprehensive Review of Evaluation Studies.* International Perspectives on Sexual and Reproductive Health, 41(1): 31-42.

Hainsworth, G., Zilhao, I., Badiani, R., Gregorio, D., Jamisse, L., Modan, A.A., Pacca, J. (2009). *From Inception to Large Scale: The Geracao Biz Programme*. World Health Organization, Geneva and Pathfinder International.

Han, J., & Bennish, M. (2009). "Condom access in South African schools: Law, policy, and practice." *PLoS Medicine*. 6(1): 25-29.

Heise, L. (2011). What Works to Prevent Partner Violence? An Evidence Overview. Working paper (version 2.0), London: Department for International Development. Herrera, C., Rhodes, J., et. al., (2012). *Big Brothers Big Sisters Youth Outcome Report*. Philadelphia: Public Private Ventures.

Hervish, A., Feldman-Jacobs, C. (2011). *Who Speaks For Me? Ending Child Marriage*. Policy Brief. Washington, DC: Population Reference Bureau.

Holmes, R. and Slater, R. (2007). Conditional Cash Transfers: What Implications for Equality and Social Cohesion? The experience of Oportunidades in Mexico. FIAPP, Overseas Development Institute (ODI) and EUROsociAL Programme.

R. Jewkes, M. Nduna, J. Levin, N. Jama, K. Dunkle, N. Khuzwayo, M. Koss, A. Puren, K. Wood and N. Duvvury. (2006) "A cluster randomized-controlled trial to determine the effectiveness of Stepping Stones in preventing HIV infections and promoting safer sexual behaviour amongst youth in the rural Eastern Cape, South Africa: trial design, methods and baseline findings.' Tropical Medicine and International Health, 11(1):3-16.

Kanesathasan, A., Cardinal, L., Pearson, E., Gupta, S. D., Mukherjee, S., Malhotra, A. (2012) *Catalyzing Change: Improving Youth Sexual and Reproductive Health through DISHA in India—an integrated Program*, Washington, DC.: International Center for Research on Women.

Kirby, D. (2007). Emerging Answers 2007: Research Findings on Programmes to Reduce Teen Pregnancy and Sexually Transmitted Diseases. Washington, DC: National Campaign to Reduce Teen and Unplanned Pregnancy.

Kirby, D. (2007). "Sex and HIV Programmes: Their Impact on Sexual Behaviors of Young People Throughout the World." *Journal of Adolescent Health*. 40: 206-217.

Kumpfer, K., Pinyuchon, M., do Castelo, V, Whiteside, H. (2008). "Cultural Adaptation Process for International Dissemination of the Strengthening Families Program." *Evaluation & the Health Professions*. 31 (2):226-239.

Lee-Rife, S., Malhotra, A., Warner, A., McGonagle, A. (2012). "What works to prevent child marriage: a review of the evidence." *Studies in Family Planning*. 43: 4, 287-303.

Lou, C. et al (2004). "Effects of a Community-based Sex Education and Reproductive Health Service Programme on Contraceptive Use of Unmarried Youth in Shanghai." *Journal of Adolescent Health*, 34: 433-440.

Lundgrin, R., Beckman, M., Chaurasiya, S., et. al. (2013) "Whose turn to do the dishes?" *Gender and Development*, 21(1): 127-145

Maguin, E., Nochajski, T., DeWit, D., Macdonald, S., Safyer, A., & Kumpfer, K. (2007). "The Strengthening Families programme and children of alcoholics families: Effects on parenting and child externalizing behavior." Manuscript submitted for publication cited in OJJDP.

Malhotra, A., Warner, A., McGonagle, A., Lee-Rife, S. (2012). Solutions to end early marriage: what the evidence shows, International Center for Research on Women, Washington, DC.

Mekbib, T., Molla, M. (2010). "Building programmes to address child marriage." *Ethiopian Journal of Reproductive Health*. 4(1): 16-25.

Mmari KN, Magnani RJ. (2003). "Does making clinicbased reproductive health services more youth-friendly increase service use by adolescents? Evidence from Lusaka, Zambia." *Journal of Adolescent Health*, 33(4): 259-70.

Muewissen, L.E., Gorter, A.C., & Knottnernus, A.J.A. (2006). "Impact of accessible sexual and reproductive health care on poor and underserved adolescents in Managua, Nicaragua: A quasi-experimental intervention study." *Journal of Adolescent Health.* 38:56.e9.

Mukherjee S., Singh, S., Das Gupta, S. Pande, R, & Basu, S. (2008). *Knot Ready: Lessons from India on Delaying Marriage for Girls*. Washington, DC: ICRW.

Munthali, W. (2011). Evaluation of youth friendly reproductive health services for adolescents aged 14-19 years in Lunzu - TA Kapeni. unpublished master's thesis, University of Malawi.

Nation, M., Crusto, C., Wandersman, A., Kumpfer, K., Seybolt, D., Morrisey-Kane, E., Davino, K. (2003). "What works in prevention: Principles of effective prevention programmes." American Psychologist, 58(6-7), 449-456.

Niño-Zarazúa, M. (2010). *Mexico's* Progresa-Oportunidades and the emergence of social assistance in *Latin America*. BWPI Working Paper, Brooks World Poverty Institute. The University of Manchester, U.K. 142.

Pallito, P, O'Campo, P., (2005) "Community level effects of gender inequality on intimate partner violence and unintended pregnancy in Colombia," Social Science & Medicine 60:2205-2216.

Pande, R.P., Kurz, K., Walia, S., MacQuarrie, K., & Jain, S. (2006). Improving the Reproductive Health of Married and Unmarried Youth In India: Evidence of Effectiveness and Costs from Community-Based Interventions. Washington, D.C.: International Center for Research on Women.

Parker, C. (2005). Adolescents and Emergency Contraceptive Pills in Developing Countries, Family Health International. Research Triangle, NC.: FHI Working Paper Series No. WP05-01.

Parker, S. (2003). "The *Oportunidades* Programme in Mexico. "Case study, Shanghai Poverty Conference - Scaling Up Poverty Reduction. April 20, 2003.

Parker, S., Rubalcava, L. Teruel, G. (2008). *Evaluating Conditional Schooling and Health Programmes*. Vol. 4, in *Handbook of Development Economics*, by S., Rubalcava, L. Teruel, G. Parker, edited by Elsevier. Amsterdam: T. P. Schultz and J. Strauss, eds.

Philliber Research Associates. (2010). More Than a Decade of Research on The Children's Aid Society Carrera Adolescent Pregnancy Prevention Program: 1999-2010. Philliber Research Associates. Philliber, S., Kaye, J. W., Herrling, S., & West, E. (2002). "Preventing pregnancy and improving health care access among teenagers: An evaluation of the Children's Aid Society-Carrera program." *Perspectives on Sexual and Reproductive Health.* 34(5), 244-251.

Pulerwitz, J.Barker,G. Segundo M., Nascimento, M. (2006). Promoting more gender-equitable norms and behaviors among young men as an HIV/AIDS prevention strategy. Horizons Final Report. Washington, DC: Population Council.

Rawlings, L. and Rubio, G. (2003). *Evaluating the Impact of Conditional Cash Transfer Programmes: Lessons from Latin America*. Research Working Paper, World Bank Policy. 3119.

Sanders, M.R. (2003). "Triple-P - Positive Parenting Program: A population approach to promoting competent parenting." Australian e-Journal for the Advancement of Mental Health 2, no. 3.

Sarnquist, C. Omondi, B. Sinclair, J. Gitau, C., Paiva,L., Mulinge, M. Cornfield N. Maldonado, Y., Rape Prevention Through Empowerment of Adolescent Girls, Pediatrics; originally published online April 14, 2014.

Sinclair J., Sinclair L., Otieno, E. Mulinge, M. Kapphahn, C., Golden, N. (2013). A Self-Defense Programme Reduces the Incidence of Sexual Assault in Kenyan Adolescent Girls, *Journal of Adolescent Health*.

Skoufias, E. Parker, S. (2001). "Conditional Cash transfers and the Impact on Child Work and Schooling: Evidence from the Progresaprogramme in Mexico." *Economia: Journal of Latin America and the Caribbean Economic Association*. 2(1.1):45-96.

Skoufias, E. (2005). *Progresa and its impact on the welfare of rural households in Mexico*. Research Report, Washington, DC. : International Food Policy Institute (IFPI).

Tierney, J, Grossman, J., Resch, N. (1995). *Making a Difference: An Impact Study of Big Brothers Big Sisters.* Philadelphia, Pa : Public / Private Ventures.

Ting, R. (2009) "Meta-Analysis on Dating Violence Prevention Among Middle and High Schools." J. School Violence, 8:328-337.

United Nations (2015). Millennium Development Goals Report. New York: United Nations.

UNESCO. (2009). International Technical Guidance on Sexuality Education: An Evidence-Informed Approach for Schools, Teachers and Health Educators. United Nations Educational, Scientific and Cultural Organization (UNESCO).

UNFPA (2013). Motherhood in Childhood: Facing the Challenge of Adolescent Pregnancy. New York: UNFPA.

UNFPA (2012). Too Young to Marry: End Child Marriage. New York: UNFPA.

UNICEF. (2012). Global Evaluation of Life Skills Education Programmes. New York: UNICEF. UNICEF. (2010). Life Skills Learning and Teaching: Principles, Concepts and Standards. New York, UNICEF.

Vandenhoudt, H. Miller KS, Ochura J, Wyckoff SC, Obong'o CO, Otwoma NJ, Poulsen MN, Menten J, Marum E, Buvé A. (2010). Evaluation of a U.S. evidence-based parenting intervention in rural Western Kenya: from parents matter! To families matter! AIDS Educ Prev.

Verma, R. Pulerwitz, J. Mahendra, V. Khandekar, S. Barker, G. Fulpagare, P. Singh, S. (2006). "Challenging and Changing Gender Attitudes among Young Men in Mumbai, India." Reproductive Health Matters. 14(28):135-143

Whitaker, D., Morrison, S., Lindquist, C.Hawkins, S., O'Neil, J. Nesius, A. Mathew, A., Reese, L.(2006) "A critical review of interventions for the primary prevention of perpetration of partner violence." Aggression and Violent Behavior 11:151-166

Wilder J, Masilamani R and Daniel EE, Promoting Change in the Reproductive Behavior of Youth: Pathfinder International's PRACHAR Project, Bihar, India, Watertown, MA, USA: Pathfinder International, 2005.

Winner, B., Peipert, J., Zhao, Q. Buckel, C., Madden, T. Allsworth, J. Secura, G. (2012). "Effectiveness of Long Acting Reversible Contraception." *N. Engl. J. Med.* 366;21:1998-2007.

Wolfe DA, Wekerle C, Scott K, Straatman AL, Grasley C, Reitzel-Jaffe D. (Apr. 2003). "Dating violence prevention with at-risk youth: a controlled outcome evaluation." J Consult Clin Psychol. 71(2):279-91.

Wolfe, D., Crooks, C. et al (2009). "A School-Based Programme to Prevent Adolescent Dating Violence: A Cluster Randomized Trial." Arch Pediatr Adolesc Med. 163(8):692-699.

World Health Organization (1997). *Life Skills Education in Schools.* WHO Programme on Mental Health.

World Health Organization (2011). *Guidelines on Preventing Early Pregnancy and Poor Reproductive Health Outcomes among Adolescents in Developing Countries*, WHO, Geneva.

World Health Organization (1999). Partners in Life Skills Education: Conclusions from a United Nations Inter-agency meeting, WHO, Geneva.

World Population Prospects (2015). A Report of the UN Department of Economic and Social Affairs, United Nations Population Division http://esa.un.org/unpd/wpp/ DVD/

Xiawen, T., Chaohua L, Ersheng, G., Shah, I. (2008) Long-Term Effects of a Community-Based Program on Contraceptive Use among Sexually Active Unmarried Youth in Shanghai, China, *Journal of Adolescent Health*, 249-258.





Delivering a world where every pregnancy is wanted every childbirth is safe and every young person's potential is fulfilled

United Nations Population Fund

605 Third Avenue New York, NY 10158, USA hq@unfpa.org www.unfpa.org

ISBN: 978-0-89714-986-0