# MOMENTUM

Country and Global Leadership

Technical Brief

# SILENT BURDEN

## Exploring the link between adolescent sexual and reproductive health and perinatal mental health in low- and middle-income countries

## INTRODUCTION

Adolescence (between the ages of 10 and 19) is a time of remarkable physical, cognitive, emotional, and social growth. These changes combined with what many girls in low- and middle-income countries experience—high levels of poverty, inequitable social and gender norms, and lack of supportive systems, laws, and policies—can make girls particularly vulnerable to poor sexual and reproductive health outcomes. For example, each year 10 million adolescent pregnancies are unintended and, of adolescent pregnancies in 2017, more than 4.1 million births were to adolescents who already had at least one child.[1,2] Pregnancy during adolescence comes with distinct risks. Complications because of pregnancy and childbirth are the leading cause of mortality among this age group, and there are also associated mental health risks that are less well known.[3]

The WHO estimates that globally one in seven adolescents experience mental health conditions.[4] Adolescent girls have an elevated risk of mental health conditions. Girls are roughly twice as likely as boys to be diagnosed with clinical depression in adolescence and throughout their lives.[5] Specifically concerning when considering the high levels of adolescent childbearing in low- and middle-income countries is that teenage mothers (aged 10-19) have a 63 percent higher risk of experiencing perinatal depression compared with adult mothers (aged 20-35).[6] Common perinatal mental disorders (CPMDs) include depression, anxiety, and somatic disorders[*] often experienced by individuals during pregnancy, birth, and (typically) extending up to two years after giving birth.[7,8] Despite these data, the relationship between adolescent sexual and reproductive health, including use of postpartum contraception, and adolescent perinatal mental health has not been well explored.

Much of what is known about this relationship comes from high-income countries and/or studies with older women. However, these studies show a strong link between poor mental health and sexual and reproductive health. Evidence from high-income country contexts show women and girls (15-49 years old) with mental health disorders are more likely to experience: recurrent miscarriage, unsafe abortions,[†] sexually transmitted infections (STIs), reproductive cancers, and low contraceptive uptake.[9,10] For example, two studies found that women and girls aged 15-49 years old with CPMDs, particularly postpartum depression, are less likely to use postpartum family planning services contributing to rapid repeat pregnancies (RRP).[11,12] However, most studies group adolescent girls in with older women, making it difficult to note the specific link between

[*] Somatic disorders are mental health conditions characterized by physical symptoms that may lack a complete medical explanation (e.g., pain, fatigue, gastrointestinal disturbances, and neurological symptoms) (American Psychiatric Association, 2013).

[†] For the brief we use WHO definition of unsafe abortions as the process of ending an unintended pregnancy by individuals who do not possess the necessary skills or in an environment that fails to meet the minimum medical standards, or both.

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adolescent CPMDs and RRPs. Nonetheless, given the increased risk of poor sexual and reproductive health outcomes for adolescent girls with CPMDs, addressing their mental health needs and providing comprehensive sexual and reproductive health services are crucial.

# PURPOSE AND METHODOLOGY

The aim of this technical brief is to explore the linkages between CPMDs among adolescents[‡] and adolescent sexual and reproductive health in low- and middle-income countries with a focus on contraceptive use and related outcomes, such as unintended pregnancy and rapid repeat pregnancies.

The findings in this brief come from a larger landscape analysis conducted between 2020 and 2021 by the MOMENTUM Country and Global Leadership project as well as a supplemental review of literature conducted in 2022. The landscape analysis report, [The Silent Burden: Common Perinatal Mental Disorders in Low- and Middle-Income Countries,] used a multitiered approach to allow for a broad understanding of the current literature on perinatal mental health in low- and middle-income countries and included a scoping review of literature, key informant interviews, focus group discussions, and a policy review.[§]

To identify any literature that may have been published after the landscape analysis was completed, a supplemental literature review was conducted in December 2022 using electronic databases, PubMed, Google Scholar, and EBSCO. From this search, 30 articles published between 2020 and 2022 were identified using the search terms: “adolescents”, “youth”, “maternal mental health”, “perinatal mental health”, “family planning”, and “sexual and reproductive health.” Of the 30 articles identified in the search, 13 articles examined linkages between adolescent sexual and reproductive health and adolescent perinatal mental health in low- and middle-income countries.[**] The articles were reviewed by two separate reviewers who compared their findings. After this initial review, any discrepancies or disagreements were addressed, and the definitions for each category were clarified. Following this, the reviewers proceeded to review the rest of the articles and discussed summaries for each category to identify thematic patterns.

Findings from the landscape analysis and supplemental literature review were grouped into four primary themes: 1) relationship between mental health and unintended pregnancies among adolescents; 2) unintended pregnancy and risk of adolescent perinatal mental health conditions; 3) relationship between perinatal mental health, use of contraception, and future unintended pregnancies; and 4) promising intervention approaches. This brief summarizes the findings related to these four themes and identifies areas for future learning.

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[‡] For this technical brief, adolescents were defined as 10- to 19-year-olds, per WHO definition. However, much of the literature was focused on 15- to 19-year-olds.

[§] For details on the methodology used, refer to the full landscape analysis report: https://usaidmomentum.org/resource/silent-burden/

[**] Published literature exploring the connections between adolescent sexual and reproductive health and perinatal mental health in low- and middle-income countries is very limited, so we have included evidence in which the experiences of adolescents are included along with women of other ages. Studies that included adolescents ages 18 and 19 along with older women analyzed outcomes by age.

# KEY FINDINGS

## MENTAL HEALTH CONDITIONS INCREASE LIKELIHOOD OF UNINTENDED PREGNANCIES AMONG ADOLESCENTS.

Studies from low- and middle-income countries suggest adolescents with mental health conditions are more likely to engage in unprotected sex leading to unintended pregnancies and less likely to have access to contraceptive services and information compared with adolescents without mental health conditions.[13,14] In a systematic review looking at humanitarian settings, evidence suggests that mental health conditions increased inconsistent contraceptive use, which may increase the likelihood of unintended pregnancies and unsafe abortions as well as the likelihood of HIV and other STIs.[15]

## UNINTENDED PREGNANCY INCREASES RISK OF ADOLESCENT PERINATAL MENTAL HEALTH CONDITIONS.

Studies with adolescents in Ethiopia, Cameroon, and Kenya as well as a systematic review that looked at adolescents ages 18 and 19 along with older women indicates that unintended pregnancies put women at greater risk for developing perinatal and antepartum depression and psychological distress.[16,17,18,19] Adolescents in Kenya with unintended pregnancies express common lived experiences of isolation, loneliness, stress, and depression.[20] The prevalence of perinatal depression is even higher among adolescents with unintended pregnancies resulting from sexual violence and rape, as seen in a cross-sectional study in Southwest Ethiopia.[21] Other sexual and reproductive health experiences, such as an early sexual debut (defined as 15-18 years, with a mean age of 15.3 years) or unsafe abortion were found to be risk factors for CPMDs in adolescents in Kenya and Cameroon.[22,23]

## PERINATAL MENTAL HEALTH CONDITIONS REDUCE CONTRACEPTIVE UPTAKE AND INCREASE FUTURE UNINTENDED PREGNANCIES.

Adolescent perinatal depression reduces the use of contraceptive services, such as counseling and contraceptive uptake, resulting in a cycle of future unintended pregnancies and mental health conditions.[24,25] Other studies from Ghana and South Africa suggest that adolescents with CPMDs are at greater risk for repeat pregnancy within two years compared with those without.[26,27] A study from rural Ethiopia that includes adolescents aged 15-19 and older women suggests that women with CPMDs may incorrectly use contraception or may be more susceptible to perceived somatic side effects of hormonal contraception and may discontinue use without using another contraceptive method, putting them at risk for an unintended pregnancy.[28] This study also found that women experiencing common mental health disorder symptoms at one year postpartum were more likely to have higher unmet contraceptive need at 2.5 years (OR 1.06, 95% CI, 1.01-1.12).[29]

## THERE ARE PROMISING ADOLESCENT PERINATAL MENTAL HEALTH INTERVENTIONS, THOUGH MORE EVIDENCE IS NEEDED.

MOMENTUM Country and Global Leadership's landscape analysis identified a few promising practices to improve adolescent perinatal mental health and related sexual and reproductive health outcomes. For example, strengthening adolescents' mental health resilience through integrating mental health counseling and services in school-based sexual and reproductive health programs has demonstrated some impact on students' self-esteem, motivation, and self-efficacy, though there were differential effects for gender and age groups.[30] However, school-based interventions may not reach some pregnant adolescents who have been expelled because of their pregnancies and others who prefer to not return to school by choice or cannot return because

of their circumstances.[31] One systematic review that included data from both high-income countries and low- and middle-income countries suggests that digital platforms delivering skills-based mental health care could improve adolescent mental health; however, studies evaluating this type of intervention in low- and middle-income countries are limited.[32,33]

Integrating mental health in sexual and reproductive health and maternal health services could also improve perinatal maternal health. For example, Kumar et al. recommend adapting validated perinatal mental health and sexual and reproductive health screening tools specifically for adolescents. Screening could identify early signs of psychological distress and identify key sexual and reproductive health challenges the adolescent may be experiencing.[34] In addition, a study from South Africa found that integrating a multi-session counseling intervention into existing maternal health services helped to reduce adolescent perinatal depression.[35] All adolescents reported feelings of validation, interpersonal support, improved ability to speak with parents, and improved ability to process and cope with problems.[36]

In addition to the promising practices, studies looking at adolescent perinatal mental health interventions are under way in Mozambique, Nigeria, and Kenya and may offer more insight on the effectiveness of key strategies. In Mozambique, a motherhood preparatory course aims to improve pregnant adolescents' agency, build networks, and reduce social isolation, and family-level interpersonal interventions aim to reduce family-driven stigma.[37] In Nigeria, a "neighborhood mother" intervention pairs pregnant adolescents with adult mothers in their community to build parenting skills and reduce isolation and societal-level stigma.[38] Similarly, in Kenya, a pilot adapting the WHO's Mental Health Gap Action Program (mhGAP) seeks to test the feasibility of group interpersonal therapy for adolescent perinatal depression.[39] The protocol by Kumar and colleagues suggests that the program will also engage in strategies for adolescents to make proactive behavior and health changes, such as using contraception if they would like to prevent pregnancy.

## CONCLUSION

Data on adolescent perinatal mental health in low- and middle-income countries is limited, and there is even less evidence showing the impact of mental health on sexual and reproductive outcomes, such as unintended pregnancies, rapid repeat pregnancies, and contraceptive use.[40,41] What little evidence was found through the landscape analysis suggests that adolescents are at greater risk for CPMDs compared with older women and that sexual and reproductive health challenges, such as unintended pregnancy, could be contributing to this. Similarly, the landscape analysis found that CPMDs may contribute to additional sexual and reproductive health outcomes among adolescents, such as rapid repeat pregnancies.

More research is needed to better understand the prevalence of CPMDs among adolescents in diverse contexts, the relationship between sexual and reproductive health experiences and CPMDs, and interventions that can improve both mental health and sexual and reproductive health among adolescents. Initial evidence suggests that integrating mental health support into sexual and reproductive health programs and services, and vice versa, could reduce the experience of CPMDs, unintended pregnancy, and rapid repeat pregnancy among adolescents.

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