Journal Homepage: www.ijarpr.com ISSN: 3049-0103 (Online)

International Journal of Advance Research Publication and Reviews

Vol 03, Issue 10, pp 01-08, October, 2026

Trends in Teenage Pregnancy in Africa from 1986 to 2024: A Cause for Public Health Concern

Jallah Mans Kennedy [1], Joe Kabeywollie[2]

PhD, MPH, RN[1]*
RN, ASN[2]
[1] Adjunct Faculty, College of Health Sciences and Technology, Rochester Institute of Technology, Rochester, NY, USA; Epidemiologist and Public Health Scientist, Roads To Health (Roads to Rural and Vulnerable Population Health); Scientific Officer, Partnership for Research on Vaccines and Infectious Diseases in Liberia (PREVAIL), Ministry of Health, Republic of Liberia
[2] Community Health Services Supervisor (CHSS), National Community Health Program (NCHP), Ministry of Health, Republic of Liberia; Program Management Department, Roads To Health (Roads to Rural and Vulnerable Population Health)
Corresponding Author: Jallah Mans Kennedy (jallahmk@gmail.com)

ABSTRACT :

Despite the decline, high teenage pregnancy rates among women aged 15-19 years old in sub-Saharan Africa (SSA) countries remain a public health concern. The region has some of the highest rates of teenage pregnancy globally, often linked to cultural and peer pressure, pressure for early marriage and to bear children, sexual abuse, access/level of use of contraceptives, poverty, access to education, and place of residence. Teenage pregnancy is a significant factor that contributes to the risk of maternal mortality. Risk factors associated with adolescent pregnancy include underdeveloped body systems to withstand the stress of pregnancy; mental health; bleeding; abortion, eclampsia; and puerperal and systemic infections. Babies born to teenage mothers are at higher risk of low birth weight, preterm birth, and severe neonatal conditions. We analyzed data from the Demographic and Health Survey (DHS) to identify trends for comparisons. This information supports public health decision-making processes to achieve the UN Sustainable Development Goals and lower maternal mortality.

We obtained data from the DHS of 41 countries in Africa over 38 years from 1986 to 2024. The DHS is produced every five years, but not all countries are aligned with the same year ranges. We considered DHS within the 5-year range as single units to create an eight-block grouping. Stepwise processes excluded 20 countries with less than three DHS, limited years reported, and completeness/availability of data. Average rates were pooled for the countries that reported. For countries where data collection for blocks that span multiple years (e.g., 2000-01; 2019-21) and proceed into the next block, the default practice is to use the preceding year, although exceptions may occur if specified in the following year.

Trend analyses focused on three main variables: teenagers who are mothers, teenagers who are pregnant with their first child, and teenagers who have begun childbearing, which highlighted age, place of residence, educational level, and wealth quintiles. Over the 38 years, the percentage of teenagers who are mothers decreased from 22.95 in 1986-1990 to 16.58 in 2021-2024, accounting for a 27.77% decrease. The rate of teenagers who began childbearing decreased from 29.35 in 1986-1990 to 20.19 in 2021-2024, accounting for a 31.21% decrease. The results varied across countries; however, Mali, Niger, Guinea, Côte d'Ivoire, [REDACTED], Mozambique, Chad, and Madagascar exhibited higher trends in teenage motherhood rates depending on the review periods when compared with other countries.

Although there has been a decline, the teenage pregnancy rate in SSA remains significantly higher, at 97.9 births per 1,000 women in 2023, compared to the global rate of 41.3 births per 1,000 women. Women in rural areas and those without formal education have a higher rate. Ongoing improvement in public health measures should be emphasized to reduce the influence and risk associated with teenage pregnancy. Preventing teenage pregnancies can provide girls with the chance to avoid stress related to pregnancy and childcare, concentrate on their education, minimize the risks of complications, break the cycle of poverty, and reach their full potential.

Keywords: Teenage pregnancy, Sub-Saharan Africa, Demographic and Health Surveys, Maternal health, Adolescents, Public health

Introduction

Teenage pregnancy is one of the major global public health issues because of the associated education, economic, health, economic, and social effects. Teenage pregnancy refers to all pregnancy among female aged 15-19 years (World Health Organization [WHO], 2023). Associated risks include maternal and neonatal mortality, obstetric complications, low birth weight, preterm births, and neonatal death. (WHO, 2023). Improved access to contraception, education, and reproductive health services has reduced in adolescent birth rates over the past two decades, though low-and middle-income countries

(LMICs), particularly SSA, face persistent challenges.

Globally, adolescent birth rates dropped from approximately 65 births per 1,000 women in 2000 to 41 births per 1,000 women in 2023 which reflects the progress made in the level of reproductive, educational, and policy interventions in different countries WHO, 2023; however, regional disparities exist. Access to sexual education, youth empowerment initiatives, and contraceptive services has led to a significant decrease in the rates of teenage pregnancies in high-income countries, such as the United States, Canada, and European nations. In the United States for example, the teenage birth rate dropped from 30 births per 1,000 women in 1991 to 8 births per 1,000 women in 2021, which is roughly a drop of 78% declined (Center for Disease Control and Prevention [CDC], 2024). Additionally, data recorded from 2020 and 2021 revealed a decline in the teen birth rate from 15 to 14 births per 1,000 females, accounting for approximately 7% decline from the previous year. These numbers are comparatively the lowest recorded over the years.

With adolescent fertility rates in, Latin America and the Caribbean (LAC) are the second highest globally due to have been experiencing massive socioeconomic growth. This growth has also resulted in serious inequity between and within countries around this region especially among families with lower education, lower wealth, and from indigenous and Afro-descendant communities (United Nations Population Fund [UNFPA], 2010). The Pan American Health Organization in 2018 showed that the overall of the global adolescent birth rate was approximately 46 births for every 1,000 girls. The pregnancy ratios for teenage mothers in LAC remain the second most elevated in the world with an estimated ratio of 66.5 births for every 1,000 girls aged 15 to 19, which is only higher in Sub-Saharan Africa. "Accelerating Progress Toward the Reduction of Adolescent Pregnancy in Latin America and the Caribbean", a document that evaluates the reports, states that these regions had an estimated adolescent pregnancy rate of 61 per 1000 women aged 15 -19 in LAC in 2019 as opposed to just 42 in the rest of the world. Although modern contraceptive use has made some progress, adolescent contraceptive prevalence in Latin America and the Caribbean is around 57%. However, the region continues to experience the highest proportion of adolescent births globally, with approximately 20% of all births attributed to adolescent mothers. This situation stems from persistent unmet need for contraception, gender inequalities, and socioeconomic challenges (Ribas et al., 2021; UNFPA Caribbean, 2023).

The global adolescent birth rate has seen a decline from 64.5 births per 1,000 women aged 15-19 in 2000 to 41.3 births per 1000 women in 2023.

The changes have not occurred at the same pace in different parts of the globe, with the most rapid decrease in Southern Asia (SA) and the least progress in LAC) and SSA. All regions have experienced a certain degree of change, but, as of 2023, SSA and LAC still have the highest rate in the world with 97.9 and 51.4 births for every 1,000 women, respectively WHO, 2023). Adolescent pregnancy remains one of the most important public health problems in SSA and contributes to high maternal mortality, poor outcomes of neonatal, and a lot of poverty. The persistence of teenage pregnancy in SSA is determined by several factors, such as:

Sociocultural beliefs and practices and child marriage: In several communities of SSA, cultural norms and practices step up gendered expectations that lead girls to marry and reproduce at a young age and limit their education and economic potential (DHS, 2023).

Inadequate reproductive health service delivery: There are great difficulties in providing reproductive health services, especially contraceptive services, to adolescents in Sub-Saharan Africa (SSA). Simply put, just about a third of sexually active adolescent girls in Sub-Saharan Africa use modern contraceptive methods as compared to more than 60% in high-income countries (Guttmacher, 2023). The problems stem from stigma, misinformation, and frontier restrictive policies, all of which block the youth from reaching essential assets for sexual and reproductive health. Consequently, many adolescents are still at risk for unplanned pregnancies and sexually transmitted infections.

Poverty and economic vulnerability: The economic conditions in SSA tend to push a significant number of young girls into transactional sex or early child marriages to survive. Consequently, this increases their chances of acquiring unintended pregnancies (UNICEF, 2023). They cannot make educated and empowered choices regarding their sexual health due to poverty and reduced opportunities. This systemic phenomenon leads them to greater economic dependence and increased vulnerability. To improve reproductive health outcomes, the approach to poverty mitigation must be tailored on a broader scale to reduce these risks.

Education disparities: Adolescent girls with little or no formal education to their name tend to be more susceptible to teenage pregnancy. As empirical evidence has shown, adolescent girls who complete secondary schooling are more than five times less likely to get pregnant in their teenage years compared to those with no formal education. (WHO, 2023)

Niger exhibits one of the highest rates of teenage pregnancies in Sub-Saharan Africa, with adolescent birth rates exceeding 1000 births per 1000 girls aged 15 – 19, similar to those reported in Mali, Guinea, Côte d'Ivoire, [REDACTED], and Chad (Demographic and Health Surveys, 2023). In Niger, nearly 40% of girls become pregnant before age 18 primarily due to child marriage and entrenched socio-cultural norms (UNFPA, 2023). Moreover, [REDACTED] and Guinea also experience high teenage pregnancies rates despite policies aimed at improving reproductive education.

The public health implications of teenage pregnancy in West Africa are worrying, for they increase the likelihood of resulting into fistula, eclampsia, severe postpartum hemorrhage, and , resorting to an unsafe abortion (Guttmacher Institute, 2023). Additionally, children of young mothers in West Africa are at a greater risk of neonatal mortality, malnutrition, and overall poor development.

Reduction of teenage pregnancy is an issue that requires addressing f its multifactorial origin, including healthcare, education, policy, and community. Teenage pregnancy can be reduced through expanding access to contraception and reproductive health services; optimizing education and socio-economic prospects; legislative and policy initiatives; and community and parental involvement (Guttmacher Institute, 2023; UNFPA, 2023; UNICEF, 2023; WHO, 2023; Even with a significant decrease in rates of teenage pregnancy in the last 40 years, there are challenges that SSA still faces. This research seeks to look at the trends of teenage pregnancy in Africa from 1986 to 2024, using the information from the Demographic and Health Surveys (DHS). The findings of this study hold significant relevance for public health practice and policy formulation, providing critical insight into the progress made toward the Sustainable Development Goals (SDGs). In particular, these results contribute to monitoring advancements toward SDG 3, which aims to ensure healthy lives and promote well-being for all at all ages, including the reduction of maternal mortality and universal access to sexual and reproductive health services. Additionally, the study supports SDG 5, which focuses on achieving gender equality and empowering all women and girls, including the elimination of harmful practices such as child marriage that contribute to adolescent pregnancy (World Health Organization, 2024; United Nations, 2025).

Methods

Study Design

This study employed a retrospective trend analysis using cross-sectional data derived from the Demographic and Health Surveys (DHS) conducted in 41 African countries between 1986 and 2024. The analysis was organized into group of eight 5-year intervals blocks: 1986–1990, 1991–1995, 1996–2000, 2001–2005, 2006–2010, 2011–2015, 2016–2020, and 2021–2024. This approach enabled the evaluation of long-term trends in adolescent childbearing across the continent.

Study Population

The target population comprised adolescent females aged 15–19 years. Countries with fewer than three DHS survey rounds or with incomplete data sets were excluded from some of the trend-specific analysis. However, their available data were incorporated into the pooled analyses for each time block to maximize representation. A total of 20 countries were excluded based on this stepwise exclusion criterion, resulting in 21 countries being included in the full trend analysis.

Data Sources and Variables

Data was extracted using the DHS STATcompiler tool into Microsoft Excel®. The three primary indicators of adolescent fertility examined in this study were: the proportion of adolescents who are mothers, the proportion of adolescents currently pregnant with their first child, and the proportion of adolescents who have begun childbearing (either mothers or currently pregnant). These indicators were further disaggregated by key sociodemographic characteristics. Age was categorized as 15 to 19 years, place of residence was classified as urban or rural, and educational attainment was grouped into three categories: no education, primary education, and secondary or higher. Additionally, wealth quintiles were used to categorize participants from the lowest to the highest quintile.

Statistical Analysis

Analysis was done using Microsoft Excel®, Tableau, R, and SAS OnDemand. Descriptive statistics, were calculated for all variables. Bivariate analyses were conducted using Student's t-tests and one-way Analysis of Variance (ANOVA) to assess differences across sociodemographic groups. Additionally, percentage changes between time blocks were calculated to assess temporal trends. All analyses were conducted following the standardized DHS analytical guidelines to ensure methodological rigor, transparency, and reproducibility.

Results

Trends in Teenage Pregnancy Indicators (1986–2024)

Analysis of pooled Demographic and Health Survey (DHS) data from 21 African countries, aggregated into eight five-year intervals between 1986 and 2024, reveals a notable overall decline in key teenage pregnancy indicators. These include the proportion of teenage girls who are mothers, those pregnant with their first child, and those who have begun childbearing.

Teenage Mothers

The average percentage of teenage girls who are mothers declined from 22.95% in 1986–1990 to 16.58% in 2021–2024, representing a 27.77% overall reduction over the study period. The most pronounced decreases occurred between 2006–2010 and 2016–2020, with drops of 10.59% and 22.42%, respectively. However, the most recent period (2021–2024) saw a 9.51% increase compared to the previous interval, indicating a possible plateau or reversal in the long-term declining trend (Figure 1).

Teenagers Pregnant with Their First Child

Similarly, the proportion of teenagers pregnant with their first child decreased from 4.78% in 1986–1990 to 3.63% in 2021–2024, which is a 23.91% decline. The sharpest drop occurred between 2011–2015 and 2021–2024 (4.75%), followed by a modest decline of 3.17% in the most recent interval (Figure 1).

Teenagers Who Have Begun Childbearing

The percentage of teenagers who had begun childbearing (either pregnant with their first child or already mothers) also declined significantly, from 27.73% in 1986–1990 to 20.19% in 2021–2024, representing an overall reduction of 27.20%. The most substantial decline occurred between 2001–2005 (0.83%). Following this, the percentage fluctuated across periods: it increased drastically to 11.25% between 2006–2010, decreased slightly to 7.73% in 2011–2015, rose again to 22.10% between 2016–2020, and then dropped to 6.82% in 2021–2024 (Figure 1).

Country Coverage and Data Completeness

The number of countries contributing data varied across the eight time blocks, with the highest coverage (32 countries) recorded in 2011–2015 and the lowest (9 countries) in 2021–2024. These fluctuations, primarily due to differences in DHS availability and reporting cycles, may affect the comparability of recent estimates (Table 1).

Table 1. Summary of Teenage Pregnancy Indicators Across Eight Time Blocks (1986–2024)

Indicator	1986–1990	1991-1995	1996–2000	2001-2005	2006–2010	2011-2015	2016–2020	2021–2024
Teenagers who are mothers (%)	22.95	23.71	20.6	20.11	17.98	19.51	15.14	16.58
Began childbearing (%)	27.73	29.16	25.59	25.38	22.52	24.26	18.9	20.19
Pregnant with first child (%)	4.78	5.42	4.99	5.28	4.54	4.75	3.75	3.63

The overall rate of decrease across the indicators is summarized in Table 2. Teenage motherhood declined by 27.77%, teenage childbearing by 27.20%, and first-time pregnancy by 23.91% between the 1986–1990 and 2021–2024 periods.

Table 2. ***Rate of Decrease in Teenage Pregnancy in Sub-Saharan Africa, 1986–2024***

Indicator	1986–1990 (%)	2021–2024 (%)	% Decrease
Teenagers who are mothers	22.95	16.58	27.77
Began childbearing	27.73	20.19	27.2
Pregnant with first child	4.78	3.63	23.91

These trends are visually depicted in **Figure 1 and 2**, which illustrates a steady decline across all three indicators from 1986 to 2024.

Figure 1. Trends in Teenage Pregnancy Indicators in Sub-Saharan Africa, 1986–2024
(Line graph showing percentages over time for teen mothers, childbearing, and first pregnancy)

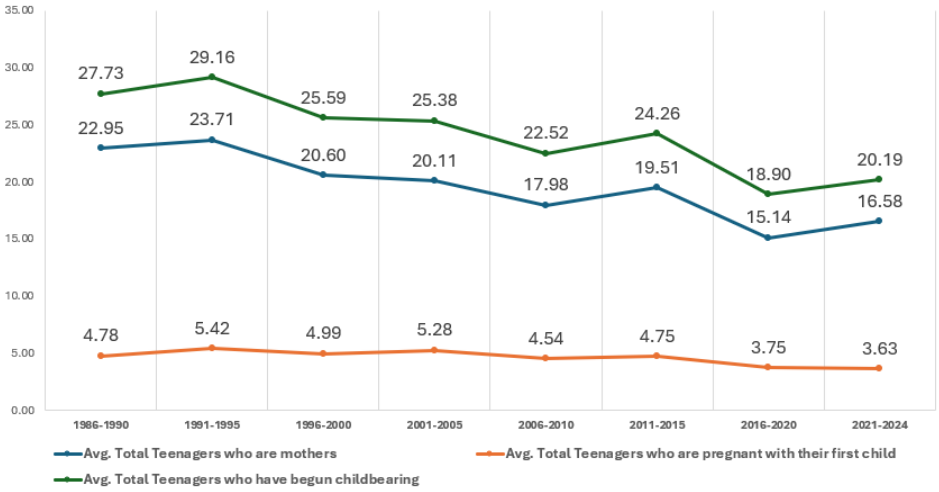
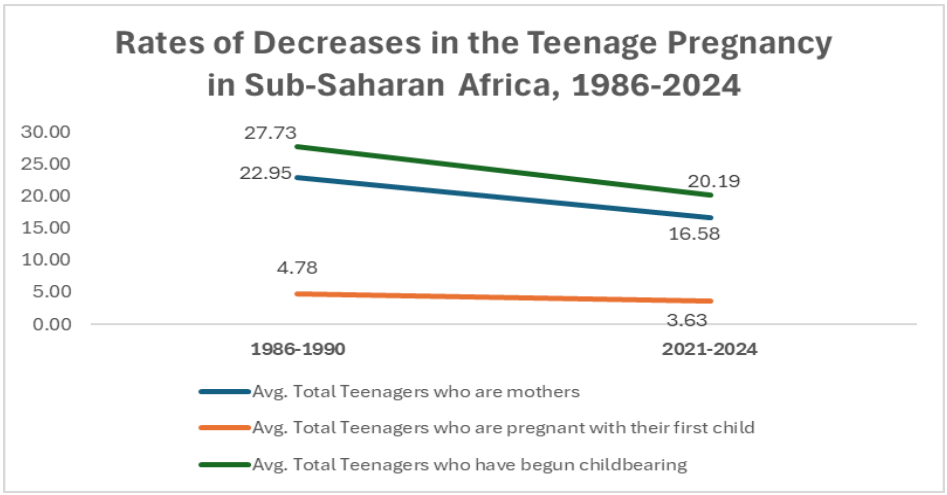


Figure 2. Trends in Teenage Pregnancy Indicators in Sub-Saharan Africa, 1986–2024
(Line graph showing the rate of decrease over time for teen mothers, childbearing, and first pregnancy)



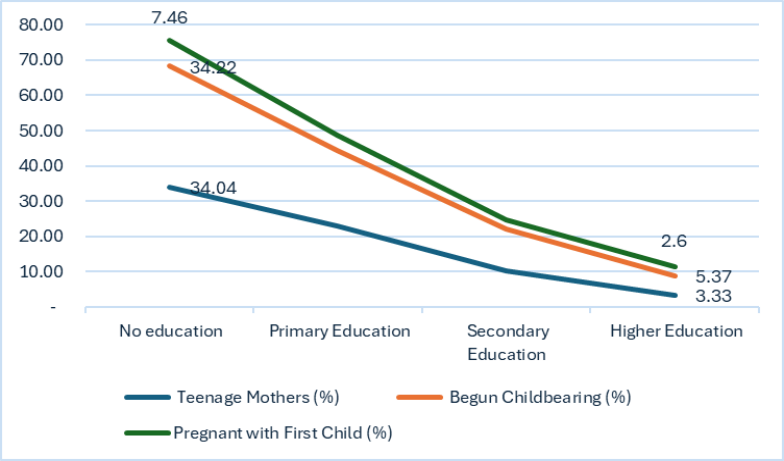
Education Level

Educational attainment remains a decisive factor in teenage pregnancy outcomes. In the most recent period (2021–2024), adolescents with no formal education had the highest prevalence of teenage motherhood (34.04%), begun childbearing (34.22%), and pregnancy with their first child (7.46%). In contrast, those with higher education exhibited markedly lower rates: only 3.33% were teenage mothers, 5.37% had begun childbearing, and 2.60% were pregnant with their first child. This inverse relationship between education and teenage pregnancy has persisted across all survey periods, highlighting the protective effect of education against early childbearing.

Table 3. Teenage Pregnancy Indicators by Education Level, 2021–2024

Education Level	Teenage Mothers (%)	Begun Childbearing (%)	Pregnant with First Child (%)
No education	34.04	34.22	7.46
Primary Education	22.78	21.46	4.40
Secondary Education	10.11	11.90	2.54
Higher Education	3.33	5.37	2.60

Figure 3 **illustrates the consistent decline in teenage pregnancy rates with increasing education level from 1986 to 2024.**



Sociodemographic Findings:
The findings revealed significant differences in teenage motherhood across various sociodemographic factors. The rate of childbearing among teenagers with no education was considerably higher, with 40% of girls in this category having begun childbearing, compared to just 5% of those with secondary or higher education. Additionally, there was a notable difference between rural and urban areas. In rural areas, 25% of teenagers began childbearing, whereas in urban areas, the figure was significantly lower at 13%. Furthermore, the analysis showed that teenage motherhood was more common in the lowest wealth quintile, with 4.7% of teenagers in this group becoming mothers, compared to 2.0% in the highest wealth quintile.

Statistical Analysis:
The statistical analysis demonstrated significant differences in teenage motherhood based on education level. A Student's t-test indicated a significant difference ($t(19) = 18.41$, $p < 0.0001$). Additionally, an ANOVA test revealed significant variability in teenage motherhood based on education level ($F(129) = 1.73$, $p = 0.035$).

High-Risk Countries:
Several countries were identified as having persistently high rates of teenage motherhood over the study period. These include Mali, Niger, Guinea, [REDACTED], Mozambique, Chad, and Madagascar, where teenage pregnancy remains a major public health concern.

Discussion

Teenage pregnancy remains a significant public health challenge in Sub-Saharan Africa (SSA), with the region still exhibiting the highest adolescent birth rates globally. While SSA has experienced a reduction in teenage pregnancy rates over the past two decades, the decline has been slower than the global average. The 27% reduction in adolescent birth rates in SSA contrasts with the 36% global reduction and the 78% decline observed in the United States (WHO, 2021; CDC, 2024). This disparity in progress underscores the systemic barriers that continue to hinder improvements in the region. Despite some progress, the rate of teenage pregnancy in SSA remains alarmingly high compared to other regions, with an adolescent birth rate of 97.9 per 1000 women aged 15-19 in 2023, significantly higher than the global and the United States averages of 41.3 and 14 per 1000 women respectively (WHO, 2021). These findings highlight the persistent and urgent need for targeted, sustainable interventions that can address the factors contributing to these high rates.

A key factor driving the high prevalence of teenage pregnancy in SSA is the limited access to education. Adolescent girls who lack formal education are 5 to 7 times more likely to experience early childbearing compared to their educated peers (UNICEF, 2014; Kassa et al., 2018). This is particularly concerning given that SSA has a large number of girls with no formal or only primary education, which is linked to significantly higher rates of teenage pregnancy. Education has been shown to act as a protective factor against early marriage and early sexual debut, both of which are key risk factors for

teenage pregnancy (Ahinkorah et al., 2021). These findings emphasize the critical role that education plays in delaying childbearing and in empowering girls to make informed choices about their reproductive health. Investment in female education is therefore essential, not only to reduce teenage pregnancy but also to break the cycle of poverty and gender inequality in SSA.

In addition to educational barriers, socio-cultural and economic factors continue to play a significant role in perpetuating teenage pregnancy in SSA. Early marriage, poverty, and deeply rooted gender norms contribute to the vulnerability of adolescent girls. Practices such as child marriage, transactional sex, and ukuthwala (bride abduction) significantly undermine the reproductive autonomy of young girls, often resulting in early pregnancies (Machaka, 2019; Wekesah et al., 2019). Rural adolescents and those from lower socio-economic backgrounds are particularly at risk. Research indicates that teenage pregnancy rates are nearly double for adolescents living in rural areas compared to their urban counterparts, with rates of 13% and 25%, respectively. Furthermore, adolescents in the lowest wealth quintile are at nearly 1.5 times greater risk of early childbearing than their wealthier peers (4.7% vs 2.0%) (WHO, 2021). These disparities reflect the compounded effects of poverty and geographic isolation, which limit access to education, health services, and economic opportunities.

The health implications of teenage pregnancy are significant, both for the adolescent mothers and their newborns. Adolescent mothers face a higher risk of pregnancy-related complications such as preeclampsia, obstructed labor, and maternal mortality (Neal et al., 2018). Newborns of teenage mothers are more likely to be born with low birth weight and face higher risks of neonatal mortality (WHO, 2021; Maharaj, 2022). In addition to these physical health risks, early childbearing disrupts educational trajectories, often leading to school dropout and limiting future employment opportunities for young girls (Geda, 2019). Teenage pregnancy remains the leading cause of death for females aged 15-19 and is a major contributor to maternal mortality in SSA, underscoring the urgent need for comprehensive interventions that address both the immediate and long-term health risks associated with adolescent pregnancies (Maheshwari et al., 2022).

Although the challenges remain significant, several interventions have shown promise in reducing teenage pregnancy in SSA. Comprehensive sexuality education (CSE) has proven effective in several countries, such as [REDACTED], Ethiopia, and Malawi, by providing adolescents with the knowledge and skills necessary to make informed decisions about their sexual and reproductive health (Wekesah et al., 2019; UNFPA, 2023). However, its implementation is often limited due to political resistance, cultural opposition, and lack of integration into school curricula. Additionally, increasing access to contraceptive services, particularly for adolescents, is critical in preventing unintended pregnancies. Less than one-third of sexually active adolescent girls in SSA currently use modern contraception, compared to over 60% in high-income countries (Guttmacher Institute, 2023). Youth-friendly reproductive health services, which offer accessible, confidential, and non-judgmental care, are essential for empowering young people to take control of their reproductive health and reduce unintended pregnancies (Chandra-Mouli et al., 2015). Gender-transformative interventions that challenge patriarchal norms and promote equitable gender roles are also key in reducing the stigma surrounding adolescent sexual health and in enhancing young people's agency over their bodies and choices (Chansa et al., 2024; Wekesah et al., 2019). These interventions are especially important for changing the socio-cultural norms that often drive early marriage, sexual violence, and early childbearing.

Moreover, the findings highlight the need for region-specific approaches that address the unique challenges faced by rural and low-income adolescents. Adolescents in rural areas and from disadvantaged households often lack access to education, health services, and economic opportunities, making them more vulnerable to early childbearing. Therefore, policy responses must prioritize these populations and focus on addressing the structural determinants of teenage pregnancy, such as poverty, inequality, and gender discrimination. Interventions must be tailored to the socio-cultural context of different countries and regions to ensure their effectiveness.

Furthermore, regional disparities within SSA demonstrate that progress is uneven. Some countries, including Ethiopia, Rwanda, and Ghana, have achieved substantial declines in adolescent fertility due to expanded girls' education, early marriage prevention initiatives, and improved access to contraceptive services (UNFPA, 2023). By contrast, countries such as Niger, Chad, and the Central African Republic continue to report some of the world's highest adolescent birth rates, reflecting the strong influence of entrenched cultural norms, weak health infrastructure, and persistent poverty (UNICEF, 2023). These contrasts highlight the importance of national policies and political will in shaping outcomes and underscore that progress is possible when interventions are comprehensive and well-implemented.

Policy and systemic challenges also remain a barrier to accelerated progress. Although many SSA governments have committed to adolescent health and the African Union's Campaign to End Child Marriage, program implementation is often fragmented, underfunded, and poorly coordinated (Chandra-Mouli et al., 2019). Restrictive laws that require parental or spousal consent for adolescents to access contraceptive services further undermine young people's autonomy and reproductive rights (Guttmacher Institute, 2023). Strengthening adolescent-friendly health systems and ensuring rights-based access to sexual and reproductive health services are therefore essential to reducing teenage pregnancy.

Emerging factors further complicate the challenge. Rapid urbanization has exposed adolescents in informal settlements to heightened vulnerabilities, including sexual exploitation, unintended pregnancies, and limited access to health services (Wekesah et al., 2019). Climate change and humanitarian crises are also increasingly linked to adolescent pregnancy, as food insecurity, displacement, and conflict drive families to adopt harmful coping mechanisms such as child marriage (UNFPA, 2021). Moreover, interventions often focus exclusively on girls, neglecting the critical role of adolescent boys and young men in shaping sexual behaviors, gender norms, and contraceptive use. Engaging boys and men in gender-transformative programs is crucial to breaking cycles of inequality and reducing adolescent fertility (Chansa et al., 2024).

Taken together, these findings reaffirm that teenage pregnancy in SSA is not merely a health issue but a multidimensional development challenge. Addressing it requires holistic, multisectoral approaches that integrate education, adolescent-friendly reproductive health services, gender equality, poverty reduction, and climate resilience. With sustained investment, political commitment, and community engagement, SSA can accelerate progress toward reducing teenage pregnancy and advancing broader development goals.

Limitations

This study has several limitations. The reliance on cross-sectional data restricts the ability to infer causality, and inconsistencies in survey years across countries may affect the comparability of results. Despite these limitations, the study's use of large-scale datasets and a broad analytical timeframe

enhances the generalizability of the findings. Additionally, the stepwise inclusion and exclusion of countries with insufficient or incomplete data may have impacted the results.

Conclusion

Teenage pregnancy rates in Sub-Saharan Africa, while declining, remain alarmingly high compared to other regions. The persistence of this public health challenge underscores the need for coordinated multi-sectoral strategies that address the complex socio-cultural, economic, and systemic factors contributing to teenage pregnancy. Key components of an effective strategy include comprehensive sexuality education, increased access to contraceptive services, the promotion of female education and economic empowerment, and strong legislative actions to end child marriage and sexual exploitation. Continued, culturally sensitive efforts are critical to accelerating progress toward achieving global health and gender equity goals, as outlined in the Sustainable Development Goals (SDGs).

REFERENCES

1. **World Health Organization (WHO).** (2023). *Adolescent pregnancy: A global concern.* Retrieved from https://www.who.int/news-room/fact-sheets/detail/adolescent-pregnancy
2. UNFPA. (2010). *Designing a comprehensive approach to adolescent sexual and reproductive health and rights: Policy brief*. United Nations Population Fund. https://lac.unfpa.org/sites/default/files/pub-pdf/final_dec_10_approved_policy_brief_design_ch_adolescent.pdf
3. Pereira, S. L., & Costa, S. M. (2021). Adolescent pregnancy in Latin America and the Caribbean: A call for action. *Cadernos de Saúde Pública, 27*(7), e07272021. https://doi.org/10.1590/1413-81232021267.07272021
4. Pan American Health Organization (PAHO). (2018, February 28). *Latin America and the Caribbean have the second-highest adolescent pregnancy rates in the world*. PAHO. https://www.paho.org/en/news/28-2-2018-latin-america-and-caribbean-have-second-highest-adolescent-pregnancy-rates-world
5. Guttmacher Institute. (2023). *Contraceptive use among adolescents in Sub-Saharan Africa*. Retrieved from https://www.guttmacher.org
6. UNICEF. (2023). *Adolescent sexual and reproductive health: Poverty, risk, and opportunities*. Retrieved from https://www.unicef.org
7. United Nations Population Fund (UNFPA). (2023). *State of the World Population Report: Adolescent birth rates.* Retrieved from https://www.unfpa.org/swp
8. Demographic and Health Surveys (DHS). (2023). *Teenage pregnancy trends in Africa.* Retrieved from https://www.dhsprogram.com
9. Centers for Disease Control and Prevention. (CDC). (2024). Teen pregnancy. *U.S. Department of Health & Human Services.* https://www.cdc.gov/reproductive-health/teen-pregnancy/index.html
10. World Health Organization. (2021). Adolescent pregnancy. https://www.who.int/news-room/fact-sheets/detail/adolescent-pregnancy
11. Geda, Y. F. (2019). Determinants of teenage pregnancy in Ethiopia: A case–control study. *Current Medical Issues*, 17(2), 91-95. Retrieved from: https://journals.lww.com/cmii/fulltext/2019/17040/determinants_of_teenage_pregnancy_in_ethiopia__a.5.aspx
12. UNICEF. (2014). *Ending child marriage: Progress and prospects*. Unicef. Retrieved from: https://pmc.ncbi.nlm.nih.gov/articles/PMC9755883/#B23
13. Kassa, G. M., Arowojolu, A. O., Odukogbe, A. A., & Yalew, A. W. (2018). Prevalence and determinants of adolescent pregnancy in Africa: a systematic review and meta-analysis. *Reproductive health*, *15*, 1-17. Retrieved from: https://pmc.ncbi.nlm.nih.gov/articles/PMC6267053/
14. Ahinkorah, B. O., Kang, M., Perry, L., Brooks, F., & Hayen, A. (2021). Prevalence of first adolescent pregnancy and its associated factors in sub-Saharan Africa: A multi-country analysis. *PloS one*, *16*(2), e0246308. Retrieved from: https://pmc.ncbi.nlm.nih.gov/articles/PMC7861528/
15. Machaka, B. J. (2019). The cultural practice of ukuthwala in South Africa [Dissertation]. Retrieved from: https://repository.nwu.ac.za/bitstream/handle/10394/33500/30995140%20Machaka%20BJ.pdf?sequence=1&isAllowed=y
16. Guttmacher Institute, 2021. Contraceptive Use in Sub-Saharan Africa: Levels and Trends. Retrieved from: https://www.guttmacher.org/fact-sheet/investing-contraceptive-services-african-union
17. Maharaj N. R. (2022). Adolescent pregnancy in sub-Saharan Africa - a cause for concern. *Frontiers in reproductive health*, *4*, 984303. https://doi.org/10.3389/frph.2022.984303
18. UNFPA. (2023, March 23). *Access to sexual and reproductive health services gives hope to adolescent girls in Liberia*. United Nations Population Fund. Retrieved from: https://www.unfpa.org/data/transparency-portal/unfpa-liberia
19. Wekesah, F. M., Nyakangi, V., Onguss, M., Njagi, J., & Bangha, M. (2019). *Comprehensive sexuality education in sub-Saharan Africa.* FAWE & APHRC. https://aphrc.org/wp-content/uploads/2019/12/COMPREHENSIVE-SEXUALITY-EDUCATION-IN-SUB-SAHARAN-AFRICA-1.pdf
20. Center for Disease Control and Prevention (2024). About Teen Pregnancy. Retrieved from https://www.cdc.gov/reproductive-health/teen-pregnancy/
21. Center for Disease Control and Prevention (n.d). Pregnancy Risk Assessment Monitoring System (PRAMS) Report on CDC's Winnable Battles: Collecting Data in Order to Improve the Health of Mothers and Infants. Retrieved from https://archive.cdc.gov/www_cdc_gov/prams/pramsreport.html
22. Demographic and Health Surveys (n.d) . Guide to DHS Statistics DHS-8 Teenage Pregnancy and Motherhood.(https://dhsprogram.com/data/Guide-to-DHS-Statistics/index.htm#t=Teenage_Pregnancy_and_Motherhood.htm)
23. Demographic and Health Surveys (n.d) STATcompiler. Retrieved from https://www.statcompiler.com/en/
24. Graczyk, K. (2007). Adolescent Maternal Mortality: An Overlooked Crisis. Advocates for Youth. Retrieved from

https://www.advocatesforyouth.org/wpcontent/uploads/storage/advfy/documents/fsmaternal.pdf

25. Maheshwari, M. V., Khalid, N., Patel, P. D., Alghareeb, R., & Hussain, A. (2022). Maternal and neonatal outcomes of adolescent pregnancy: a narrative review. *Cureus*, *14*(6).
26. Mueller, T., Tevendale, H. D., Fuller, T. R., House, L. D., Romero, L. M., Brittain, A., & Varanasi, B. (2017). Teen pregnancy prevention: Implementation of a multicomponent, community-wide approach. *Journal of Adolescent Health*, *60*(3), S9-S17.
27. Population Matters (2025). One step forward, two steps back in African economic development? Retrieved from https://populationmatters.org/news/2018/10/one-step-forward-two-steps-back-in-african-economic-development/
28. United Nations International Children Emergency Fund (2024). Early childbearing. Retrieved from https://data.unicef.org/topic/child-health/adolescent-health/
29. World Bank Group (2025). Teenage mothers (% of women ages 15-19 who have had children or are currently pregnant). Retrieved from https://data.worldbank.org/indicator/SP.MTR.1519.ZS?fbclid=IwY2xjawJfo_RleHRuA2FlbQIxMAABHjMBsRgdEuaXRYWUZspRH0xIf2_v0sCuPCn-OEPPN2BF2s2q3sBMUVxIa0oH_aem_Z5C5JdeRdUBzPzHkc2_oGg
30. World Health Organization (10 April 2024). Adolescent pregnancy. Retrieved from https://www.who.int/news-room/fact-sheets/detail/adolescent-pregnancy
31. World Health Organization (2025). Adolescent health. Retrieved from https://www.who.int/health-topics/adolescent-health/pregnancy-and-childbirth-complications-are-the-leading-cause-of-death-among-15-19-year-old-girls#tab=tab_1
32. Ribas, L. C., et al. (2021). Adolescent pregnancy, public policies, and targeted programs in Latin America and the Caribbean: A systematic review. Revista Panamericana de Salud Pública, 45, e56. https://doi.org/10.26633/RPSP.2021.56
33. United Nations Population Fund (UNFPA) Caribbean. (2023). Accelerating progress towards the reduction of adolescent pregnancy in Latin America and the Caribbean: Policy brief. UNFPA. https://caribbean.unfpa.org/sites/default/files/pub-pdf/policy_brief_2023_accelerating_progress_towards_the_reduction_of_adolescent_pregnancy.pdf
34. Cano, J. L. (2020). Adolescent pregnancy in Latin America and the Caribbean: Technical brief. UNFPA. https://lac.unfpa.org/sites/default/files/pub-pdf/final_dec_10_approved_policy_brief_design_ch_adolescent.pdf
35. Ahinkorah, B. O., Budu, E., Agbaglo, E., Adu, C., Osei, P., & Seidu, A.-A. (2021). Teenage pregnancy and its associated factors in Sub-Saharan Africa: A systematic review and meta-analysis. *Reproductive Health, 18*(1), 1–12. https://doi.org/10.1186/s12978-021-01165-5
36. Centers for Disease Control and Prevention (CDC). (2024). *Teen birth rates drop to record lows*. Atlanta: CDC. https://www.cdc.gov
37. Chandra-Mouli, V., Lane, C., & Wong, S. (2015). What does not work in adolescent sexual and reproductive health: A review of evidence on interventions commonly accepted as best practices. *Global Health: Science and Practice, 3*(3), 333–340. https://doi.org/10.9745/GHSP-D-15-00126
38. Chandra-Mouli, V., et al. (2019). Adolescent health and well-being: Key data points. *Journal of Adolescent Health, 65*(6), S3–S8. https://doi.org/10.1016/j.jadohealth.2019.09.015
39. Chansa, C., Chibwe, E., & Banda, M. (2024). Gender-transformative approaches in reducing adolescent pregnancy: Lessons from Zambia. *BMC Public Health, 24*(1), 552. https://doi.org/10.1186/s12889-024-17521-y
40. Geda, A. (2019). Adolescent fertility and education outcomes in Sub-Saharan Africa. *African Development Review, 31*(S1), 55–70. https://doi.org/10.1111/1467-8268.12419
41. Guttmacher Institute. (2023). *Adolescent sexual and reproductive health in Sub-Saharan Africa: Key facts*. New York: Guttmacher Institute. https://www.guttmacher.org
42. Kassa, G. M., Arowojolu, A. O., Odukogbe, A. T., & Yalew, A. W. (2018). Prevalence and determinants of adolescent pregnancy in Africa: A systematic review and meta-analysis. *Reproductive Health, 15*(1), 1–17. https://doi.org/10.1186/s12978-018-0640-2
43. Machaka, H. (2019). Child marriage in Sub-Saharan Africa: Cultural, religious, and social dynamics. *African Journal of Gender Studies, 28*(2), 45–61.
44. Maheshwari, M., Malhotra, A., & Yadava, R. (2022). Adolescent pregnancy: Health risks and socio-economic consequences. *Journal of Maternal and Child Health, 17*(4), 567–574. https://doi.org/10.1007/s10995-022-03353-2
45. Neal, S., Matthews, Z., Frost, M., Fogstad, H., Camacho, A. V., & Laski, L. (2018). Childbearing in adolescents aged 12–15 years in low resource countries: A neglected issue. *The Lancet Global Health, 6*(9), e1049–e1064. https://doi.org/10.1016/S2214-109X(18)30324-1
46. United Nations Children's Fund (UNICEF). (2014). *Ending child marriage: Progress and prospects*. New York: UNICEF.
47. United Nations Population Fund (UNFPA). (2021). *Impact of COVID-19 on child marriage and adolescent pregnancy*. New York: UNFPA. https://www.unfpa.org
48. United Nations Population Fund (UNFPA). (2023). *State of World Population 2023: 8 billion lives, infinite possibilities*. New York: UNFPA. https://www.unfpa.org
49. Wekesah, F. M., Kabiru, C. W., & Izugbara, C. O. (2019). Comprehensive sexuality education in Sub-Saharan Africa: Insights, challenges, and future directions. *Sex Education, 19*(3), 342–356. https://doi.org/10.1080/14681811.2018.1557999
50. World Health Organization (WHO). (2022). *Adolescent pregnancy fact sheet*. Geneva: WHO. https://www.who.int
51. World Health Organization (WHO). (2023). *Global Health Observatory: Adolescent fertility*. Geneva: WHO. https://www.who.int
52. **UNFPA. (2021).** *The impact of climate change on sexual and reproductive health and rights: A review of the literature.* United Nations Population Fund.
53. **UNFPA. (2023).** *Adolescent pregnancy in Sub-Saharan Africa: Trends, drivers and solutions.* United Nations Population Fund.
54. **UNICEF. (2023).** *Early childbearing in West and Central Africa: Drivers and policy priorities.* United Nations Children's Fund.
55. **Chandra-Mouli, V., Ferguson, B. J., & Plesons, M. (2019).** The political, research, programmatic, and social responses to adolescent sexual and reproductive health and rights in Sub-Saharan Africa. *Reproductive Health, 16*(1), 1–12. https://doi.org/10.1186/s12978-019-0807-y
56. **Chansa, C., Malama, K., & Kalaba, M. (2024).** Engaging boys and men in adolescent reproductive health: Toward gender-transformative programming in Sub-Saharan Africa. *Global Health Action, 17*(1), 227–239. https://doi.org/10.1080/16549716.2024.227239
57. **Guttmacher Institute. (2023).** *Adolescent sexual and reproductive health in Sub-Saharan Africa: Key data and policy priorities.* Guttmacher Institute.
58. **Wekesah, F., Coast, E., & Izugbara, C. (2019).** Contraceptive use and adolescent pregnancy in Sub-Saharan Africa: Evidence from demographic and health surveys. *BMC Public Health, 19*(1), 1370. https://doi.org/10.1186/s12889-019-7740-8