

Research Article

## The Impact of Teenage Pregnancy on Maternal and Child Health: A Systematic Literature Review

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**Abstract:** For adolescent girls aged 15–19 around the world, complications from pregnancy and childbirth are the main cause of death. With girls under 15 being up to five times more likely to pass during delivery, this group has substantially more hazards than older women. Contributions include physical maturity, insufficient prenatal care, and socioeconomic obstacles. Correcting these inequalities is essential to raise maternal and teen health results worldwide. Adolescent mothers have a higher risk of problems including preterm birth, anemia, and preeclampsia. Their babies are more prone to have low birth weight, developmental delays, and greater death rates. Socially, teenage mothers sometimes face stigma, limited educational and job prospects, and economic hardship, therefore sustaining cycles of poverty and social injustice. This review aims to examine how common and serious maternal problems, like preeclampsia, anemia, and infections, are in teenage pregnancies. It also looks at serious issues for babies, such as low birth weight, preterm birth, and neonatal death. Finally, it studies the longterm health effects on both teenage mothers and their children, physical, psychological, and developmental aspects. Using keywords pertaining to teenage pregnancy and maternal and foetal health outcomes, the systematic review will include studies published in English or Indonesian from 2010 to 2023 focusing on teenage pregnancies (ages 10–19), maternal and foetal health outcomes, conduct thorough database searches using PubMed, and Google Scholar Teen mothers may struggle to meet the nutritional demands of pregnancy, leading to complications like preeclampsia, anemia, and a higher chance of cesarean births. These challenges require specialized medical care and can have lasting impacts on both mother and child. The effects of adolescent pregnancy can affect future generations, perpetuating cycles of health inequity. It is important to ensure that young mothers receive timely prenatal and postnatal care, and to promote education about contraception, the effects of early pregnancies.

**Keywords:** Child Health, Maternal, Pregnancy, Teenage.

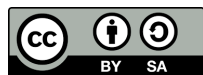
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### 1. Introduction

Several studies and academic literature also describe teenage pregnancy as one occurring prior to the age of 20. For example, Ayu (2016) and Widyastuti (2011) define the age range for adolescence as 10 to 19 years, within which teenage pregnancy happens. The severe physical, psychological, and social problem of adolescent pregnancy affects millions of youngsters all around (1). Though the problem persists in rich countries, in 2023 it still poses challenges especially in low- and middle-income ones. Because their bodies are less developed, teenage women are more prone to have physical issues throughout pregnancy and delivery. Among these complications are early labor, low birth weight, and even maternal or child mortality. Teenage mothers are also less likely to receive prenatal care, increasing their health problems. Teenage pregnancy might cause emotional anguish, anxiety, and depression episodes as well as mental health concerns. Though they are still developing emotionally, young mothers sometimes struggle to balance their studies, family obligations, and parenting.

Their emotional well-being may be worsened by social stigma and a shortage of mental health care, which can sometimes have long-lasting psychological consequences. Teen pregnancy can have social consequences that trapped a girl and her kid in a cycle of poverty for her education and future work prospects (2).

Teenage mothers sometimes quit school, struggle with employment, and occasionally face stigma in their communities. Adolescent mothers are occasionally forced into early marriages in some places, limiting their autonomy and chances in the future. Teen pregnancy results from a number of causes, including cultural traditions, poverty, peer pressure, poor access to contraception, and insufficient sex education (3). The adolescent birth rate globally has dropped somewhat in 2023 as a result of awareness campaigns and better access to reproductive health services, but it is still high in certain regions of Africa, South Asia, and Latin America. Tackling teenage pregnancy calls for a multifactorial approach including complete sex education, easily accessible healthcare, community support, and empowering young girls to make informed decisions about their bodies and futures.

Ramachandra and coworkers' study reveals that teenage mothers were more prone than adult mothers to disorders like anemia, Premature Rupture of Membranes, Oligohydramnios, and postpartum hemorrhage (4). Furthermore more instances of PIH and polyhydramnios were seen in the control group than in the group under investigation. With regard to negative perinatal outcomes, the study group had a bigger likelihood of intrauterine growth restriction, preterm deliveries, stillbirths, low APGAR ratings, and NICU admissions than the control group. This study draws attention to the increased risk young mothers face for poor pregnancy outcomes—both in relation to mother, newborn, and fetus complications when compared with their adult counterparts (5).

Teen pregnancy presents a complex and multifaceted issue that affects millions of adolescents across the globe. Though peer pressure and romantic relationships affect teen pregnancy, its source is usually discovered in more fundamental structural and societal reasons. Culture, family ties, and financial condition significantly affect a teenager's decisions and life trajectory, which sometimes leave them in vulnerable circumstances where they become pregnant at a young age, often without the needed knowledge or resources to care for themselves or their kids (6). Seen through this broader angle, adolescent pregnancy offers better solutions and support systems. Teenage pregnancy is mostly caused by socialization's impact. During their adolescence, young people experience significant changes in their social, physical, and emotional growth. Teenagers often participate in early sexual activity as a result of peer pressure, the desire to belong, curiosity about sexual relationships, and media influence (7). Still, many youngsters lack access to thorough sex education that would impart facts on reproductive health, contraception, and permission (8). Without appropriate counseling, their decisions are often based on peer pressure, stories, or false information, leading to unanticipated pregnancies. Still, focusing only on peer pressure or romantic behavior oversimplifies things. Teenagers' ideas of maturity, relationships, and sexuality are greatly shaped by cultural elements. Cultural norms in many regions of the globe, particularly in traditional and conservative cultures, give early marriage and childbirth great value.

A girl's worth in certain societies is mostly based on her ability to be a wife and mother; she may even be pushed or coerced into marrying soon after puberty. This societal expectation could eclipse the teenager's need for personal development and obstruct her academic or vocational objectives (9). In several rural areas, child marriage is still practiced and even society accepts it. Girls are often wed off before they become 18, occasionally as early as 13 or 14, in such circumstances because of deeply held beliefs regarding family honor, gender roles, and the need of preserving virginity. Often lacking the physical, emotional, and mental maturity to manage marriage and motherhood, these young brides Early pregnancies are thus rather prevalent in circumstances wherein the youngster has little authority or informed decision-making ability (10). These pregnancies have major health issues and long-run consequences for both the mother and the child as they are unplanned and lack knowledge of reproductive health. Parental influence is among the most significant contributors to adolescent pregnancy (11).

Parents or guardians may either support early marriage or fail to give teenagers the required education and emotional support as they handle their changing bodies and relationships. Some families see daughters as a financial burden and view early marriage as a way to reduce financial strain. Marriage of an underage daughter may help a family hand responsibility to the husband's family, therefore saving the cost of raising her or resulting in a dowry. Financial need occasionally drives this choice, which often handicaps the girl by stopping her development, education, and independent choice-making (12). Furthermore contributing is the lack of candid conversation between parents and their children about sexuality, relationships, and personal health.

Many teens depend on the internet or their friends for knowledge, which may not always offer accurate or useful perspectives. Teenagers could be embarrassed or confused when their parents are silent, critical, or evasive about these topics, therefore increasing the likelihood of irresponsible sexual activity and unintended pregnancies. The economy compounds the problem. Teenagers—especially girls—in many low-income homes may turn to early marriage or casual relationships as a perceived means of security driven by financial difficulties (13). Because many of these unions are violent, unstable, or financially dependent, the assumption that it will result in financial stability often turns out to be untrue.

Teenage mothers have fewer job choices and are more likely to leave school, therefore perpetuating the cycle of poverty. Their kids could then suffer from bad health, poor education, and limited social mobility, therefore reproducing the generational cycle of disadvantage. In destitute rural areas and urban slums, access to contraception and reproductive health care is sometimes limited or nonexistent. Teenagers are moreover discouraged from asking for help because of social disdain, tough laws, or shame. Even if assistance is available, young people may still be afraid of being judged by family members or healthcare professionals, therefore avoiding clinics and making bad choices. Seldom, therefore, adolescent pregnancy is the only result of a teenager's own actions. Rather, it is more accurately seen as a social problem resulting from underlying systematic problems including gender inequality, poverty, poor education, cultural norms, and insufficient healthcare infrastructure. It shows how society falls short of protecting, educating, and empowering its young members especially girls. Although adolescent pregnancy rates have fallen in some countries because of better education and health care, data from international health organizations in 2023 reveal they are still significant in many areas of Latin America, South Asia, and sub-Saharan Africa.

Based on the events detailed, we intend a systematic literature study of the consequences of teenage pregnancy on adolescents as well as their children's health.

## 2. Proposed Method

This study is a systematic literature review compiled in accordance with the PRISMA (Preferred Reporting Items for Systematic reviews and Meta-Analyses) guidelines to ensure accuracy, consistency, and transparency in reporting results. The literature search and selection approach is based on the PINCO framework, which covers aspects of population, topic of interest, context, and expected outcomes.

### Inclusion Criteria

- Articles that are the results of primary studies (both quantitative and qualitative), or systematic reviews that discuss the relationship between adolescent pregnancy and maternal and child health.
- Publication in Indonesia or English.
- Published between 2010 and 2013
- Contains explicit information related to the impact of adolescent pregnancy on maternal health (such as anemia, preeclampsia, pregnancy complications) and child health (such as low birth weight, premature birth, and stunting).
- Articles are available in full text.

### Exclusion Criteria

- Non-scientific writings such as editorials, opinions, or news articles.
- The studies focused on examining teenage pregnancy (aged 10-19 years).
- Publications that do not present empirical data or analysis relevant to the focus of the review.

The reference search was conducted using the PICO approach, which is detailed as follows

**Table 1**

<b>P (Patient, Population, Problem)</b>	Adolescent girls who are pregnant (10-19 years)
<b>I (Intervention)</b>	Pregnancy in adolescence
<b>C (Comparison)</b>	None, or compared with adult pregnant women
<b>O (Outcome)</b>	Maternal health conditions (for example pregnancy complications, psychological disorders) and infant health (premature birth, low birth weight, developmental disorders)

The article search was conducted using two main data sources, namely PubMed and Google Scholar. Search keywords are constructed using Boolean operators (AND, OR) and combined with relevant key phrases, such as: (“adolescent pregnancy” OR “teenage pregnancy”) AND (“maternal health” OR “infant health” OR “low birth weight” OR “pregnancy complication”) AND (“systematic review” OR “meta-analysis”). Searches are conducted by filtering results based on relevance, full text availability.

Below is an overview of article selection using the PRISMA flowchart:

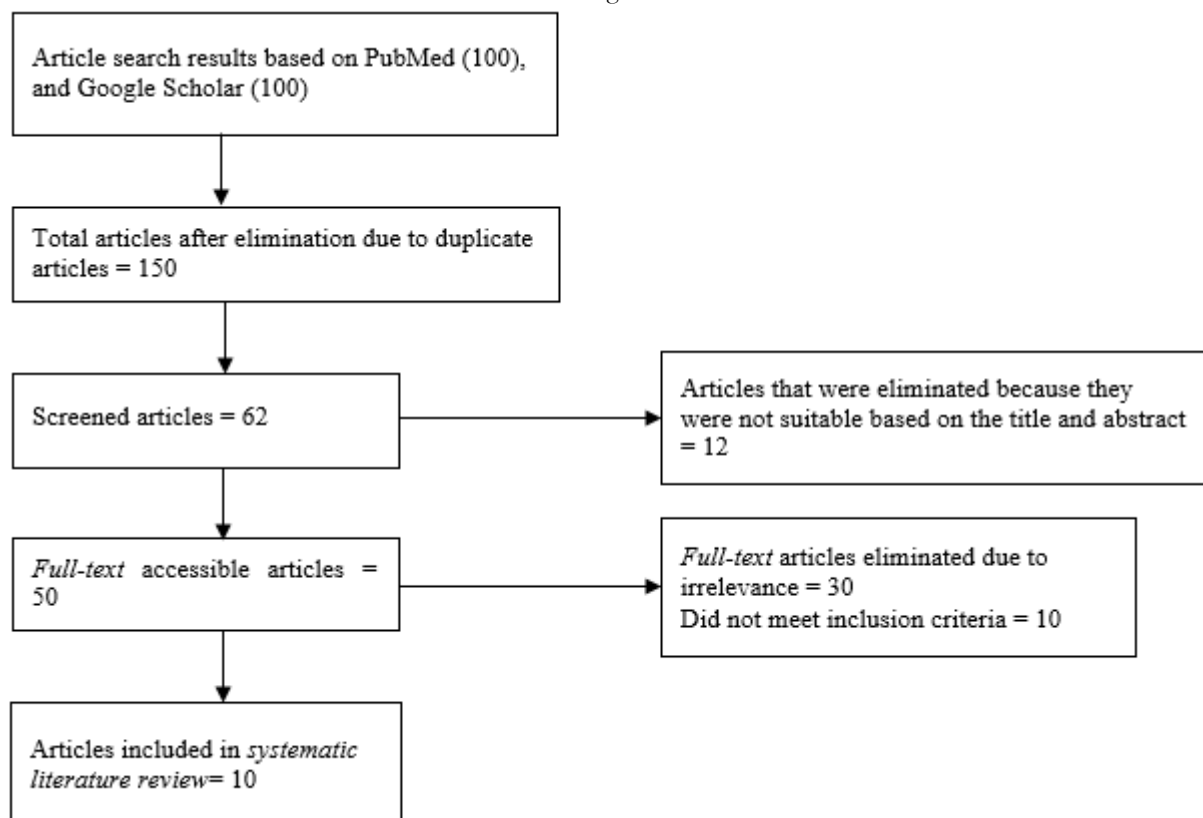


Diagram 1. PRISMA Flowchart

### 3. Results and Discussion

Based on the results of a systematic literature review, it was found that pregnancy in adolescence (10 - 19 years) has a significant impact on the health of mothers and children. Teenagers who become pregnant are at higher risk of medical complication such as high blood pressure during pregnancy (preeclampsia), anemia, premature birth, and postpartum hemorrhage. Additionally, babies born to teenage mother are more likely to have low birth weight, growth disorders, and a higher risk of neonatal mortality.

Socially, teenagers who experience pregnancy often face social pressure in the form of negative stigma, loss of educational opportunities, and prolonged economic hardship. This has the potential to perpetuate the cycle of poverty and social inequality from one generation to the next. Factors contributing to teenage pregnancy include insufficient reproductive health education, early marriage practices, peer influence, cultural norms that restrict teenage girl's autonomy, and limited access to healthcare services.

Of the total 200 articles searched through two main databases (PubMed and Google Scholar), 10 studies met the selection criteria and were analyzed further. The result of the analysis underscore the importance of family support, comprehensive sex education, and the provision of reproductive health services that are responsive to the needs of adolescents as preventive measure against teenage pregnancy and its adverse effects.

#### Discussion

Teenage pregnancies are greatly caused by poverty and poor access to education. Early motherhood may be seen by youngsters from low-income households as a way to get status or purpose, especially in places where career and educational possibilities are scarce. Many adolescents lack thorough sex education, therefore having false ideas about reproductive health and birth control. Without exact knowledge, they could participate in dangerous sexual activities without awareness of the possible repercussions (14).

Puberty causes teenagers to go through considerable hormonal and emotional changes, which can result in impulsive decision-making and a limited awareness of long-run ramifications. Teenagers become more vulnerable to participating in unprotected sex and unexpected pregnancies as this developmental phase usually favors immediate needs above future consequences. Young women face pressure from conventional gender norms and expectations to fit certain behaviors, including early marriage and motherhood. Teenagers' autonomy over reproductive choices can be restricted by these cultural standards, which can result in pregnancies that are not entirely voluntary.

Finding a pregnancy changes the adolescent's decision making process and emotional wellbeing greatly with parental support. A caring and non-judgmental response promotes a feeling of security, which frees the adolescent to explore all alternatives and make choices consistent with their ideals and circumstances. Moreover, ongoing parental involvement after childbirth via help with childcare, education, and emotional support can improve the young mother's capacity to achieve her aspirations and offer her kid a secure environment. Although parental involvement is beneficial, obstacles are still present. While other parents might have cultural or personal convictions that prevent open conversation, some lack the understanding or confidence to address sexual health issues. External assistance from teachers, counselors, or healthcare professionals can complement parental direction in such circumstances (15).

Through education, support, and research, health specialists and academics are absolutely essential in addressing teenage pregnancy. Implementing thorough sex education programs that provide correct knowledge on contraception and reproductive health can empower teenagers to make informed decisions (16). Young people can negotiate the difficulties connected with teenage pregnancy by means of counseling and support services. Moreover, studies on the root causes and consequences of teen pregnancy can guide programs and laws designed for support and prevention. Working with lawmakers and communities, health professionals and academics can champion institutional changes that address the underlying causes of adolescent pregnancies.

#### 4. Conclusions

Adolescent moms run greater health risks during pregnancy and labor. Still growing, their bodies could find it difficult to meet the physical demands of pregnancy, which could cause preeclampsia, anemia, and a higher probability of cesarean birth. Babies of teenage mothers are more likely to be born prematurely, have low birth weight, and experience breathing problems. These health issues call for expert medical treatment and can permanently affect both mother and baby. Teenage pregnancy can have consequences that reach next generations.

Because of its links with a range of maternal and perinatal problems, teenage pregnancy is still a major public health problem everywhere, including in Indonesia. Preeclampsia, a hypertensive condition that can cause major health problems for both the mother and the kids among the most serious dangers adolescent mothers encounter. Though the precise cause of preeclampsia is unknown, it is thought to arise from aberrant placentation and immune system reactions during pregnancy. High blood pressure and indicators of organ damage usually the kidneys, define this illness.

Several reasons could explain why young people are more prone to preeclampsia. Physiologically, teenagers are still growing and developing, which may not offer the best circumstances for a good pregnancy. Furthermore, socioeconomic variables including restricted healthcare access, dietary inadequacies, and lack of knowledge about reproductive health might help to explain the greater prevalence of preeclampsia among teen mothers. Children of teenage mothers face a higher likelihood of academic problems, behavioral issues, and early parenting themselves. Through education, support, and intervention initiatives, tackling teen pregnancy is highlighted in this intergenerational cycle. Adolescent pregnancy poses major difficulties that compromise the mental well-being, health, education, and economic stability of both the teenage mother and her child. Extensive sex education, access to healthcare, and strong support networks are vital to lessen these effects. Society can assist young mothers and their children in overcoming these difficulties by tackling the underlying causes and offering the resources needed, therefore promoting a better and more stable future.

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