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Exploring the enablers of teenage pregnancy in Sub-Saharan Africa (SSA): A scoping literature review

Abstract

Evidence from sub-Saharan Africa indicates that 35 percent of pregnancies among 15-19-year (s)-olds were unplanned, unwanted, or untimed and that the teenagers' relationships were unstable. Teenage pregnancy is a global problem especially in developing countries. Teenage pregnancy is associated with several social issues: poverty, low education levels, and the lack of awareness about sex and pregnancy prevention. The contributing factors for teenage pregnancy are multiple and complex categorised as socio-demographic, familial, cultural, and reproductive behaviour. Different literature reported that factors associated with teenage pregnancy include living in rural areas, not attending school, early marriage, lack of communication between parents and adolescents about sexual and reproductive health (SRH) issues, educational level of the teenagers and family history of teenage pregnancy.

A scoping review was conducted from February 2021 to August 2021 using the following specific subject databases: Google scholar, PubMed, EBSCOhost, and research gate. Special attention was paid to keywords during navigation to ensure consistency of searches in each database. English language, studies conducted in sub-Saharan Africa and articles published in the last 10 years (2011–2021), were the three limiters applied in the four databases. The researchers identified eight themes for inclusion in the findings. The themes fell into three major categories: individual related factors, family related factors and external factors. These themes reflect factors associated with teenage pregnancy. The review revealed that there are several risk factors that lead to teenage pregnancy. Therefore, there is urgency for strategic interventions aimed at improving teenage pregnancy through female education and sexual and reproductive health education must also be introduced or reinforced in schools. Policy makers, community leaders and school curriculum can act towards raising the age for marriage to after 20 years and make the methods of contraception accessible to teenagers. Qualitative techniques like focus group discussions in communities could be helpful in reflecting on the root cause of the problem.

Keywords: teenage, pregnancy, adolescent, contraceptives, sub saharan africa

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Introduction

Today, Sub Saharan African countries lead the world in teen pregnancies: With Niger on the top list of 203.604 births per 100,000 teenage women. Mali follows with 175.4438, Angola (166.6028), Mozambique (142.5334), Guinea (141.6722), Chad (137.173), Malawi (136.972), and Cote d'Ivoire (135.464).¹ Teenage pregnancy is a public health concern in both developed and developing countries.² According to the United Nations Children Fund (UNICEF), teenage pregnancy is defined as a pregnancy in girls within the ages of 13–19yrs.³ Annually, about 21 million girls' aged 15-19 years in developing regions become pregnant.⁴ Approximately 95 percent of teenage pregnancies happen in developing countries with 36.4 million women becoming mothers before age 18 and 5.6 million having a live birth before age 15 in 2010.⁵ In 2013, sub-Saharan Africa was reported to have the highest prevalence of teenage pregnancy in the world⁵ with the least teenage age being 13years old.³

Evidence from studies conducted in sub-Saharan Africa indicates that 35 percent of pregnancies among 15–19-year-old were unplanned, unwanted, or untimed and that the teenagers' relationships were unstable.^{6,7} The highest teenage pregnancy rates which are often associated with early marriage are in sub-Saharan Africa, where one in every four girls has given birth by the age of 18 years.⁸

Adolescent pregnancies are linked to disadvantaged social and economic situations.⁹ Globally, this phenomenon is regarded as a

serious public health issue.¹⁰ In low-and-middle-income countries, about 21 million adolescent girls aged 15–19 years are estimated to get pregnant and about 16 million give birth annually.^{11,12} Globally, adolescent pregnancy is expected to increase by 2030, with high concentrations in sub-Saharan Africa.⁵ Currently, the highest teenage pregnancy rates are recorded in Africa.¹ Records show high prevalence across the sub-Saharan Africa regions: 16.3 percent in Eastern, 27.9 percent in Western, and 28.9 percent in Southern Africa.¹³ Ghana, from the western side, reports that about 14 percent of adolescent girls aged between 15 and 19 years starts childbearing with about 11 percent live birth rate.¹⁴

Teenage pregnancy should be considered as one of the main issues in every healthcare system since early pregnancy can have harmful long-lasting implications on girls' physical, psychological, economic, and social status¹⁵ and it is a concern from both human rights and public health perspectives.¹⁶ Consequences of teenage pregnancy are numerous encompassing obstetric, healths, economic and social problems.¹⁷ Firstly, teenage mothers are at higher risk of obstetric complications such as: incontinence from obstetric fistulae, eclampsia, post-partum haemorrhage, sepsis, and a five-fold increased risk of maternal mortality.^{18,19} Secondly, the children that teenagers bear experience higher levels of birth complications, poor health outcomes and deprivation.^{20,21}

The transition from childhood to being a teenager may cause unstable emotions to some teenagers, and this may cause complex

psychological breakdown among teenagers.²² To this end, teenagers in particular those in rural communities need some protection. If a teenager is affected at this stage, it may mean a sorrowful life for her. As alluded to by Ghandi.²² Mersal¹⁵ further explain that medically, teenage pregnancy, maternal and prenatal health is of particular concern among teens who are pregnant or parenting. In some studies, it has been observed that there is a high incidence rate of premature birth and that low birth weight is higher among adolescent mothers.

The contributing factors for teenage pregnancy are multiple and complex²³ categorised as socio-demographic, familial, cultural, and reproductive behaviour. Different literature reported that factors associated with teenage pregnancy include living in rural areas, not attending school, early marriage, lack of communication between parents and adolescents about sexual and reproductive health (SRH) issues,²⁴ educational level of the teenagers²⁵ and family history of teenage pregnancy.^{26,27} Considering the assertions above, the objective of this paper is to explore the enablers of teenage pregnancy in sub-Saharan Africa through a scoping review.

Methods

The Arksey and O'Malley five stages framework was used to guide our scoping review.²⁸ The five stages followed are as follows: 1. Identification of the research question; 2. Identification of relevant studies; 3. Selection of studies; 4. Data abstraction (charting of the data); and 5. Data analysis and reporting of results. This scoping review was conducted from February 2021 to August 2021 using the following specific subject databases: Google scholar, PubMed, EBSCOhost, and research gate. Special attention was paid to keywords during navigation to ensure consistency of searches in each database. English language, studies conducted in sub-Saharan Africa, and studies published in the last 10 years (2011–2021), were the three limiters applied in the four databases.

Inclusion criteria

Articles were considered if they met at least one of the outlined inclusion criteria:

- Articles exploring factors leading to teenage pregnancy
- Articles exploring effects of adolescent pregnancy
- Articles published in SSA about teenage pregnancy between 2011 and 2021

Exclusion criteria

- Articles exploring teenage abortion
- Articles published outside the 2011–2021 period
- Articles exploring factors about teenage pregnancy outside the 13–19 years age range

Table 1 Characteristics of studies in the scoping review (n = 8)

Authors	Country	Methods	Settings
Asare et al., ³⁵	Ghana	unmatched case-control study (n=6933)	Ghana
Sungwe C & N. Mutombo ²⁵	Zambia	descriptive cross-sectional study (n=1574)	Lusaka, Zambia
Mchunu et al., ³¹	South Africa	Cross sectional study (n=3123)	South Africa
Mothiba & Maputle, ³³	South Africa	Quantitative descriptive study (n=100)	Capricorn district (SA)
Mutara & Mutanana, ³²	Zimbabwe	Qualitative study (n=23)	Hurungwe District-Zimbabwe
Nabugooma Josephine et al., ³⁴	Uganda	Qualitative study (n=101)	Rural eastern Uganda
Odimegwu.Clifford et al., ¹³	SSA	Quantitative multi-country cross section study	Sub Saharan Africa
Mezmur Haymanot et al., ³⁶	Ethiopia	cross-sectional study (n=2258)	Eastern Ethiopia

Study selection

We identified a total of 17, 000 literature from the database search. Following the removal of duplicates, we were left with 1063 articles, which we considered for our scoping review. All the titles and abstracts of the considered articles were screened, which resulted in the exclusion of 1013 articles. We then identified 50 articles as relevant for use in the scoping review and were matched against the inclusion and exclusion criteria. A total of eight articles were judged to meet the prescribed criteria after screening the full articles.

The PRISMA diagram in Figure 1 outlines the searches undertaken and the subsequent results obtained.

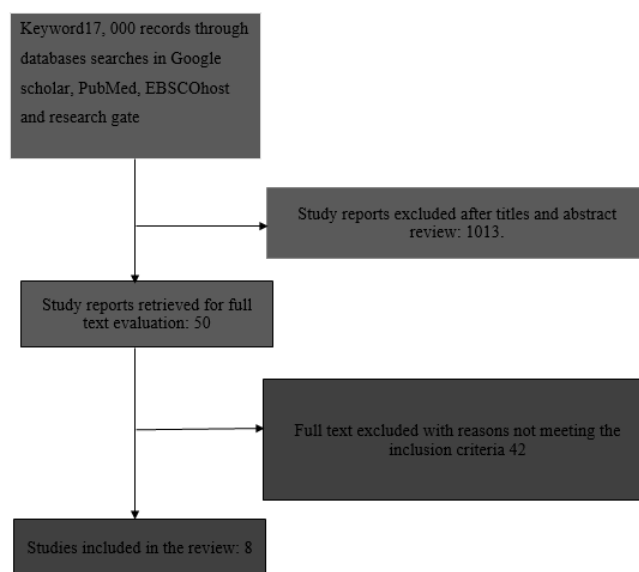


Figure 1 PRISMA flowchart outlining the literature search.

Data abstraction

Data abstraction was undertaken by the first author and verified by the second author. Discrepancies in the results were resolved by the third author.

Most of the articles were from South Africa (n=2). Six articles were quantitative in nature, and 2 were qualitative studies. Despite the methodological differences and geographical locations of the studies analysed, a common thread was noted and confirmed throughout the themes identified, as shown in Table 1 below.

Qualitative analysis

Thematic analysis was utilised to reflect the new combined findings of the eight articles considered.²⁹ Articles were colour coded on Microsoft Excel according to the related themes they contributed.³⁰ The colour coding used helped to visualise the contribution of each article, including its contribution to the themes. The data coding was reviewed over 2 months, leading to various changes and refinement of themes, which subsequently made the final themes of the article.

Table 2 Themes by Author

Theme	Mchunu et al. ³¹	Sungwe C& N.Mutumbo ²⁵	Mothiba &Maputle ³³	Mutanana & Mutara ³²	Asare et al. ³⁵	Nabugoo et al. ³⁴	Odimegwu & Mkwanzani ¹³	Mezmur et al. ³⁶
Individual Related Factors								
Poor condom & contraceptive use	V	v	V	v		v		
Personal Values & Choices	V	v						
Family Related Factors								
Low Education of Parents								
Economic Factors	V	v		v	v	v	v	V
Family Setup	V	v			v		v	V
Religious & Cultural Beliefs		v		v		v		
External Factors								
Lack of Knowledge	v	v	V	v		v		V
Early Exposure & Peer Pressure				v		v		

Individual related factors

Poor condom and contraceptives use: The use of condoms and contraceptives was a factor contributing to teenage pregnancy.^{31–34} Mchunu³¹ found a correlation between high scores on contraceptive or condom use index and adolescent pregnancies in South Africa.³¹

Personal values and choices: Personal desire to have a child enabled teenage pregnancies. For example, in South Africa, some adolescents chose to get pregnant as a way of proving their maturity or identity as women. In some cases, men desiring pregnancy led to teenage pregnancy. It was also observed that fewer (9.5%) females chose to use condoms as compared to their male counterparts (36.9%) when they were with their non-regular partners. This increased the risk of unwanted pregnancies. Additionally, having sexually permissive attitudes enabled teenage pregnancies.³¹

Family related factors

Economic factors: Poverty was one of the enablers of teenage pregnancy.^{13,31,34,35} In West Africa, one percent increase in community level poverty was likely to lead to one percent increase in teenage pregnancy.¹³

Additionally, there was a correlation between dropping out of school and the propensity for early pregnancy as was reported by.^{32,36} Early marriage resulting from lack of money to cover education costs led to teenage pregnancy²⁵ while in rural Uganda, some parents lacked money to finance school items which in turn resulted in parents

Results

The study found that the enablers of teenage pregnancy in sub-Saharan Africa were divided in three main groups which included individual related factors, family related factors and external related factors. Under individual related factors there was poor condom and contraceptive use including personal values and choices. Under family related factors there was low education of parents, economic factors, family set up including religious and cultural beliefs. Under external factors there was lack of knowledge, early exposure, and peer pressure (Table 2).

encouraging their girls to source supplies from men or to work. This exposed girls to the risk of sexual attacks on their way to and from work and encouraged girls to get into prostitution, an additional factor in teenage pregnancy.³⁴

Unemployed teenagers were more predisposed to teenage pregnancies than those in school.^{34–36} In rural Eastern Uganda, some teenagers admired certain items provided by people of the opposite sex thereby promoting exchange of gift items for sex.³⁴

Family Setup

Teenagers from single parent homes were more likely to have sexual intercourse than other children,³¹ leading to teenage pregnancy. For example, in Ethiopia, the teenage pregnancy prevalence ratio was higher for teenagers with divorced parents as compared to those with married parents.³⁶ As such, family breakdown contributed to teenage pregnancies.^{13,33,36} Furthermore, the sex of the household head was linked to teenage pregnancy in Sub Sahara Africa¹³ where it was observed that teenagers from female headed homes were less likely to experience teenage pregnancy than those from male headed homes.

Place of residence was another significant enabler of teenage pregnancies.^{13,35} In Ghana, adolescents who lived in rural settings were more susceptible to early pregnancies than those who lived in urban areas³⁵ while rural residence increased the potential for teenage pregnancy in East and West Africa.¹³ Nabugoomu³⁴ found that girls who lived in the rural parts of Uganda did not have social skills such as bargaining power to prevent early sex and pregnancies.

Religious and Cultural Beliefs

Beliefs are one of the factors that forced children into early marriage that encouraged teenage pregnancies.^{25,34} Some parents did not uphold the use of contraceptives because of their religious beliefs.³⁴ For example, in Zimbabwe, it was a taboo for children to be found with condoms and contraceptives even when the children were willing to engage in sexual affairs. As such, children end up engaging in sexual intercourse without the use of contraceptives and ended up being pregnant.³² In some cases, children were made to participate in traditional roles outside the home environment such as fetching water. This exposed the children to men who had have sex with the girls that resulted in teenage pregnancy.³²

External factors

Lack of knowledge

Lack of information about sex and the use of contraceptives contributed to teenage pregnancies.^{33,25} However, in the Capricorn district of the Limpopo Province, some of those who were knowledgeable about the use of contraceptives and other pregnancy prevention measures chose not to use them for various reasons.³³ Again, in Ethiopia, prevalence levels were greater for teenagers who could not identify their fertile period in the menstrual cycle than their counterparts who could do so.³⁶ Similarly, in Uganda and South Africa, some girls had no information on how to prevent pregnancy and in the use of contraceptives, leading to teenage pregnancies.^{33,34} However, most of the teenagers in South Africa indicated having been taught about reproduction in schools and in the communities.³³ This was also irrespective of the numerous intervention programs available to the communities. Notwithstanding this, there was still a notion that early pregnancy resulted from failure of teachers, medical staff and parents to train teenagers on pregnancy-prevention measures and the risks associated with early pregnancy.^{32,34} Additionally, some teenagers became pregnant due to lack of knowledge of the risks involved in engaging in an unprotected sexual intercourse.³³

Early exposure and peer pressure

Early exposure to pornographic material and peer pressure predisposes teenagers to early sex.^{25,32,34} For instance, children exposed to pornography pictures in Zimbabwe were pressured to have sex at an early age.³² Pornography and other sexual content were perceived to induce sexual activity, in order to please peers, as well as induce sexual violence.³⁴ In rural Uganda, intensified sex-based media messages contributed to teenage pregnancy.³³

Discussion

Miller³⁷ observes that some teenagers fall pregnant because they lack information or access to conventional method of preventing pregnancy. Children are also inexperienced in how to use condoms, and this also contributes to teenage pregnancies. According to WHO and UNFPA⁵ over 30 percent of adolescent girls in developing countries have unplanned pregnancy before 18 years of age and about 14 percent before the age of 15 years and this is attributed to fact that teenagers are inexperienced in the use of condoms and contraceptives. It is therefore very cardinal to consider an intense sensitisation on abstinence, sex, and contraceptives among teenagers. This can be very helpful if the concerned stake holders can do this exercise in languages that are native to the recipients.

There are many personal values and choices that lead teenagers to get pregnant, for example in north eastern part of Africa sexual abstinence is a common cultural practice during pregnancy and up to 2 years postpartum.³¹ Generally, teenagers engage in risky sexual

behaviours not only due to lack of knowledge but due to unfavourable decisions.³¹ Therefore, there is need to enhance peer education, self-esteem education and sexual reproductive health education through the concerned stake holders to make sure that teens are highly informed with the right knowledge regarding unsafe sex.

Several factors are strongly associated with and contribute to the increased risk of teenage pregnancies.³⁸ Studies reveal that most respondents have knowledge about the use of contraceptives and other ways of preventing unwanted pregnancy apart from total abstinence from sexual activity. However, those who were knowledgeable about contraceptives chose not to use them or keep the use of any contraceptives a secret for fear of complications and parental detection.³⁸ This calls for the ministry of health and child care to intensify health promotion on sexual reproductive health to the communities so that parents are able to support their children. In addition, implementation of culturally appropriate school-based and out-of-school health and sex education should start before the age of 12 years. A study conducted in the rural community of Zimbabwe³² revealed that teenagers from divorced parents were more exposed to pregnancy than those from married parents.

This finding is in line with studies conducted in Northeast Ethiopia, Malaysia, and South Africa which reported in comparison to teenagers from married parents, teenagers from divorced parents were more prone to teenage pregnancy.^{31,33} Furthermore, children delay sexual practice when there is good communication regarding sexual education with both parents compared to just one parent.²⁵ Literature also points out that child of divorced parents are more likely to take on adults' roles such as early marriage. An early marriage can grant the breakout of an unpleasant family situation or an emotional replacement missing in the parental home. This is contrary to Spjeldnaes,³⁹ who highlighted those young females growing up with single mothers would be more conscientised of the various sacrifices accompanying being a single parent. This may dissuade them from predisposing themselves to situations that would result in early childbirth. On the other hand, family practices of benefitting from dowries provided by the partner's family often as cattle influences child marriage.²⁵

However, this practice can be mitigated if the central government through ministry of health and justice mobilise communities to engage in sexual and reproductive health and establish a mechanism for collective action for deterring gift dowries, forced marriage, and rape respectively. Lack of Knowledge was amongst the several factors that were strongly associated with and contribute to the increased risk of teenage pregnancies. lack of knowledge being expressed in relation to information about sex and how to use and access contraceptives.^{25,33,40}

Furthermore, it was outlined that in some teenagers' lack of knowledge was confounded by many misconceptions that surround contraceptives for example some respondents indicated their unwillingness to use condoms citing that sex was not enjoyable.^{33,40,41} Lack of knowledge on safer sex and proper use of and access to contraceptives has grave effects on the teenagers. This age group is one that comprises individuals that want autonomy and some level of independence in the way they make choices and decisions of life.⁴¹ Therefore, if they are not well informed it means decisions and life choices would be dotted with wrong ones such as having unwanted pregnancy. This in turn will complicate issues such as teenager decides to get rid of the unwanted unintended pregnancy.⁴⁰ It is important therefore to strengthen the systems that focus on the sensitization of teenagers, enlightening them about reproductive health services available for teenagers. This will inform the way they make decisions regarding their sexual and reproductive health.

There are several social pressures that make teens be coerced into falling pregnant. Mutara³² postulated that most teenagers rely on their peers for information. This information being relied upon can be correct or wrong information. If it is wrong information for instance a situation where peers influence each other to indulge in unsafe sexual intercourse will lead to teenage pregnancies. Many of the participant's in³² study disclosed that they got pregnant early because of peer pressure and early exposure to sexual materials such as pornographic materials. One participant in this study disclosed that, being in a group of peers allows them to discuss a lot of things including sex. Once such are discussed, individuals are so eager to know how it feels.³² They also spend considerable time showing each other pornography. This subsequently forces the teens to practice what they watch and discuss leading to indulgence in unprotected sexual intercourse that leads to unintended pregnancies. Such disrupts the life these teenagers may have hoped to live, for instance dropping out of school, ill-health and many more.³² It is therefore incumbent upon all parties involved especially policy makers and implementers to devise policies that will address peer pressure and its dangers thereof.

Implications for practice

Since there are varying dynamic factors leading to the burden of teenage pregnancies in sub-Saharan Africa, various private organisations alongside government efforts should participate in trying to attain a high education standard regarding sexual reproductive health, emphasising on abstinence, safe sex practices and correct contraceptive use. Furthermore, policies that support female education, female drop-out education should be implemented. Also, there should be provision of economic and social opportunities to empower poor and vulnerable families and female adolescents particularly those in rural areas.

Conclusion

This scoping review had revealed that there are multiple factors attributed to high levels of adolescent pregnancies in Sub Saharan Africa. Our study found that some of the greatest enablers of teenage pregnancy in the SSA region were religious beliefs, poverty, early marriages and low levels of education. It is therefore, a matter of urgency for policy makers to create programs that sensitise girls on sexual reproductive health and highly advocating for the girl child to be in school and stay in school.

Conflicts of interest

The authors declared no potential conflict of interest.

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