

Original Research

Reasons for Teenage Pregnancy as Experienced by School Dropout Teen Mothers in Katavi Region, Tanzania

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Abstract

Background: Teenage pregnancy, defined as pregnancy between 10 and 19 years, carries significant health risks. In Tanzania, it has led to the expulsion of over 70,000 schoolgirls between 2003 and 2015, with Katavi being particularly affected. Limited research has examined the causes from the perspective of school dropout teen mothers, a gap this study sought to fill.

Methods: We employed a qualitative case study involving purposively sampled 18 teen mothers who dropped out of school (2017-2019). We conducted in-depth interviews with the study participants using an interview guide. We audio-recorded interviews in Kiswahili. The recorded interviews were transcribed verbatim, translated into English, and qualitative thematic analysis was used to analyze the data. The findings were presented in terms of themes and sub-themes.

Results: The findings indicate that teenage pregnancy arises from factors operating at multiple levels: individual, family, community, and societal. At the individual level, pregnancy was linked to students' limited life skills and strong sexual desire. At the family level, poverty and financial instability-manifested through food insecurity, inability to meet basic needs, and lack of safe accommodation were key contributors. At the community level, unregulated student housing in school neighborhoods created risky environments. At the societal level, the findings point to systemic government failures to adequately provide food and accommodation in school-owned hostels.

Conclusion: Teenage pregnancy is a multifaceted problem driven by individual, family, community, and societal factors, including limited life skills, poverty, unsafe housing, unregulated student accommodation, and inadequate government support. Comprehensive, multi-level interventions are required that strengthen individual capacities, family support, community regulation, and national policies to ensure safe and affordable school accommodation.

Keywords: *Teenage Pregnancy; Teen Mothers; Drop out of School; Tanzania*

Introduction

Globally, it is estimated that sixteen million teenagers give birth every year. About 11% of all births which occur worldwide are accounted for by girls aged thirteen to nineteen; from these, 95% teenage deliveries occur in low and middle-income countries(1). Each year, an estimated 21 million pregnancies occur among teenage girls aged 15–19 years in developing countries, almost half of which (49%) are unintended. This results in an estimated 16 million births and more than 3.2 million abortions annually (2). In fact, the teenage pregnancy poses several threats to the health of the mother and her fetus (3–5).

World Health Organization (WHO) reports the global teenage birthrate as 49 per 1000 girls aged thirteen to nineteen years, such that almost one fifth (18.8%) of teenagers get pregnant. World Health Statistics 2014 showed that complications during pregnancy

and childbirth are the second cause of death for girls aged fifteen to nineteen years old globally (6). The burden persists in both developed and developing countries, but with a varied magnitude. More than 70,000 teenage girls die every year because of these complications, mainly in developing countries. Every year, more than 8,000 girls drop out of school due to pregnancy making it a huge problem in the World (7).

In sub-Saharan Africa (SSA), it is estimated that 45% of the pregnancies among young women aged between 15 and 19 are unintended, resulting in unintended births, unsafe abortions and miscarriages (8–11). Nearly half of the unsafe abortion cases in SSA also occur among teenage girls and young women under the age of 25 years (12). The major cause of teenage pregnancy is poverty, which encompasses several variables in it (13).

In Tanzania, over 70,000 teenage girls were expelled from school due to pregnancy between 2003 and 2015 (14). Teenage pregnancies were reported to become prevalent in the Katavi region, contributing to high school dropouts (15) making Katavi a leading region with 45% (1). While factors influencing teenage pregnancy among school girls have been generally studied in Tanzania (16–18). Dropout teen mothers' lived experiences of pregnancy and parenting in Tanzania are not fully understood, and the literature in this domain is scarce. Moreover, few previous qualitative studies only collected data from the peripheral stakeholders such as school teachers, parents and the general population of in- and out-of-school teenagers (16). These previous studies identified sociocultural drivers such as low education, peer pressure, and early marriage (16,18). However, the voices of the dropout teenage mothers are missing, thereby reducing the thoroughness of the interventions responding to this important public health problem. Therefore, based on socio-ecological model, specific objectives of this paper include: 1) To report multilevel (individual, family, community, and societal) reasons for teenage pregnancy as reported by teenage mothers themselves; 2) To provide

multilevel recommendations for the prevention of teenage pregnancy in the Tanganyika district, Katavi Region.

Theoretical Framework

The socioecological model provides a comprehensive lens through which the intricate and interrelated factors influencing teenage pregnancy can be examined, making it an invaluable framework for directing this qualitative investigation (19). The model provides a deeper understanding of how economic constraints, family dynamics, personal choices, and institutional structures interact to shape the experiences of teen mothers who have dropped out of school by looking at the individual, interpersonal, community, and societal levels.

At the individual level, personal characteristics like age, sexual and reproductive health-related information, attitudes, beliefs, and behaviors all have an impact on adolescent pregnancy (20). Vulnerability is increased by early sexual activity initiation, low self-esteem, restricted access to reliable information about contraception, and poor academic achievement (20–22). Unplanned pregnancies may result from the absence of proper sexual education or from

misunderstandings about fertility and the usage of contraceptives among many teenage girls in the Katavi Region.

The interpersonal level is concerned with interactions with intimate partners, peers, and family. Often, teenage females are more likely to be exposed to dangerous situations when there is a lack of parental monitoring, poor communication between parents and children, or no supportive family structures (23). Common contributing variables include peer pressure to have sex and connections with older partners who may exercise control or provide financial support in exchange for sex (24,25).

At the community level, the neighborhood setting, the local cultural norms, and the availability of youth-friendly health services play a critical role (26–28). Early pregnancies in Katavi region may be attributed to risky neighbourhood settings, lack of comprehensive sexuality education in schools, and poor access to adolescent reproductive health services (26–28).

At the societal level, teenage pregnancy and school dropout in Tanzanian society are perpetuated by deep-rooted cultural norms that encourage early marriage and place limited value on girls' education (29). In

addition, widespread poverty may compel some adolescent girls to engage in transactional sex as a means of meeting basic needs (30). The situation is further exacerbated by weak social protection systems for at-risk girls (29) and gaps in the implementation and enforcement of relevant policies aimed at protecting their rights and promoting their well-being.

Methods

Study design

This study employed a case study design to explore the underlying reasons for teenage pregnancy as experienced by school dropout teen mothers. The use of a case study approach facilitated an in-depth and comprehensive examination through a qualitative lens, allowing for rich insights into the lived experiences of participants (31). Specifically, this design enabled a detailed investigation of the circumstances and challenges faced by teen mothers who discontinued their education due to pregnancy, situating their narratives within the real community context of the Tanganyika District in the Katavi region.

Study context

The study was conducted in the Tanganyika district, Katavi Region in 2020. The district is

one of the three districts constituting the Katavi Region. The other two districts are Mpanda and Mlele. According to the 2022 national census, the region had a population of 1,152,958 (32). Katavi region is reported to be the leading region in teenage pregnancy in the country, with a prevalence of 45%, followed by Tabora (43%), Dodoma (39%), Morogoro (39%), and Shinyanga (34%) (32-34).

Study population

The participants of this study were teenage mothers aged 16-19 years who dropped out of school between 2017 and 2019 due to pregnancy. The 2020 study targeted teen mothers who had dropped out of school. To ensure a sufficient sample size for data saturation, participants were recruited from those who had left school within the three years preceding the study. Information about these teenagers was obtained from the school administration and the health facilities of the selected wards.

Number of participants and recruitment of participants

Based on the information obtained from the school administration and the health facility in the selected wards regarding teenagers who got pregnancies and dropped out of

school from 2017 to 2019. A sample size of twenty (20) participants was selected purposefully to participate in the study. The sample size of 20 participants was determined in the field after reaching saturation (36), where no new themes or insights emerged from additional interviews. This ensured that the data collected was both adequate and reliable for addressing the research objectives. Sandelowski (35), (p.176) offers a good principle as she succinctly concludes that: “an adequate sample size in qualitative research is one that permits - by virtue of not being too large - the deep, case oriented analysis that is a hallmark of all qualitative inquiry, and that results in by virtue of not being too small - a new and richly textured understanding of experience”. The study participants were recruited at the community level with the assistance of school administrators and health facility officials in the selected wards, who helped identify potential participants. Local leaders then assisted in locating participants' homes and guided the researchers to these residences. A brief explanation of the study objectives was given to both parents and other guardians to establish rapport and build confidence among parents, teen mothers and the investigator.

Data collection tool

Data were collected through in-depth interviews, using an interview guide (30), by the first author and a research assistant. The interviews were conducted at the adolescents' parental homes in private locations. The questions on the interview guide inquired about the reasons for becoming pregnant as experienced by teenage mothers who dropped out of school; challenges related to teenage pregnancy and parenting as experienced by teenage mothers who dropped out of school; and the ways through which teenage mothers who dropped out of school coped with the situations of teenage pregnancy and parenting. In-depth interviews were appropriate because teenage pregnancy is a sensitive topic that requires a safe and private setting for participants to share openly. Using an interview guide provided structure while still allowing flexibility to probe deeper, ensuring nuanced and contextually grounded insights into the lived experiences of teenage mothers who

dropped out of school. A digital recorder and handwritten field notes were used to capture information during in-depth interviews, which lasted between 30 and 45 minutes. Kiswahili language was used as the primary and common language among participants.

Data management and analysis

A thematic analysis approach was employed to analyze the data (30). This method involved examining and categorizing participants' opinions into recurring patterns (themes) within the dataset, to capture aspects that are particularly meaningful in relation to the research question (31,37). The analysis was carried out in three stages: firstly, the line-by-line coding of field notes and transcripts; secondly, the in-depth examination and interpretation of the resultant codes and their categorization into descriptive themes; thirdly, the distillation of the descriptive themes into more abstract analytical themes (Table 1), which are used as the subheadings in the results section.

Table 1: Illustration of thematic analysis process: from text to analytical and overarching themes

Quotes	Codes	Descriptive themes	Analytical themes	Overarching theme
<p>I wish I could stay in the safe hostel, but it is very expensive, and my parents cannot afford it. They need a lot of food and a lot of money, which I could not afford to stay there (Teen mother 17 years old).</p> <p>“We were living in a rented house. Both boys and girls live in the same house, but in separate rooms. During the night, some of us go to the males’ rooms and sleep. At night, some of us would go to the males’ rooms and sleep together. The house we rented was only for students. We were very free to do anything (Teen mother, 18 years old)</p> <p>“My mother used to give me 5 kg of rice, a small amount of beans, enough maize flour, small fish and half a litre of cooking oil, but they were finished before the end of the term. One man who was not a student supported me, and one day he asked me to have sex with him. I failed to resist because he was helping me; whenever we met, he</p>	<p>Safe hostel, Safe hostel is expensive,</p> <p>Affordable but unsafe hostel,</p> <p>Girls and boys living in the same house, different rooms,</p> <p>Freedom to do anything</p> <p>A small quantity of rice,</p> <p>A small amount of beans,</p> <p>A small amount of fish</p>	<p>A safe hostel is unaffordable to girls from poor families</p> <p>Affordable hostels expose girls to sex</p> <p>Parents provide insufficient food staff</p> <p>Excessive freedom</p>	<p>At the Interpersonal [family] Level:</p> <p>Inability of the families to afford a safe residence at school</p> <p>Insufficient food</p>	<p>Structural Poverty and Unregulated Housing in School Neighbourhoods</p>

<p>gave TZS 5000. So we continued with love affairs till I got pregnant”</p> <p>Despite the claim that lodging is free, families are nonetheless solely responsible for supplying food. Some parents cannot afford the five tins of maize, five tins of rice, and five tins of beans required each term to remain in a school dormitory. Because of the perceived increased cost of living in school-owned dorms, vulnerable students are pushed to live off campus.</p>	<p>A small amount of cooking oil,</p> <p>Sought support from a man</p> <p>Failure to resist pressure for sex</p> <p>Free lodging</p> <p>No free food at school</p> <p>Parents contribute food stuff</p> <p>High cost of living in school dormitories</p> <p>Opting to live off campus</p>	<p>Students are not required pay any fee for accommodation in school dormitories</p> <p>Parents are solely responsible for supplying food to sustain their daughters</p> <p>The government is not allocating funds for food</p>	<p><i>At the Societal Level:</i></p> <p>Inability of the government to provide both accommodation and food</p>	
<p>“At night, some of us would go to the males’ rooms and sleep together. The house we rented was only for students. We were very free to do anything” (Teen mother, 18 years old)</p>	<p>Girls go to boys’ rooms</p> <p>Girls sleep with boys</p> <p>The rented house occupied by students alone</p> <p>Freedom to do anything</p>	<p>Lack of supervision</p> <p>Lack of rules governing the stay of students in the school neighbourhood</p> <p>Excessive freedom</p>	<p><i>At the Community Level:</i></p> <p>Unregulated student housing in school neighbourhoods</p>	

Ethical considerations

Ethical clearance was obtained from the Muhimbili University of Health and Allied Sciences (MUHAS) Institutional Review Board. Permission to conduct the study was also granted by the Regional Administrative Secretary and the Tanganyika district. All participants were informed about the study's purpose, and written consent was obtained before interviews.

For adolescents, the consenting process followed Tanzanian National Institute of Medical Research (NIMR) standards: those aged 16–17 years living alone were considered emancipated minors and could consent independently, while those living with parents/guardians required both parental/guardian consent and child assent.

To minimize psychological distress, several safeguards were implemented: interviews were conducted privately, participants were assured anonymity, and they could skip any uncomfortable questions. If emotional upset occurred, the researcher paused the interview to provide short-term counselling, and persistent distress prompted referral to a mental health clinician. Participants were

fully informed of their rights, including the option to withdraw at any time without consequences.

Findings***Participant's socio-demographic characteristics***

This study included 20 participants from the Tanganyika district, aged 16–19 years, all of whom were school dropout teen mothers. Most had been expelled during secondary school: ten in Form Three, six in Form Two, three in Form One, and one in primary school (Standard Seven). Only one participant was married, while the majority (19) were unmarried. Nearly all were self-employed in small businesses (19 out of 20), with one working as a peasant farmer.

Reasons influencing pregnancy among teenagers

The findings demonstrate that reasons for teenage pregnancies among students are obtained at four levels: individual, interpersonal, community, and societal. The reasons are organized under these broad categories in the form of analytical themes which emerged from the data, as illustrated in Table 2 below:

Table 2: Analytical and Overarching Themes

Level	Analytical Themes	Overarching Themes
Individual Level	<ul style="list-style-type: none"> • Lack of life skills • Lust for sexual intercourse 	Personal Limitations in Self-Management and Sexual Impulse Control
Interpersonal [family] Level	<ul style="list-style-type: none"> • Inability of the families to afford a safe residence at school • Limited ability to afford essential requirements. • Insufficient food 	Structural Poverty and Unregulated Housing in School Neighbourhoods
Community Level	Unregulated student housing in school neighbourhoods	
Societal Level	Inability of the government to provide both accommodation and food	

Individual Level factors

At the individual level, the study revealed that personal limitations in self-management and sexual impulse control, lack of life skills and lust for sexual intercourse influenced the occurrence of adolescent pregnancy. They are described in the sub-sections that follow.

Lack of life skills

Most dropout teen mothers lacked knowledge in life skills, particularly in decision-making, problem-solving, reasoning capacity, and self-esteem. Most participants failed to

answer the questions on life skills, as they either didn't remember when they were taught about life skills or didn't know the subject in which life skills are taught. One of the teen mothers admitted this:

About life skills, honestly, today is my first time to hear, but I only know about school skills (Teen mother, 17 years old).

Due to a lack of knowledge on life skills, most teenagers seemed to have had poor decision-making, as it was easy for them to

be persuaded to enter into love affairs. Without life skills, the teens could not firmly say no to sexual advances from older men in the surrounding community or even from their fellow students. One of the teen mothers disclosed how a man maliciously persuaded her:

He said I love you, and I don't want to play with you, and I'm just waiting until you finish studying, then I'll marry you. Then I agreed, as you know, for a girl, if a boy said I will marry you we would quickly get convinced (Teen mother, 19 years old).

Lust for sexual intercourse

Some of the teen mothers stated clearly that poverty and lack of life skills were not major reasons for their engagement in sexual affairs. Instead, they said they had an internal drive for sex, and as a result, they were sexually attracted to men who eventually impregnated them. This was well captured from a remark made by one of the teen mothers.

...when I saw him, my body became sexually aroused, and the man also told me that he similarly became sexually aroused when he looked in my eyes. From that day, we developed the

relationship and started dating (Teen mother, 17 years old)

Interpersonal level factors

At the interpersonal level, the study revealed factors related to poverty within the teen's parental family, namely: insufficient food; limited ability to afford essential requirements; and inability of the families to afford a safe residence at school. They are presented in the sub-sections that follow.

Insufficient food

Insufficient food was mentioned as one of the poverty-related reasons that lead to teenage pregnancy. It was elaborated that parents have a responsibility to provide food to their daughters so that they can be food secure when living in rented rooms. However, it was reported that some parents give their students insufficient food. Consequently, sometimes food gets finished before the year ends, so they decide to look for help from fellow students, including male ones and even from the other guys who are not students, since their parents' homes are very far and there is no communication. Consequently, they engage in sexual relationships to get food, which leads to teenage pregnancy. This was revealed by one of the participants;

My mother used to give me 5 kg of rice, a small amount of beans, and half a litre of cooking oil, but they were finished before the end of the term. One man who was not a student supported me, and one day he asked me to have sex with him. I failed to resist because he was helping me (Teen mother, 19 years old).

Limited ability to afford essential requirements

It was reported that some parents were financially incapable of providing their daughter with essential needs such as pads, oils, clothes and pocket money. Due to this, some adolescents decided to initiate sexual relationships with guys who are not students and can give them money to fulfil their requirements. They get the requirements, but they end up becoming pregnant. This was revealed by one of the participants.

My parents provided my requirements, but they were not sufficient. When the requirements were finished, I asked them to give me another, but they did not. I found a man who gave me twenty-thousand-shilling severly time I slept with him (Teen mother, 18 years old).

Inability of the families to afford a safe residence at school

The participants attributed the occurrence of teenage pregnancy to the inability to afford a safe residence. They inevitably stayed in risky residences since most secondary schools are located far away from the students' parental homes (about 75 kilometers). Although the schools have constructed hostels, the participant reported that parents preferred renting rooms in the neighbourhood. Some students rent rooms owned by the community members living close to the schools, as they complained that the living costs are on the higher side in the school-owned hostels. They elaborated that for a student to stay at the school hostel, the parent has to contribute five tins of maize, five tins of rice, and 5 tins of beans, which were to be consumed in one term of (5-6) months.

Consequently, it was reported that parents perceived that the cost for their daughters to stay in the school-owned accommodation is unaffordable, and opted to rent rooms in school neighbourhoods, which are relatively cheaper. It was revealed that those cheap residences in the community were risky in the sense that female and male students were living in the same house, though in different rooms. It is easy for them to seduce each other and engage in sexual intercourse, which

leads to a teenage pregnancy. This was revealed by one of the participants:

We were living in a rented house. We were both boys and girls living in the same house but in different rooms, at night; some of us were going to the boys' rooms and sleeping together. The house we rented was occupied solely by students. We were very free to do anything (Teen mother, 16 years old).

Community level factors

At the community level, participants' responses implied that unregulated student housing in school neighbourhoods serves as a driver of sexual permissiveness. As described, boys and girls lived in the same rented house without adult oversight or clear rules governing conduct. Because these hostels were occupied solely by students and lacked responsible guardians, there were no mechanisms to enforce discipline. This freedom, described by the participants as being "very free to do anything," reflects an unsafe living arrangement that normalized sexual permissiveness. Such unmonitored environments increase adolescents' vulnerability to early sexual activity, thereby heightening the risk of unintended sexual consequences, including teenage pregnancy.

Likewise, at the societal level, the participants' responses implied that teenage pregnancy and consequent school dropout were perpetuated by poverty at the national level. A specific analytical theme that emerged is the government's inability to afford both accommodation and food in its schools. It was elaborated that although the schools have constructed hostels, parents preferred renting rooms in the neighbourhood. That is, some students rented rooms owned by the community members living close to the schools, as they complained that the living costs are on the higher side in the school-owned hostels. They said that while accommodation was free, the food was not. They elaborated that for a student to stay at the school hostel, the parent has to contribute five tins of maize, five tins of rice, and 5 tins of beans, which were to be consumed in one term of (5-6) months. This systemic failure of the government was succinctly narrated by one of the participants.

Despite the claim that lodging is free, families are nonetheless solely responsible for supplying food. Some parents cannot afford the five tins of maize, five tins of rice, and five tins of beans required each term to remain in a school dormitory. Because of the

perceived increased cost of living in school-owned dorms, vulnerable students are pushed to live off campus (Teen mother, 18 years old).

Discussion

This study examined the reasons influencing teenage pregnancy among adolescent mothers who had dropped out of school, most of whom were expelled during secondary education, particularly in Form Three. The findings show that teenage pregnancy is a multifaceted issue shaped by individual, family, community, and societal factors. Individual factors included limited life skills and lust for sexual intercourse; family factors centered on poverty and financial instability; community factors involved unregulated student housing that increased vulnerability; and societal factors reflected systemic inadequacies in government provision of food and accommodation in school hostels. These key findings are subsequently discussed in detail in the sections that follow.

At the individual level, this study identified lack of life skills as a key contributor to teenage pregnancy. Adolescents with limited competencies in critical thinking, decision-making, problem-solving, and self-awareness reported difficulty resisting sexual advances

from older men in surrounding communities as well as from fellow students. This finding is consistent with evidence from other studies in sub-Saharan Africa, including research conducted in Kenya, which similarly reported that inadequate life skills increase adolescents' vulnerability to early and unintended pregnancy (38). In the present study, this observation is further reinforced by the fact that nearly half of the participants (9 out of 20) became pregnant during the early years of secondary education - a developmental stage at which life skills are still emerging and may not yet be firmly established. Together, these findings suggest that delayed acquisition of life skills heightens susceptibility to sexual risk-taking during adolescence.

In contrast to much of the existing literature, some participants in this study explicitly rejected poverty and lack of life skills as primary drivers of their sexual engagement, instead attributing their experiences to a strong internal sexual drive. The inclusion of this perspective strengthens the current study, as most African studies on teenage pregnancy have predominantly emphasized structural and socioeconomic determinants, often overlooking adolescents' own acknowledgment of sexual desire as a

motivating factor (2,39–41). By capturing this underexplored dimension, the study contributes a more nuanced understanding of adolescent sexuality that recognizes teenagers not only as passive victims of circumstance but also as active agents with sexual feelings and motivations.

From a policy and programmatic perspective, these findings suggest that interventions focusing solely on poverty alleviation or provision of basic needs, while necessary, are insufficient to prevent teenage pregnancy. There is a clear need for comprehensive, age-appropriate sexuality education that goes beyond risk avoidance to include discussions of sexual desire, self-regulation, and healthy coping mechanisms. Schools and families should be supported to deliver structured life skills education early in secondary schooling, before adolescents are exposed to heightened sexual risks. Furthermore, policies should promote adolescent-friendly reproductive health services that enable both in-school and out-of-school adolescents to access contraception without stigma or barriers. Complementary strategies, such as structured participation in sports and other extracurricular activities, may also provide socially acceptable outlets for managing sexual energy and reducing risky sexual

behavior (41,42). Collectively, these measures align with a rights-based and realistic approach to adolescent sexual and reproductive health.

Moreover, the findings of this study demonstrate that household poverty is a major determinant of teenage pregnancy among female students. Participants consistently described difficulties in affording safe accommodation, which forced them to rent rooms in overcrowded and poorly regulated settlements surrounding schools. These settings were frequently accessed by men who were relatively better off economically and who exploited the material deprivation of adolescent girls to satisfy their sexual desires. Similar patterns have been documented in previous studies across sub-Saharan Africa, where economically disadvantaged adolescents are disproportionately exposed to predatory relationships due to structural inequalities (9,14,39,40). In this study, such exploitative dynamics emerged as a central pathway linking poverty to unintended pregnancy.

Poverty also manifested through food insecurity, particularly among students living away from their parental homes. Parents from economically constrained households

struggled to provide consistent food supplies, leaving adolescent girls vulnerable to engaging in sexual relationships as a survival strategy. This finding corroborates earlier research from Tanzania and other East African countries, which has repeatedly shown that food insecurity is a powerful driver of transactional and coercive sexual relationships among school-aged girls (14,39,40). The consistency of this evidence across settings underscores the entrenched role of household-level deprivation in shaping adolescent reproductive outcomes.

Beyond food insecurity, the inability to afford basic personal and educational necessities - such as sanitary pads, soap, body oils, clothing, and pocket money - was identified as another critical risk factor. Participants reported engaging in transactional sex to obtain these items, highlighting how even modest material needs can expose girls to sexual exploitation. This aligns with findings from studies conducted in Katavi (33) and Dodoma (39), as well as evidence from other low- and middle-income countries (9,40), which emphasize that poverty-driven deprivation at the family level remains a central driver of teenage pregnancy. These findings suggest that interventions narrowly focused on food or

school fees alone may be insufficient; rather, comprehensive material support that addresses girls' dignity, hygiene, and daily subsistence is essential.

At the community level, the study revealed that unregulated student housing near schools created unsafe and poorly supervised environments that normalized sexual permissiveness. The absence of adult oversight, clear rules, and protective structures facilitated unrestricted interaction between boys and girls, increasing exposure to early sexual activity and unintended pregnancy. Similar observations have been reported by Mtopa and Mbirigenda (43), who found that excessive freedom in street-rented housing contributed to sexual permissiveness and risky sexual behavior among students. These findings point to the importance of community-level governance, including regulation, monitoring, and supervision of student accommodation in school neighborhoods.

At the societal (national) level, the study highlights systemic weaknesses in government capacity to adequately finance accommodation and food provision in public secondary schools. While recent initiatives, such as the construction of girls' dormitories

in former day schools, represent important progress, these efforts are undermined by the lack of accompanying food support. Although accommodation is officially described as “free,” students are required to bring prescribed quantities of foodstuffs, placing a substantial burden on poor households. For families unable to meet these demands, adolescent girls become exposed to heightened risks of exploitation as they seek alternative means to secure food. Similar limitations in government capacity to protect schoolgirls from pregnancy have been reported in Kenya (44), suggesting that this challenge is not unique to Tanzania but reflects broader structural constraints within low-resource education systems.

Conclusions

This study demonstrates that teenage pregnancy is not the result of isolated individual choices but emerges from the interaction of individual vulnerabilities, family-level deprivation, community-level environmental risks, and broader structural shortcomings. The convergence of limited life skills, economic hardship, unsafe and unregulated student housing, and inadequate institutional support creates contexts in which adolescents are exposed to heightened sexual risk. These findings underscore the

need for multilevel prevention strategies that move beyond individual behavior change to address structural and environmental determinants. Strengthening life skills education, improving family socioeconomic support, regulating student housing in school neighbourhoods, and expanding affordable and safe school-hostel accommodation are critical for reducing teenage pregnancy risk. Addressing teenage pregnancy, therefore, requires coordinated action across sectors, including education, social welfare, and housing policy.

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write-up. PL provided technical support to support data analysis, improve the contents of the findings in accordance with the topic, and read and prepared the final manuscript.

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