

The Challenge of Teenage Pregnancies in Tigania Central Sub County, Meru County, Kenya: Insights into its Cultural Determinants

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Abstract: **Background:** Teenage pregnancy has harmful consequences on the health and wellbeing of adolescent girls. It can lead to severe complications during delivery which can result into their own morbidity and mortality and that of their infants. Though a high prevalence of teenage pregnancies was noted in Tigania Central Sub-County in Meru County, the cultural factors behind the trend were unclear. **Aim:** To examine the cultural factors influencing teenage pregnancies in Tigania Central Sub-County, Meru County. **Methods:** We conducted an analytical cross-sectional study involving 142 teenage girls and seven community health promoters (CHPs) from Tigania Central Sub-County in Meru County. The teenage girls were recruited using cluster and simple random sampling methods while the CHPs were selected using purposive sampling method. The teenage girls responded to a researcher-administered structured questionnaire while the CHPs responded to an interview guide. The two study tools were duly pretested. Quantitative data were analyzed using descriptive measures that included percentages and frequencies. We also used bivariable logistic regression analysis and odds ratios to determine the cultural variables that influenced teenage pregnancies as the outcome variable. Quantitative data analysis was performed using SPSS version 28. Qualitative data was analyzed using thematic analysis with findings reported verbatim. Appropriate ethical principles were also observed. **Results:** A total of 142 teenage girls and 7 CHPs took part in the study, 80(56.3%) of whom indicated that they had ever been pregnant. Early marriages ($\beta = 2.587$, $p = 0.000$, $OR = 13.29$), adverse peer influence ($\beta = 1.381$, $p = 0.013$, $OR = 3.98$), exposure to sexual abuse or violence ($\beta = 1.327$, $p = 0.001$, $OR = 3.77$) and involvement in cultural initiation ceremonies ($\beta = 0.824$, $p = 0.017$, $OR = 2.28$) were the cultural factors found to be associated with teenage pregnancies in the sub-county. **Conclusion:** Teenage pregnancies were prevalent among teenage girls in the study setting and cultural factors were major drivers. Everyone in the community should get involved in the fight against teenage pregnancies.

Keywords: Adolescence, teenage, teenage pregnancy, risky sexual behaviours, cultural factors.

1. Introduction

The teenage period is an important growth period for young girls and it is when they are maturing developmentally including physically, socially and psychologically (Bitew et al., 2023). Preventing pregnancy and pregnancy-related mortality and morbidity among teenage girls is foundational to achieving

positive health outcomes across the life course and is imperative for achieving the sustainable development goals related to maternal and newborn health (Maharaj, 2022). Hence, action is needed to address teenage pregnancy cases especially given that teenage pregnancy has detrimental health, social and economic consequences to young girls and to their families and communities including increased risk of morbidity and death to the teenage mothers and their newborns (Sayegh, 2021). Increased risk of early marriages, impaired educational progress and social stigma, isolation and physical abuse are other unacceptable effects of teenage pregnancy (Irwin & Shafer, 2021; Olenja et al., 2020).

Globally, every year, an estimated 21-24 million adolescents become pregnant representing one fifth of all pregnancies (WHO, 2023). Developing countries in parts of Asia, Latin American and Caribbean (LAC) and sub-Saharan Africa (SSA) bear the greatest burden of adolescence pregnancy (WHO, 2023). Global statistics also indicate that at least 12 million adolescent girls give birth every year, mostly in low- and middle-income countries (LMICs), with the SSA and LAC regions having the highest adolescents' fertility, pregnancy and birth rates in the world (WHO, 2023). Sustainable development goal number 3 (SDG 3) aims to end preventable deaths of mothers, newborns and children under 5 years of age, with all countries aiming to reduce maternal mortality ratio to less than 70 per 100,000 live births; neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births by 2030 (WHO, 2023). It also seeks to ensure universal access to sexual and reproductive health (SRH) services, including family planning, information and education, and the integration of reproductive health into national strategies and programmes (WHO, 2023).

Evidence from SSA shows that approximately 50% of pregnancies among 13-19-year-olds are unplanned, unwanted, or untimed (Ahinkorah et al., 2023). About 55% of these unintended pregnancies end in abortions which are often unsafe in most of the SSA countries (WHO, 2023). Though differences exist in teenage pregnancy rates among the different SSA countries and even within regions in individual countries, it is apparent that teenage pregnancies are highly prevalent in most

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of the SSA countries (Ahinkorah et al., 2023; Maharaj, 2022). Research evidence indicates that a number of factors are linked to teenage pregnancies including personal, sociodemographic, familial and relational traits, poverty and threats to livelihood, social and cultural norms and practices of early sexual experience and child marriages, gender based sexual abuse and violence, poor parenting, parents' illiteracy, barriers to access and use of contraceptives among adolescents, peer pressure, young girls' lack of autonomy in decision-making within sexual relationships, religion, legal gaps and lack of or low educational status have been linked to teenage pregnancy (Gunawardena et al., 2019; Kassa et al., 2018). Evidence also shows that even within countries, there are enormous variations, with the teenage pregnancy burden significantly higher in rural and economically deprived areas (Maharaj, 2022).

Kenya has initiated various efforts to eliminate teenage pregnancies (Njogu 2019) These include the adoption of the National Adolescent Sexual and Reproductive Health Policy - which supports the provision of youth friendly services to young persons to empower and facilitate them to make the right choices pertaining to their sexuality; the Kenya Youth Development Policy which seeks to improve the social and economic wellbeing of youth in the country by removing obstacles that impede their participation in social and economic activities; a return to school policy which allows girls to return to school and continue with their education after childbirth; various programs such as those advocating for adolescent and sexual reproductive health issues, upscaling guidance and counselling services in schools, provision of sanitary towel to girls both in and out of schools and gender based violence rescue centres; and various legislations such as the Children Act (2002), Sexual Offences Act (2006), Prohibition of Female Genital Mutilation Act (2011), and the 2010 Constitution of Kenya (Constitution of Kenya, 2010). Despite all these initiative, teenage pregnancies remain prevalent in the country which clearly signifies that more needs to be done especially in the area of cultural dimension of the problem (Olenja et al., 2020).

In Kenya, 25% of the population is between the ages of 13 and 19 (KNBS, 2023). These young people confront enormous obstacles as they enter adulthood, just as in other regions of Africa and the rest of the globe (Olenja et al., 2020). Current data from the 2022 Kenya Demographic and Health Survey (KDHS) released by the Kenya National Bureau of Statistics (KNBS) reveals that teenage pregnancies remain an area of concern for the country (KNBS, 2023). The survey shows that teenage pregnancy rate in Kenya was 15% in 2022. However, huge variations exist with the highest rates of teen pregnancy recorded in the counties of Samburu at 50%, West Pokot at 36%, Marsabit at 29%, Narok at 28%, and Meru at 24% while Nyandarua and Nyeri counties reported the lowest rates at 5% each (KNBS, 2023). Meru County is one of the counties with a high proportion of teenage pregnancies in Kenya (KNBS, 2023). The 2022 KDHS report indicated that the county had a teenage pregnancy rate of 24% which was significantly higher than the national average of 15% (KNBS, 2023).

Tigania Central Sub-County in Meru County led in the

number of teenage pregnancies in Meru County with statistics from the Meru County's Health Department indicating that almost 5 out of 10 teen girls in the sub-county become pregnant at least once before turning 20 (Meru County Department of Health Services, 2023). This was also shown by data from Tigania Central Sub-County which showed that pregnant teenage girls made up 44.3% of all its antenatal care (ANC) clients in 2022 (Tigania Central Sub-County ANC Records, 2022). This clearly illustrated a challenge with teenage pregnancies in Tigania Central Sub-County. However, the cultural factors behind this trend were unclear hence our study.

2. Methods

Study Design: We performed a cross-sectional analytical study which helped us examine the cultural factors that influenced teenage pregnancies in the study setting.

Study Area: We carried out in Tigania Central Sub-County in Meru County, Kenya. Tigania Central is a sub-county of Meru County and is a proposed parliamentary constituency. It is the smallest in size among the sub-counties of Meru County. Latest statistics from the 2022 KDHS indicated that the sub-county had an estimated population of 17,121 of which 8,638 were females of reproductive age with 30% (n = 2,592) being teenage girls. The incidence of teenage pregnancy in the sub-county was 11.9% according to the 2022 KDHS. Tigania Central Sub-County has three wards namely Mikinduri, Kiguchwa and Thangatha. We conducted the study in health facilities in the sub-county which included Mikinduri Sub-County Hospital in Mikinduri Ward, Kiguchwa Health Centre in Kiguchwa Ward and Kunati Health Centre in Thangatha Ward. The three health facilities were purposively selected as the study areas as it was where teenage girls in Tigania Central Sub-County sought various sexual and reproductive health services.

Study Population and Sample: All teenage girls aged between 13 and 19 years, with or without children, from Meru County's Tigania Central Sub-County and nine community health promoters (that is, 3 each from Mikinduri, Kiguchwa and Thangatha wards) formed part of the study population. An aggregate of 161 teenage girls and 9 community health promoters from Tigania Central Sub-County, Meru County were sampled. The teenage girls were recruited using cluster and simple random sampling methods while the CHPs were selected using purposive sampling method.

Inclusion and Exclusion Criteria: teenage girls aged 13 to 19 years and adult community health promoters who resided in the sub-county and who consented to participate were included in the study. However, teenagers who were away from home or inaccessible in the study locale at the time of the study such as those in boarding schools or those visiting far away relatives as well as teenagers and community health promoters who declined to participate in the study were excluded.

Research Instruments: We utilized a structured questionnaire and an interview guide to collect the study data. The questionnaire was responded to by the teenage girls while the interview guide was for the community health promoters. Both tools were researcher administered.

Data Collection: Teenagers who accepted to take part in the

study were given participant assent (for those aged below 18 years) or consent form (for those aged 18 years and above) and where necessary parent consent form (for those aged below 18 years and residing with their parents/guardian) while the community health promoters signed an informed consent form. Interviews with the participants were undertaken at their respective wards in the selected health facilities in a confidential manner. Interviews with the community health providers were audio-recorded. At the end of each data collection session, we checked to ensure that the study tool had been completely filled. Each day, 9 to 10 questionnaires were given out while a single interview was held with the community health providers every two days. Three interpreters helped translate the questionnaire into the local language, using the forward backward translation, for ease of administration to those participants not conversant with the national language. The data collection exercise was performed during the daytime between 8 am and 4 pm. The entire data collection exercise took 2 weeks.

Data Analysis and Presentation: The quantitative data, derived from the questionnaires, was analyzed as per the study objectives, utilizing descriptive statistics that included frequencies and percentages. The data was further subjected to bivariable logistic regression analysis to establish association between the independent variables and the dependent variable. The odds ratios were also used to determine the likelihood of the independent variable influencing the dependent variable. The level of statistical significance was at 95% confidence interval which implied that a p-value of ≤ 0.05 denoted presence of a statistically significant relationship while p-values > 0.05 denoted that the existing relationship between the study variables was not statistically significant. Results of the study were presented in the form of tables, charts and graphs. The analysis was performed using the Statistical Package for Social Science (SPSS) version 28. Qualitative data was probed via thematic-analysis. This followed clear steps relating to recognizing, discerning as well as conveying ascertained themes as espoused by Braun and Clarke (2006). The approach applied was inductive. The steps that were utilized included (a) transcribing together with reviewing of the taped discussions numerous times to ensure the accuracy of the transcriptions and to achieve familiarity with the data; (b) developing of initial codes for the transcribed data; (c) categorization of the codes to potential themes followed by creating a theme map as part of ensuring that derived themes matched earlier developed codes; (d) continued appraisal of the themes till; (e) suitable definitions and labels of themes and subthemes were created, and (f) compiling and reporting of the qualitative study findings. Probing of the qualitative data was accomplished using NVivo v.14. Qualitative data findings were reported verbatim. The two data sets (qualitative and quantitative) were triangulated, at the interpretation and reporting level, through narrative integration. We utilized the contiguous approach of narrative integration in which the quantitative and qualitative results are presented together in a single report based on the study aims.

Ethical Considerations: Chuka University Institutional Ethics Review Committee approved the study

(NACOSTI/NBC/AC-0812). Research permit was issued by NACOSTI. Collection of the data was authorized by the Sub-County Health Coordinator. The study participants offered their informed assent or consent and where applicable parental consent to take part in the study. The information gathered was treated with utmost confidentiality and was processed and reported anonymously. Ethical principles of voluntary participation, autonomy, anonymity and confidentiality, non-maleficence, beneficence and justice were observed.

3. Results and Discussion

A. Demographic Profile of the Teenage Girls

An aggregate of 142 teenage girls took part in the study. The results on their background information are shown in Table 1.

Table 1
Demographic attributes of the teenage girls

Attribute	Category	Frequency (n)	Percent (%)
Age	13 - 15 years	36	25.4
	16 - 19 years	106	74.6
	Total	142	100.0
Schooling status	Primary	30	21.1
	Secondary	52	36.6
	College	15	10.6
	Not in school	45	31.7
	Total	142	100.0
Whether married?	Yes	53	37.3
	No	89	62.7
	Total	142	100.0
Religion	Christianity	136	95.8
	Islam	6	4.2
	Total	142	100.0

On the teenage girls' age, most (74.6%, $n = 106$) were aged 16 - 19 years while 25.4% ($n = 36$) were aged over 13 - 15 years. Being teenagers, they were best placed to offer their views concerning the factors that influenced teenage pregnancies in the study area as they were the age group affected by the phenomenon being investigated in the current study. Similarly, in studies by Elekeh *et al.* (2021), Bitew *et al.* (2023) and Achiaa (2023), the primary study respondents were teenage girls, same as was in studies by Ibitoye *et al.* (2024) and Kumma *et al.* (2023).

On schooling status of the teenage girls, 36.6% ($n = 52$) were in secondary school, 21.1% ($n = 30$) were in primary school while 10.6% ($n = 15$) were in college. Additionally, 31.7% ($n = 45$) were not in school. This showed that a significant proportion of the teenage girls were at different levels of education. Given that most of the teenage girls were in school, it meant that schools, at the different levels, can be used as an important medium for offering the teenage girls education on sexual and reproductive issues including educating them on the dangers of teenage pregnancy. Similar observations were made by Uwizeye *et al.* (2020) and Shukla *et al.* (2023), with most of the teenage girls who took part being in elementary level of education while a considerable proportion were also out of school.

On whether the teenage girls were married or not, most 62.7% ($n = 89$) said they were not married while 37.3% ($n = 53$) indicated that they were married. This clearly demonstrated

that a significant proportion of the teenage girls suffered early marriages. This also signified that early-marriages among young girls was an issue of concern in the study area. Similarly, in studies by Amoateng et al. (2022) and Baale (2023) in South Africa and Uganda respectively, the proportion of teenage girls who were married was significant. Likewise, a significant proportion of teenage girls that took part in studies by Bedzo and Manortey (2019), Belay et al. (2021) and Habitu et al. (2018) were married.

On religion, majority (95.8%, $n = 136$) of the teenage girls were Christians while few (4.2%, $n = 6$) were Muslims. This denoted the teenage girls predominantly professed the Christian faith. Likewise, in studies by Asare et al. (2019), Kukundakwe (2021) and Chemutai et al. (2022), the participating teenage girls were mostly Christians by religion. In contrast, majority of the teenage girls who took part in studies by Dehesh et al. (2022) and Bitew et al. (2023) were Muslims while in Shukla et al. (2023) most professed Hindu religion.

B. Demographic Profile of the Community Health Promoters

Seven (7) community health promoters also took part in the study as key informants. Results on their demographic characteristics are presented in Table 2.

Table 2

Demographic attributes of the community health promoters			
Attribute	Category	Frequency (n)	Percent (%)
Gender	Female	5	71.4
	Male	2	28.6
	Total	7	100.0
Age	20 - 29 years	1	14.2
	30 - 39 years	3	42.9
	40 - 49 years	3	42.9
	Total	7	100.0
Education level	Primary	1	14.2
	Secondary	3	42.9
	College	3	42.9
	Total	7	100.0

According to Table 2, most (71.4%, $n = 5$) of the community health promoters (CHPs) were female while 28.6% ($n = 2$) being male. Majority of the CHPs were aged 30 years and above with 42.9% ($n = 3$) aged 30 - 39 years and a similar number being aged 40 - 49 years. On education level, 42.9% ($n = 3$) had college education, 42.9% ($n = 3$) had secondary education while 14.2% ($n = 1$) had primary education. Additionally, all the 7 CHPs were married and were all Christians by religion. This indicated that adult male and female CHPs took part in the study though female CHPs were more prevalent. The CHPs had a sound education background, were married and professed Christian faith. Similar demographic profile of community health promoters and social health workers whose views on teenage pregnancies were sought was evident in studies by Amoateng et al. (2022) in South Africa and Baale (2023) in Uganda. Likewise, adult male and female CHPs who were majorly married and with basic education level offered their views on teenage pregnancies in reviews by Habitu et al. (2018) and Belay et al. (2021) in Ethiopia, Ochen et al. (2019) in Uganda alongside Oduor and Kithuka (2020) in Kenya. In all these studies, including the current study, the CHPs were

recruited to offer their expert opinion relating to determinants of teenage pregnancies in their local contexts given their regular engagements with teenage girls and their experience with teenagers' SRH matters.

C. Teenage Pregnancy Among the Teenage Girls

We sought to establish the teenage pregnancy status among the teenage girls who took part in the study. To determine the incidence of teenage pregnancy, the teenage girls were requested to indicate whether they were pregnant or had ever been pregnant. Consequently, the teenage girls were categorized into two groups – teenage pregnancy group and non-teenage pregnancy group. The teenage pregnancy group included those currently pregnant and those who had ever been pregnant while the non-teenage pregnancy group included teenage girls who had never been pregnant. The results are illustrated in Figure 1.

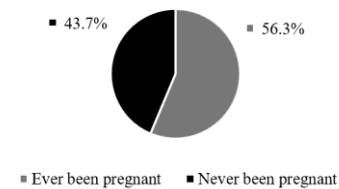


Fig. 1. Teenage pregnancy among the teenage girls

From the findings shown in Figure 1, over half (56.3%, $n = 80$) of the teenage girls indicated that they had ever been pregnant while 43.7% ($n = 62$) said they had never been pregnant. This clearly illustrated that most of the teenage girls who took part in the study had experienced teenage pregnancy.

Teenage pregnancies as a serious and persistent challenge affecting many teenage girls in the study area also emerged as a key theme among discussions with the community health promoters. The CHPs unanimously acknowledged that a significant proportion of young girls in the area suffered teenage pregnancies, as clearly demonstrated in the following few excerpts;

“Teenage pregnancy is a serious problem here. Way too many young girls who should be in school get impregnated in our community and it’s a matter of serious concern.” Ann*

“In my work as a community health promoter, I have come to realize just how big a problem, teenage pregnancies are in this community. It’s disheartening that so many teenage girls are affected.” Lucy*

“To be honest, to say we have a problem with teenage pregnancies in our community is a huge understatement. This is a serious challenge here as the number of young girls affected is significant and is likely to even increase if urgent interventions to address this scourge are not taken.” Dan*

“I do agree that a significant proportion of teenage girls in our community do get pregnant. It’s a challenge we are all working to address.” Alice*

“I cannot lie and there’s no hiding in this. We do have a serious problem with teenage pregnancies in our community here to the extent that it’s worrying.” Chloe*

The findings signified that teenage pregnancies were common in Tigania Central Sub-County within Meru County, Kenya. The findings corroborate those of the 2022 Kenya Demographic and Health Survey (KDHS) which identified Meru County as one of the counties with a high prevalence of teenage pregnancies as reported by the KNBS (2023). Likewise, in a study conducted in Ghana, Achiaa (2023) reported the incidence of teenage pregnancies among surveyed teenage girls was high. Baale (2023) in a study conducted in Uganda also found that teenage pregnancies were common among teenage girls attending a local healthcare facility. A high prevalence of teenage pregnancy among teenage girls was also reported in Ethiopia in studies by Belay et al. (2021), Bitew et al. (2023) and Kumma et al. (2023). Teenage pregnancies were also noted to be highly prevalent among teenage girls in Kajiado West Sub-County in Kenya as reported by Olenja et al. (2020) with a similar observation made among teenage girls in Kenya’s Nyatike Sub-County in Migori County as established by Oduor and Kithuka (2020). Other studies which reported a significant proportion of surveyed teenage girls as having experienced teenage pregnancy included those by Ochen et al. (2019) and Baale (2023) in Uganda; Elekeh et al. (2021) in Nigeria; Uwizeye et al. (2022) in Rwanda; Ali et al. (2022) in Pakistan; Tabei et al. (2021) in Philippines and Shukla et al. (2023) in India. It was therefore evident that teenage pregnancy was a widespread problem across numerous and diverse settings in Africa and beyond and hence remained a subject of grave concern across the globe.

D. Cultural Factors Associated with Teenage Pregnancies

We sought to determine cultural factors that influenced teenage pregnancies in Tigania Central Sub-County, Meru County. Results are as described in the subsequent subsections.

1) Perception on Gender Equality

To ascertain the influence of gender roles on teenage pregnancies, the teenage girls were asked whether they felt that both genders were viewed equally in their society. Results are presented in Figure 2.

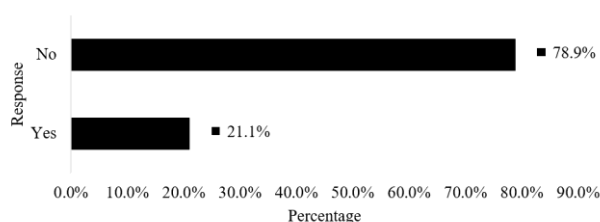


Fig. 2. Whether the teenage girls felt that both genders were viewed equally in their society

According to the findings in Figure 2, majority (78.9%, $n = 112$) of the teenage girls shared the view that males and females were not viewed equally in their culture while 21.1% ($n = 30$) were of contrary opinion. Asked to elaborate, they pointed to

the differences in traditional gender roles for girls and boys in their community. The girls observed that, in their community, boys were perceived as being more valuable than girls and that often girls were relegated to undertaking household-based roles while the boys were kept in school to study. The girls also noted that, even when taken to school alongside their brothers, they were still expected to perform family caring activities such as cooking and washing and to serve the male folk in the family. The girls acknowledged that they felt less empowered than their male counterparts and felt that girls held a disadvantaged social position in their community.

The findings were supported by responses offered by the community health promoters who also attributed teenage pregnancy cases in the study area to glaring gender inequality between sons (or boys) and daughters (or girls) in the community where girls/daughters held a disadvantaged social position. As a consequence of gender roles based on cultural traditions and norms, lesser emphasis was placed on education of daughter/girl child compared to education of the boy child (or sons). Often, teenage girls were relegated to performing household-based roles such as cooking and washing, being home careers and at the service of men and which often left them less empowered. The disempowerment in turn leads to the teenage girls being at a vulnerable position which can easily result into early unintended pregnancies. This is clearly demonstrated in the following few excerpts;

“I feel that the girl child is not given the same prominence as a boy child in our community. This places the girls in a vulnerable position resulting in some getting pregnant at an early age.” Mary*

“I strongly agree that there are inequalities between sons and daughters which are perpetuated by our culture with more emphasis placed on the welfare of sons than daughters. This in turn perpetuates harmful practices like FGM, early marriages and sexual abuse against women and young girls increasing the chances for teenage pregnancy among the teenage girls.” Alex*

“Part of the problem with teenage pregnancies in our community is due to the lack of voice among women and girls. I strongly feel that, as women, we are not adequately empowered to stand for our rights including our SRH rights.” Ann*

“How can the rampant teenage pregnancy rates go down when cultural traditions and norms tend to favor boys over girls in our community? We must accept that existing gender inequalities are a significant contributor to the prevailing scourge of teenage pregnancies.” Alice*

It was therefore evident from the findings that gender roles deeply ingrained in cultural traditions and norms alongside gender inequalities that disempower and disadvantage girls while empowering the boys were a significant predictor of teenage pregnancies among teenage girls in Tigania Central Sub-County. Similar observations were made in India, in which

a disadvantaged social position where girls are perceived as being valuable only when they are serving men and hence being relegated to household-based roles also served to exacerbate the teenage pregnancy crisis in India as reported by Shukla et al. (2023). Worku et al. (2021) in a study conducted in the East African region also noted that the odds of teenage pregnancy among adolescent girls who were spouse/head within the family were found to be significantly higher compared to among adolescent girls who were just a daughter. On their part, Mutanana and Mutara (2021) equally observed that a significant proportion of teenage girls in Zimbabwe cited engaging in family caring activities such as cooking, washing, child caring and the pressure to demonstrate their value and fertility as women as a reason as to how they got pregnant at an early age. In a study exploring the correlates of teenage pregnancy in Kenya, participants unanimously agreed that traditional gender roles did influence the likelihood of teenage pregnancy among adolescent girls in the county as reported by Musyoki and Kisimbii (2019). Olenja et al. (2020) also established that gender roles based on traditional norms did also contribute to teenage pregnancies among young Maasai girls in Kenya, hence calling for more concerted efforts towards empowerment of women and the girl child. Achiaa (2023) and Mezmur et al. (2021) did also identify gender roles, norms and expectations as being a key driver of early and unintended pregnancies among adolescent girls in Ghana and Ethiopia respectively.

2) Early Marriages

From the teenage girls' demographic profile findings (Table 1), it was evident that, though most (62.7%, $n = 89$) of the teenage girls were not married, a significant proportion of the teenage girls were married (37.3%, $n = 53$). Hence, the problem of early marriages among teenage girls was evident in the study area. Further, to ascertain the proportion of the teenage girls that had experienced teenage pregnancy or not on the basis of their marital status, we performed cross tabulation between the teenage girls' marital status and teenage pregnancy, results of which are presented in Table 3.

Table 3
Cross-tabulation results - teenage marital status vs teenage pregnancy

		Ever been pregnant?		Total
		Yes	No	
Are you married?	Yes	47(88.7%)	6(11.3%)	53
	No	33(37.1%)	56(62.9%)	89
Total		80	62	142

From Table 3, of the teenage girls that were married, majority had experienced teenage pregnancy (88.7%, $n = 47$). However, among teenage girls that were not married, the proportion that had experienced teenage pregnancy was significantly lower at 37.1% ($n = 33$). Further, to establish whether there was an association between early marriages and teenage pregnancy among the teenage girls, bivariate logistic regression analysis was performed at 95% confidence interval. Results are presented in Table 4.

Association of early marriages with teenage pregnancy				
Overall model fit				
-2 Log likelihood		154.804 ^a		
Chi-square		39.762		
df		1		
Significance level (p)		0.000		
Coz & Snell R ²		0.244		
Nagelkerke R ²		0.327		
Regression coefficients				
Variable	Coefficient	Std. Error	Wald	Sig. (p)
Early marriages	2.587	.486	28.351	.000
Constant	2.058	.434	22.544	.000
Odds ratio at 95% confidence interval				
Variable	Odds ratio	95% CI		
Early marriages	13.29	5.13 - 34.45		

a. Variable(s) entered on step 1: early marriages

From Table 4, a logistic regression coefficient of 2.587 denoted that there existed a positive relationship between early marriages and teenage pregnancy among the surveyed teenage girls. A p value of 0.000 showed that the relationship was statistically significant. The study therefore concluded that there was a statistically significant positive relationship between the girls' being exposed to early marriages and teenage pregnancies. An odds ratio of 13.29 [5.13 - 34.45, 95% CI] indicates that teenage girls involved in early marriages were 13.29 times more likely to experience teenage pregnancy compared to their counterparts who were not involved or exposed to early marriages. The findings denoted that engagement of young girls in early marriages fostered teenage pregnancies in the study area. The implication of the finding is that early marriages were a significant positive predictor of teenage pregnancies among teenage girls in Tigania Central Sub-County.

The findings were corroborated by responses offered by the community health promoters in interview discussions and who unanimously agreed that early marriages among young girls were a leading determinant of teenage pregnancies in the study area. The CHPs decried the rampant cases of young girls being married off at an early age and which they argued were a major cause of noted teenage pregnancies in the community, as is clearly demonstrated in the following few excerpts;

"In our community, we have many cases of girls being married off while still very young which in turn leads them to become mothers while still teenagers." Lucy*

"It's a shame that in this age, we still have so many girls dropping out of school to get married while still very young. This is no doubt a major driving force of teenage pregnancies in our area." Mary*

"How can we address the teenage pregnancy menace while there are still parents marrying off their teenage daughters? Early marriages are both a cause and result of the teenage pregnancy menace." Chloe*

"I do agree that early marriages among our young daughters contribute significantly to the prevailing scourge of teenage pregnancies in our community." Alex*

“With so many girls getting married off at an early age, teenage pregnancies will remain a challenge. We need to keep our girls in school to keep them away from these early marriages.” Alice*

It was therefore evident that a significant proportion of the teenage pregnancy cases were as a result of early marriages among teenage girls in the sub-county. Early marriages were therefore a significant predictor of teenage pregnancies in Tigania Central Sub-County. Similar observations were made by Yakubu and Salisu (2018) who established early marriages as one of the factors that contributed to teenage pregnancies in a notable way in most of the SSA countries. The findings also agreed with those of Chakole *et al.* (2022) who also identified early marriages as being a leading cause of untimely and unwanted pregnancies among young teenage girls in India. In a review of the causes behind teenage pregnancy in the SSA region, Maharaj (2022) also identified early marriage as a factor with significant influence on cases of pregnancies among teenage girls in the region. Likewise, studies by Shukla *et al.* (2023) in India and Dehesh *et al.* (2022) also pointed to early marriage as being a key predictor of teenage pregnancies. Similar sentiments being shared by Amoateng *et al.* (2022) who also noted that, in South Africa, young girls subjected to early marriages were deprived of economic empowerment and self-efficacy which increased their risk of early pregnancies. In a study carried out in Uganda Chemutai *et al.* (2022) did also establish that the odds of teenage pregnancy were significantly higher among adolescents who were married off at an early age compared to their counterparts not exposed to early marriage. Being married, at an early age, also emerged as a leading predictor of untimely and unwanted pregnancies among teenage girls in Ethiopia as reported by Mezmur *et al.* (2021) and Kumma *et al.* (2023), with similar observations also made in Kenya in studies by Oduor and Kithuka (2020) along with Musyoki and Kisimbii (2019).

3) Being Culturally Initiated

The teenage girls were asked whether they had undergone through cultural initiation events while growing up. Results are presented in Figure 3.

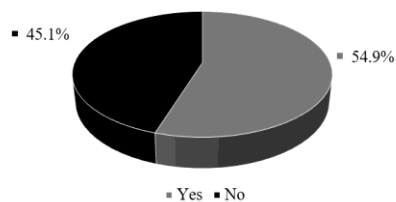


Fig. 3. Whether the teenage girls had undergone cultural initiation

From Figure 3, slightly over half (54.9%, $n = 78$) of the teenage girls indicated that they had undergone cultural initiation ceremonies while growing up while 45.1% ($n = 64$) indicated that they had not undergone any cultural initiation events while growing up. For the teenage girls who answered affirmatively, the cultural initiation ceremony they had gone through was a rites of passage cultural event.

To ascertain the proportion of the teenage girls that had experienced teenage pregnancy or not on the basis of having undergone or not through a rites of passage cultural event, we performed cross tabulation between cultural initiation and teenage pregnancy, results of which are depicted in Table 5.

Table 5
Cross-tabulation results – cultural initiation vs. teenage pregnancy

		Ever been pregnant?		Total
		Yes	No	
Whether they underwent a rites of passage cultural initiation event?	Yes	51(65.4%)	27(34.6%)	78
	No	29 (45.3%)	35 (54.7%)	64
Total		80	62	142

Table 5 indicates that, of the teenage girls that had undergone rites of passage cultural initiation events, a significant proportion had experienced teenage pregnancy (65.4%, $n = 51$). However, among teenage girls who had not undergone the rites of passage cultural initiation events, the proportion that had experienced teenage pregnancy was lower at 45.3% ($n = 29$). The findings therefore indicated that teenage pregnancies were more common among teenage girls taken through cultural-based rites of passage initiation ceremonies compared to their counterparts who did not participate in these events.

Further, to establish whether there was an association between undergoing cultural initiations and teenage pregnancy among the teenage girls, bivariate logistic regression analysis was performed at 95% confidence interval. Results are presented in Table 6.

Table 6
Association of participating in cultural initiations with teenage pregnancy

Overall model fit				
-2 Log likelihood				188.785 ^a
Chi-square				5.781
df				1
Significance level (p)				0.016
Coz & Snell R ²				0.040
Nagelkerke R ²				0.053
Regression coefficients				
Variable	Coefficient	Std. Error	Wald	Sig. (p)
Involved in cultural initiation events	.824	.346	5.673	.017
Constant	.636	.238	7.141	.008
Odds ratio at 95% confidence interval				
Variable	Odds ratio		95% CI	
Involved in cultural initiation events	2.28		1.16 - 4.49	

a. Variable(s) entered on step 1: involved in cultural initiation events

From Table 6, a logistic regression coefficient of .824 denoted that there existed a positive relationship between undergoing rites of passage cultural initiation ceremonies and teenage pregnancy among the teenage girls. A p value of 0.017 showed that the relationship was statistically significant. The study therefore concluded that making teenage girls undergo rites of passage cultural initiation events positively correlated with teenage pregnancies among them. An odds ratio of 2.28 [1.16 - 4.49, 95% CI] indicates that teenage girls who underwent rites of passage cultural initiation ceremonies were 2.28 times more likely to experience teenage pregnancy

compared to their counterparts who did not partake in such events. The findings implied that rites of passage cultural initiation events were linked to teenage pregnancies among teenage girls in Tigania Central Sub-County. The implication of the finding is that cultural initiation ceremonies for teenage girls were a significant positive predictor of teenage pregnancies among teenage girls in Tigania Central Sub-County.

The findings were corroborated by responses offered by the community health promoters who acknowledged that cultural beliefs and traditions such as cultural initiation rites such as FGM positively influenced teenage pregnancy cases in the sub-county. According to the CHPs, these cultural initiation ceremonies were often used as a pathway for initiating young girls into womanhood and to promote other practices such as early marriages all of which perpetuated teenage pregnancies. This is clearly demonstrated in the following few excerpts;

“Part of the teenage pregnancy problem we have here is attributable to cultural initiation rites such as FGM as they serve to initiate the young girls into womanhood. Consequently, some get married off and others begin engaging in sexual activities resulting into teenage pregnancies.” Ann*

“Teenage girls being culturally initiated through traditional practices such as FGM remain an area of concern because initiated girls are less likely to continue with their studies and instead get married off at a young age which leads to them becoming mothers at an early age.” Lucy*

“The community’s cultural beliefs and traditional norms and practices do play a role in perpetrating teenage pregnancies as some parents’ belief that girls should get married to bring more wealth to the family through dowry.” Dan*

“Indeed, cultural beliefs and practices around girls’ initiation rites such as through FGM open the doors for girls getting married off at a young age which in turn leads to teenage pregnancy cases.” Alice*

It was therefore evident that the communities’ cultural beliefs and traditional norms and practices especially those around girls’ initiation practices such as FGM played a significant role in perpetrating teenage pregnancies in Tigania Central Sub-County. It was apparent that girls who underwent cultural initiation ceremonies such as FGM were much more likely to get pregnant at a young age signifying the effect that cultural beliefs and practices had on teenage pregnancy incidence in the sub-county. Similar views were shared by Elekeh *et al.* (2021) who in a study conducted in Nigeria identified retrogressive cultural practices including girls’ initiation ceremonies such as female ‘cut’ as significantly contributing to teenage pregnancy cases in the country. In a study exploring the magnitude of teenage pregnancies and its associated factors in Somaliland, Gensa Geta *et al.* (2023) observed that exposing teenage girls to female genital mutilation as part of cultural initiation ceremonies significantly increased the odds of the girls getting

pregnant at an early age. Similar observations were also made by Habitu *et al.* (2018) who also identified cultural initiation practices including FGM as playing a significant role in perpetuating teenage pregnancies in Northeast Ethiopia. The findings also concurred with those of Indongo (2020) in whose study traditional cultural practices of girls’ initiation to womanhood were found to influence teenage pregnancy rates in Namibia in a significant way, an observation also echoed in a Ugandan study conducted by Kukundakwe (2021). In rural Zimbabwe and Kenya, cultural initiation ceremonies for young girls and particularly FGM were reported to influence teenage pregnancy incidences significantly in studies by Mutanana and Mutara (2021) and Olenja *et al.* (2020).

4) Peer Pressure

The teenage girls were asked whether peer pressure influenced their sexual behaviour. Results are illustrated in Figure 4.

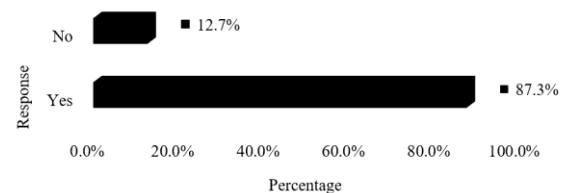


Fig. 4. Whether peer pressure influenced the teenage girl’s sexual behaviour

From Figure 4, majority (87.3%, $n = 124$) of the teenage girls agreed that peer pressure influenced their sexual behavior while 12.7% ($n = 18$) indicated that their sexual behaviour was not influenced by peer pressure. The findings denoted that a considerable proportion of the teenage girls did acknowledge that their sexual behaviour was influenced by peer pressure. To ascertain the proportion of the teenage girls that had experienced teenage pregnancy or not on the basis of the influence of peer pressure on their sexual behaviour, we performed cross tabulation between peer pressure influence and teenage pregnancy, results of which are presented in Table 7.

		Ever been pregnant?		Total
		Yes	No	
Peer pressure influence?	Yes	75(60.5%)	49(39.5%)	124
	No	5(27.8%)	13(72.2%)	18
Total		80	62	142

From Table 7, the findings indicate that, of the teenage girls whose sexual behaviour was influenced by peer pressure, most had experienced teenage pregnancy (60.5%, $n = 75$). However, among the teenage girls whose sexual behaviour was not influenced by peer pressure, the proportion that had experienced teenage pregnancy was lower at 27.8% ($n = 5$). The findings therefore denoted that peer pressure was an important factor in relation to teenage pregnancies among teenage girls.

Further, to establish whether there was an association between peer pressure influence and teenage pregnancy among

the teenage girls, bivariate logistic regression analysis was performed at 95% confidence interval. Results are outlined in Table 8.

Table 8
Association of influence of peer pressure with teenage pregnancy

Overall model fit				
-2 Log likelihood		187.679 ^a		
Chi-square		6.887		
df		1		
Significance level (p)		0.009		
Coz & Snell R ²		0.047		
Nagelkerke R ²		0.063		
Regression coefficients				
Variable	Coefficient	Std. Error	Wald	Sig. (p)
Peer pressure influence	1.381	.557	6.141	.013
Constant	.426	.184	5.370	.020
Odds ratio at 95% confidence interval				
Variable	Odds ratio		95% CI	
Peer pressure influence	3.98		1.33 - 11.87	

a. Variable(s) entered on step 1: peer pressure influence

From Table 8, a logistic regression coefficient of 1.381 denoted that there existed a positive relationship between influence of peer pressure and teenage pregnancy among the surveyed teenage girls. A p value of 0.013 showed that the relationship was statistically significant. The study therefore concluded that there was a statistically significant positive relationship between the influence of peer pressure and teenage pregnancies. An odds ratio of 3.98 [1.33 - 11.87, 95% CI] indicates that teenage girls whose sexual behaviour was influenced by peer pressure were 3.98 times more likely to experience teenage pregnancy compared to those whose sexual behaviour was not influenced by peer pressure. Hence according to this finding, increased levels of peer pressure among the teenage girls, particularly negative peer pressure, would lead to an increase in teenage pregnancies cases and vice-versa. The implication of the finding is that peer pressure influence was a significant positive predictor of teenage pregnancies among teenage girls in Tigania Central Sub-County.

The findings were supported by responses offered by the community health promoters during the interview discussions and who singled out negative peer influence among teenage girls as another reason behind the prevailing teenage pregnancies in the area. According to the CHPs, the odds of teenage girls getting pregnant at an early age increased when they associated themselves with the wrong company such as acquaintances involved in sexual misconduct and vice-versa. This is clearly demonstrated in the following few excerpts;

“When young girls keep the wrong company, it does influence their behaviour including sexual behaviour and definitely if they engage in reckless sexual behaviour then teenage pregnancy is the outcome.” Alex*

“In our community we have a saying that he/she who walks with an ill-mannered/behaved person, misbehaves like them. This applies to teenage girls’ sexual behaviour and therefore keeping the wrong company often leads them to engage in

devious sexual behaviour and then they end up getting impregnated at an early age.” Ann*

“From my experience interacting with teenagers, no doubt peer pressure has a significant effect on their behaviour including sexual conduct.” Mary*

“I do agree that peer pressure has an influence on teenage pregnancy rates. Teenage girls who keep the wrong company, such as of other girls who engage in sex, are more likely to suffer teenage pregnancies than girls who are upright and who keep company with other upright girls.” Lucy*

Hence, it was evident that peer pressure had a significant influence on teenage pregnancies in the study area mainly through influencing the teenage girls’ sexual behaviour. According to the findings, negative peer pressure was likely to spur teenage pregnancy cases through girls’ involvement in sexual misconduct while positive peer pressure was likely to reduce teenage pregnancy cases through promoting responsible sexual conduct such as abstinence. The findings were in agreement with those of Mutanana and Mutara (2021) who established that peer influence was a major factor behind teenage pregnancy with a significant proportion of the surveyed girls citing peer pressure as the reason they got pregnant. Te Lindert *et al.* (2021) in a study done in Tanzania also noted that some peer groups promoted engaging in sexual activities from an early age in turn increasing their risks of teenage pregnancy. In their study, Ochen *et al.* (2019) did also identify negative peer pressure as one of the attributes that increased the likelihood of teenage pregnancy among young girls in Uganda. This was the case in studies by Letaru (2023) and Kukundakwe (2021) whose findings revealed that peer pressure played an influential role in teenage pregnancy cases in the country especially through encouraging young girls to begin engaging in sexual activities from an early age. In Nigeria’s Abia State, more than half of the surveyed adolescent girls reported that peer pressure influenced their sexual behaviour and was the main reason why they had fallen pregnant at a young age as reported by Elekeh *et al.* (2021). Similarly, in Ghana, peer pressure was found to increase the probability of teenage pregnancy among teenage girls in the area according to Achiaa (2023).

5) Sexual Abuse and Violence

The teenage girls were asked whether they had ever suffered any form of sexual abuse or violence. The results are outlined in Figure 5.

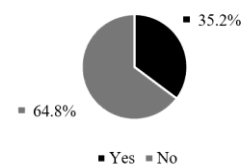


Fig. 5. Whether the teenage girls had suffered any form of sexual abuse or violence

According to Figure 5, most (64.8%, n = 92) of the teenage

girls indicated that they had not suffered any form of sexual abuse or violence. However, 35.2% ($n = 50$) of the teenage girls acknowledged that they had suffered a form of sexual abuse or violence. It was therefore evident that a considerable number of the surveyed teenage girls had suffered sexual abuse or violence. To ascertain the proportion of the teenage girls that had experienced teenage pregnancy or not on the basis of having suffered sexual abuse or violence, we performed cross tabulation between the teenage girls' experience of sexual abuse or violence and teenage pregnancy. Results are shown in Table 9.

Table 9
Cross-tabulation results – sexual abuse or violence experience vs. teenage pregnancy

		Ever been pregnant?		Total
		Yes	No	
Sexual abuse or violence experience	Yes	38 (76%)	12 (24%)	50
	No	42 (45.7)	50 (54.3%)	92
Total		80	62	142

Findings in Table 9 indicate that, of the teenage girls that had suffered any form of sexual abuse or violence, a significant proportion had experienced teenage pregnancy (76%, $n = 38$). However, among the teenage girls that had not suffered any form of sexual abuse or violence, the proportion that had experienced teenage pregnancy was lower at 45.7% ($n = 42$). The findings indicate that exposure to sexual abuse or violence could possibly be linked with teenage pregnancies among the teenage girls. Further, to establish whether there was an association between having suffered sexual abuse or violence and teenage pregnancy among the teenage girls, bivariate logistic regression analysis was performed at 95% CI. Results are presented in Table 10.

Table 10
Association of sexual abuse or violence with teenage pregnancy

Overall model fit				
-2 Log likelihood		181.951 ^a		
Chi-square		12.615		
df		1		
Significance level (p)		0.000		
Coz & Snell R ²		0.085		
Nagelkerke R ²		0.114		
Regression coefficients				
Variable	Coefficient	Std. Error	Wald	Sig. (p)
Suffered sexual abuse/violence	1.327	.392	11.476	.001
Constant	1.153	.331	12.117	.000
Odds ratio at 95% confidence interval				
Variable	Odds ratio		95% CI	
Suffered sexual abuse/violence	3.77		1.75 - 8.12	

a. Variable(s) entered on step 1: suffered sexual abuse/violence

From Table 10, a logistic regression coefficient of 1.327 denoted that there existed a positive relationship between suffering sexual abuse or violence and teenage pregnancy among the teenage girls. A p value of 0.001 showed that the relationship was statistically significant. The study therefore concluded that there was a statistically significant positive relationship between the girls' exposure to sexual abuse or

violence and teenage pregnancies. An odds ratio of 3.77 [1.75 - 8.12, 95% CI] indicates that teenage girls who suffered any form of sexual abuse or violence were 3.77 times more likely to experience teenage pregnancy compared to their counterparts who had never experienced any form of sexual abuse or violence. The findings imply teenage pregnancies among teenage girls in Tigania Central Sub-County could partly be attributable to their exposure to sexual abuse and/or violence. The implication of the finding is that exposure to sexual abuse and/or violence was a significant positive predictor of teenage pregnancies among teenage girls in Tigania Central Sub-County. The findings were supported by responses offered by the community health promoters in interview discussions who pointed that some of the teenage pregnancy incidences were linked to sexual abuse and violence against teenage girls. This is clearly demonstrated in the following few excerpts;

"Just how cruel sexual abuse and violence of teenage girls can be is all too evident here as so many cases of teenage pregnancies are the result of the girls being sexually abused." Ann*

"Indeed, sexual abuse and violence against young girls by close family members, friends or even strangers do contribute to teenage pregnancy cases in our community." Lucy*

"I have dealt with numerous cases where the girls' pregnancy was as a result of being sexually abused, in most cases, by persons known to them including family members. So, it's true that sexual abuse of teenage girls contributes to them getting pregnant at an early age." Alice*

"No doubt, sexual abuse and violence against young teenage girls constitutes part of the forces that drive teenage pregnancy incidences in our community." Chloe*

"I would agree that a large number of teenage girls get impregnated as a result of sexual abuse and violence circumstances." Alex*

It was therefore evident that exposure of young girls to sexual abuse and violence could be partly to blame for teenage pregnancy cases in Tigania Central Sub-County. It is therefore crucial that teenage girls are protected from any form of sexual abuse, violence or exploitation if teenage pregnancy cases in the sub-county were to be reduced. This agreed with Gunawardena *et al.* (2019) whose review identified sexual abuse and coercion from male partners and close family members as one of the leading factors behind the rampant teenage pregnancies in the SSA region. In an empirical evaluation of the causes of unwanted teenage pregnancies in India, Chakole *et al.* (2022) also identified sexual violence and abuse of both married and unmarried adolescent females as well as rape as being leading causes of untimely and unwanted pregnancies among young teenage girls in the country. Similarly, Olenja *et al.* (2020) also established sexual harassment and coercion from men as one of the major factors that led to teenage pregnancies among young Maasai girls in one of the sub-counties of Kajiado County in

Kenya. This showed need for action from all relevant stakeholders to protect young girls from coerced and abusive sexual activities. According to Maharaj (2022), gender-based violence manifesting in the form of sexual violence, abuse and coercion emerged as one of the leading factors behind the teenage pregnancy scourge in sub-Saharan Africa, an observation also shared by Te Lindert et al. (2021) in a Tanzanian study as well as Ochen et al. (2019) in a Ugandan study. It is therefore clear that sexual harassment, violence, abuse and/or coercion of young girls remains a leading factor perpetuating unwanted teenage pregnancies in numerous African settings.

6) Influence of Religion on Character and Behavior

The teenage girls were asked whether religion played a significant role in their character and behavior. Figure 6 outlines the findings.

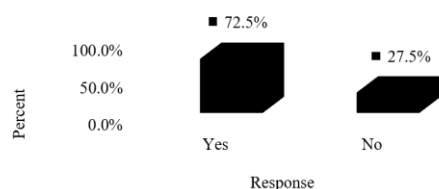


Fig. 6. Whether religion played a significant role in the teenage girls' character and behavior

As depicted in Figure 6, there was acknowledgment that religion played a significant role in their character and behavior among most of the teenage girls (72.5%, $n = 103$). However, 27.5% ($n = 39$) of the teenage girls shared the view that religion did not play a significant role in their character and behavior. Among the ways in which religion influenced the character and behaviour of the teenage girls was in instilling a strong moral sense in them, advocating against sexual immorality and for greater sex abstinence and creating awareness on the dangers of irresponsible sexual behaviour including the ills of teen pregnancies. Hence, the findings showed that religion was instrumental in shaping the character and behavior of most of the teenage girls. To ascertain the proportion of the teenage girls that had experienced teenage pregnancy or not on the basis of the belief in the influence of religion on their character and behavior, we performed cross tabulation between the influence of religion on character and behaviour and teenage pregnancy, results of which are summarized in Table 11.

Table 11

Cross-tabulation results – influence of religion vs. teenage pregnancy

		Ever been pregnant?		Total
		Yes	No	
Whether religion played a major role in their character and behaviour	Yes	51 (49.5%)	52 (50.5%)	103
	No	29 (74.4%)	10 (25.6%)	39
Total		80	62	142

Findings in Table 11 indicate that, of the teenage girls that held the belief that religion played a significant role in their character and behavior, half had experienced teenage pregnancy (49.5%, $n = 51$). However, the proportion that had experienced teenage pregnancy among teenage girls who

indicated that religion did not play a significant role in their character and behavior was higher at 74.4% ($n = 29$). The findings indicate that religion could possibly be used to advocate against teenage pregnancies among the teenage girls. Further, to establish whether there was an association between influence of religion on character and behaviour and teenage pregnancy among the teenage girls, bivariate logistic regression analysis was performed at 95% confidence interval. Results are presented in Table 12.

Table 12

Association of influence of religion on character and behaviour with teenage pregnancy

Overall model fit				
-2 Log likelihood				187.182 ^a
Chi-square				7.384
df				1
Significance level (p)				0.007
Coz & Snell R ²				0.051
Nagelkerke R ²				0.068
Regression coefficients				
Variable	Coefficient	Std. Error	Wald	Sig. (p)
Religion's influence on character and behaviour	-1.084	.416	6.781	.009
Constant	1.172	.354	5.029	.004
Odds ratio at 95% confidence interval				
Variable	Odds ratio			95% CI
Religion's influence on character and behaviour	0.34			0.15 - 0.76

a. Variable(s) entered on step 1: religion's influence on character and behaviour

From Table 12, a logistic regression coefficient of -1.084 denoted that there existed an inverse relationship between influence of religion on character and behaviour and teenage pregnancy among the teenage girls. A p value of 0.009 showed that the relationship was statistically significant. The study therefore concluded that there was a statistically significant inverse relationship between influence of religion on character and behaviour and teenage pregnancies. An odds ratio of 0.34 [0.15 - 0.76, 95% CI] indicates that teenage girls whose character and behaviour was shaped by their religious beliefs were less likely to experience teenage pregnancy compared to their counterparts whose character and behaviour was not significantly influenced by religious beliefs. The findings imply that religion's role in positively influencing or shaping the character and behaviour of teenage girls could help reduce teenage pregnancy cases in the society. The implication of the finding is that religion can play a significant role in reducing teenage pregnancy incidences among teenage girls in Tigania Central Sub-County through shaping their character and behaviour in the right way. Similarly, participants in the study by Musyoki and Kisimbii (2019) also unanimously agreed that one's religious faith had a significant influence on their sexual behavior and character in turn influencing whether they became pregnant at an early age or not. Bitew et al. (2023) in a study conducted in Ethiopia also established that religion was a crucial factor in influencing higher odds of teenage pregnancy among Muslim and Christian protestant girls compared to those who were Orthodox Catholic. In studies by Elekeh et al. (2021) and Uwizeye et al. (2020), in Nigeria and Rwanda respectively, results demonstrated that there were lower odds of teenage

pregnancy among female adolescents who held strong religious beliefs during their teen years when compared to their peers who were not religiously affiliated. Maharaj et al. (2022) also observes that having strong religious beliefs especially those that forbid use of contraception and sexual immorality has been shown to be associated with greater abstinence and lower teen pregnancy rates. According to Worku et al. (2021), possessing a religious faith and a strong moral sense were found to play an instrumental role in protecting teenage girls from too-early sexual activity and teen pregnancy. In studies by Te Lindert et al. (2021) and Zemene et al. (2024) young girls who professed Islam were found to be more likely to get married and become pregnant earlier hence signifying that religion was an important factor in efforts at eradicating the teenage pregnancy menace.

4. Conclusion

Teenage pregnancies were highly prevalent among teenage girls in in Tigania Central Sub-County. Early marriages, adverse peer influence, exposure to sexual abuse or violence and involvement in cultural initiation ceremonies were the cultural factors found to be associated with teenage pregnancies in Tigania Central Sub-County.

5. Recommendation

We recommend that, on practice, first, teenage girls should be educated on the dangers and repercussions of teenage pregnancy. They should also be counselled against engaging in irresponsible sexual conduct. Secondly, community health promoters and other healthcare professionals should be allowed to provide appropriate SRH education to the teenage girls; and thirdly, all community members including teachers, religious leaders, healthcare professionals, government officials, parents, the teenage girls and the general public should get involved in the fight against teenage pregnancies. At policy level, to the government authorities, firm legal action need be taken against perpetrators of teenage pregnancies. Additionally, teenage girls who suffer teenage pregnancies need be supported and encouraged to resume their studies without being discriminated, stigmatized or any prejudice. Further research should be conducted on the effects and outcomes of teenage pregnancies in the sub-county.

Study limitation: The study was limited to a single sub-county in Kenya and hence its findings may not be generalized to the teenage pregnancy status in the country.

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