

Association Between Individual, Socio-Cultural Factors and Sexual Activity Patterns Among Students at KMTC Nakuru.

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DOI: <https://doi.org/10.51244/IJRSI.2026.1305000250>

Received: 03 March 2026; Accepted: 13 March 2026; Published: 12 June 2026

ABSTRACT

Background: College students face significant reproductive health risks, including unintended pregnancies and STIs, often driven by the transition to autonomous campus life. At Kenya Medical Training College (KMTC), Nakuru Campus, students navigate a unique intersection of medical knowledge and prevailing socio-cultural pressures. This study investigated the association between individual, social, and cultural factors and sexual activity patterns among these healthcare trainees.

Methods: A descriptive cross-sectional study design was employed. Stratified random sampling was used to select 105 students across various years of study. Data were collected using a secure, electronic self-administered questionnaire to ensure privacy and data integrity. Analysis involved descriptive statistics to identify prevalence and correlate behavioral drivers.

Results: the study population was predominantly female (68.6%) and aged 22–24 years (66.7%). Findings revealed a high prevalence of sexual engagement, with 61.9% of respondents reporting being sexually active. While 92.4% claimed to possess sexual health knowledge, 52.4% admitted that gaps in specific knowledge drive risky behaviors. Among sexually active students, curiosity was the primary individual driver (92.3%), followed by a significant 100% correlation between substance use (alcohol/drugs) and sexual decision-making. Socially, 84.8% of participants identified peer pressure as a catalyst for sexual behavior, while 83.8% linked exposure to sexual content to increased activity. Economically, 44.8% of respondents noted that financial challenges influence student sexual involvement.

Conclusion: Despite high general health literacy, KMTC Nakuru students remain highly susceptible to behavioral drivers such as curiosity, substance use, and peer influence. The gap between theoretical knowledge and practical risk reduction suggests a need for student-centered sexual health interventions that address the social and economic realities of campus life.

Keywords: *Sexual Activity, KMTC Nakuru, Socio-Cultural Factors, Medical Students, Peer Pressure, Kenya.*

INTRODUCTION

Background Information

Sexual activities refer to behaviors that involve sexual arousal, stimulation, or interaction either alone or with another person. These activities can be physical, emotional, or both and are associated with intimacy, reproduction, or sexual pleasure.

Sexual activities among college students remain a global public health concern due to their association with unintended pregnancy, sexually transmitted infections (STIs), and compromised academic performance [1].

The transition to tertiary education often involves exposure to new environments characterized by autonomy, experimentation, and peer influence—factors linked to the likelihood of sexual involvement.

Globally, studies indicate that many young adults initiate sexual activity during their college years, frequently in the absence of adequate knowledge or consistent use of protection, leading to reproductive health risks [1, 2]. Research in Europe and North America shows that individual factors—including age, gender, self-esteem, and sexual knowledge—correlate with students' sexual involvement [3]. Likewise, social factors such as peer pressure, exposure to social media, and alcohol consumption are significant correlates [2]. These findings highlight that sexual behavior exists within the interaction of personal, social, and cultural influences.

In Sub-Saharan Africa, early sexual debut and risky sexual practices are common among youth, observed alongside limited access to sexual and reproductive health education, cultural taboos, and socio-economic challenges [3]. Peer pressure and economic hardship are noted in instances of transactional relationships or unprotected sexual activity [4]. Furthermore, gender norms and initiation rites prevalent in African societies relate to how young people perceive sexual behaviors [5]. Studies also show that while awareness of sexual health may be high, behavioral change is limited where cultural beliefs discourage open discussion about sexuality [6]. Thus, the interplay between individual awareness, social influence, and cultural traditions is a persistent factor in sexual health among African students.

Within East Africa, the prevalence of early sexual initiation among female youth has been estimated at 21.1%, varying across countries such as Kenya, Uganda, and Tanzania [7]. Observations have shown that alcohol use and peer influence are predictors of risky sexual practices among university students in Uganda and Tanzania [8]. Research has found that cultural beliefs, gender roles, and community expectations are linked to sexual behavior and low contraceptive use among youth [9]. These findings indicate that young people in East Africa face multiple educational, social, and cultural pressures related to their sexual decisions.

In Kenya, studies reveal a significant prevalence of sexual activity among youth, with about 3 in 10 adolescents reporting prior sexual intercourse and 20% engaging in early sexual debut before age 15 [10]. Among college students, factors such as peer influence, social media exposure, and substance use are associated with sexual involvement [11]. A study in Nairobi reported that 49% of male students have experienced sexual intercourse, indicating gender variations in behavior [12].

Another study in Nakuru County found that social media exposure and peer norms correlated with risky sexual behaviors among undergraduates [13]. Despite awareness campaigns, unsafe sexual practices persist among students characterized by weak self-control, curiosity, and a desire for social acceptance [14].

At Kenya Medical Training College (KMTC), students are expected to demonstrate exemplary health knowledge and behavior, yet they are exposed to the same social and cultural influences observed in other youth populations. Research across KMTC campuses indicates that 27% of students have experienced gender violence, including sexual harassment and coercion, suggesting that sexual power dynamics are present within the medical training environment [15]. However, limited studies have explored how individual, social, and cultural factors interact among KMTC Nakuru students. Nakuru County's diverse cultural composition, networks, nightlife, and changing moral values may relate to sexual behavior [13].

Given these factors, there is a gap in understanding how personal attributes, social relationships, and cultural practices interact in relation to sexual activities among KMTC Nakuru students. This study seeks to fill this gap by examining these determinants to generate evidence for student-centered sexual health education and policy interventions.

RESEARCH METHODS AND MATERIALS

Design and Study Area

This study utilized a descriptive cross-sectional design at KMTC Nakuru Campus. This design assesses behaviours prevalence and identifies associations between variables at a single point in time among medical students.

Population and Sampling

The target population included all students registered in the 2025 academic year. Using stratified sampling, the population was divided by year of study (1st, 2nd, and 3rd years) to ensure proportional representation. Participants were selected randomly within these strata to minimize bias.

Sample Size Determination

Using Fischer's formula, an initial sample of 384 was identified. However, since the actual population was smaller ($N=150$), the finite population correction [$f=n(1+n/N)$] was applied, resulting in a final sample of 105 respondents.

Study Variables and Instruments

- **Variables:** The dependent variable was sexual activity involvement; independent variables included individual, social, and cultural factors.
- **Tools:** Data was collected via a secure electronic self-administered questionnaire. This allowed for built-in validation, skip logic, and faster data export.

Validity, Reliability, and Analysis

Validity was maintained by aligning the tool with objectives, while reliability was established through a peer pilot study. Data was cleaned and analyzed using descriptive statistics presented through tables and charts.

Ethical Considerations

The researcher obtained authorization from NACOSTI and the KMTC administration.

Participation was voluntary with informed consent, and strict confidentiality was maintained throughout.

DATA ANALYSIS AND INTERPRETATION

The study involved 105 respondents. The population is predominantly youth, with 66.7% aged between 22–24 years. A minority (6.7%) were 30 years or older. There was a female majority of 68.57%, compared to 27.62% male and 3.81% who did not disclose gender. Most participants were in their early years of study, with first-years (48.6%) and second-years (38.1%) making up the bulk of the sample. The majority were single (66.7%) and identified as Christian (91.43%).

Individual Factors Associated Sexual Activities Among Students

This study aimed to assess the individual factors that are associated sexual activities among students at Kenya Medical Training College, Nakuru Campus. The study analyzed various variables as presented in the descriptive analysis below.

The Study findings indicate that 92.38% of participants possess knowledge regarding sexual health. While 92.38% claim to have "knowledge" of sexual health, 52.38% admit that a lack of specific sexual health knowledge is what actually drives risky behavior. At same study findings farther indicate that 61.9% of the respondents as having ever engaged in sexual activities (65 out of 105 respondents). Yet 100% ($n=65$) of whom are sexually active identified their substance use (alcohol or drug use) habit as a variable that influenced their sexual decision-making. Additionally, 83.8% of participants associate exposure to sexual content with increased sexual activity, and 84.8% agree that peer pressure encourages sexual behaviours. Curiosity is strongest driver of whom 92.3% (60 out of 65) of those who are sexually active cited it as a major influence. Economics are a major driver, 44.8% of respondents agreed that their financial challenges lead some students to engage in sexual activities, suggesting that "survival sex" or transactional relationships may be a factor. And, 80% report low self-esteem and peer comparison as factors that contributed to sexual engagement. While

92.38% claim to have "knowledge" of sexual health, 52.38% admit that a lack of specific sexual health knowledge is what actually drives risky behaviours.

Social Factors associated sexual activities among students

This study aimed assess the social factors associated with students' sexual activities involvement of Kenya Medical Training College Nakuru Campus. The study analysed various variables as presented in the descriptive analysis below.

The study findings indicates that exactly 61.9% (65 out of 105 respondents) reported that they have ever engaged in sexual activities. Of whom Males 76.7% (23 out of 30 total males) have engaged in sexual activities, means males in this study are sexually active. While, for Females 55.7% (39 out of 70 total females, have engaged in sexual activities, means of females in the study are sexually active.

However, social media influence their behaviours at 80% (52 out of 65) of sexually active students confirmed that social media platforms do. With Media Content 83% (54 out of 65) of sexually active students "Agree" or "Strongly Agree" that exposure to internet/movie content increases activity. On Peer Expectations 70.7% (46 out of 65) of those who have had sex agree that relationship expectations from friends affect their behaviours.

The dominant factor peer pressure at 84.8% of respondents (48.6% strongly agree + 36.2% agree) believe that students are encouraged to engage in sexual behaviours specifically through it. Of whom 70.7% (46 out of 65) of those who are already sexually active confirmed that expectations from friends regarding relationships directly affect their sexual behavior. Additionally, access to Private Hostel indicating Physical environment matters.,48.57% (31.43% agree + 17.14% strongly agree) of respondents identified easy access to privacy in hostels as a key promoter of sexual involvement, and lack of guidance and counselling (76.7%) further enable these behaviors.

Cultural Factors associated sexual activities among students

This study aimed assess the cultural factors associated with students' sexual activities involvement of Kenya Medical Training College Nakuru Campus. The study analysed various variables as presented in the descriptive analysis below.

The Presence of Cultural Taboos in Attitudes

The study findings reveals that cultural background serves as a psychological anchor for students sexual decision making. Farther, 39.0% of participants alluding that cultural taboos influence overall attitudes toward sexual activities. Interestingly, while many acknowledge the presence of taboos, only a minority (7.6%) strongly agree that cultural beliefs (the instructional side of culture) serve as a guide. While the largest group of participants (45.7%) agreed that certain traditional taboos actually encourage early sexual involvement. And majority of respondents accepted that gender norms play a role in shaping students' sexual behavior

Patterns in Traditional Norms and Gender

The study findings highlights a paradox where culture, intended to regulate behavior, is sometimes observed alongside accelerated sexual activity. A plurality of 45.7% believe that certain traditional taboos relate to early sexual involvement. This is observed in the context of "forbidden fruit" dynamics or specific rites of passage that signal a youth has reached sexual maturity. The majority acceptance of gender norms as a factor indicates that male and female students report pressure to act in specific ways—such as males demonstrating masculinity or females demonstrating submissiveness—which correlates with their sexual decision-making patterns.

The "Culture of Silence" (Communication Barriers)

The study findings reveals that a substantial majority of respondents (72.38%) agreed that community taboos directly impede open discussion on sexual issues. When nearly three-quarters of a population report an

inability to speak openly, a "knowledge vacuum" is observed. Farther, In this absence of formal guidance, students rely on social media (80%) and Peer Expectations (70.7%) to script their understanding of sexual relationships. And it reveals that this cultural silence is compounded by a structural failure, as 76.7% of students identified a lack of guidance and counselling as a factor that enables risky sexual behaviours. Paradoxically, 45.7% of respondents believe traditional taboos actually encourage early involvement rather than preventing it.

DISCUSSION, CONCLUSION, AND RECOMMENDATIONS

Discussion

The findings of this study demonstrate that sexual decision-making among students at KMTC Nakuru is a multi-dimensional process shaped by a complex interplay of individual, Social and cultural factors; external social pressures, and entrenched cultural norms.

Individual Factors: The Knowledge-Behaviour Paradox

A significant "Knowledge-Behaviour Paradox" was observed within the study population. While an overwhelming 92.38% of participants reported possessing knowledge of sexual and reproductive health (SRH), 61.9% (n=65) had engaged in sexual activity, and 52.38% acknowledged that a lack of applied knowledge contributes to risky behaviours. This reinforces the premise that educational gaps persist even in professional training environments where students are expected to have higher health awareness [7].

Substance use emerged as a critical behavioural catalyst; notably, 100% of the 65 sexually active respondents identified alcohol or drug consumption as a variable that impaired their sexual decision-making. This is consistent with regional findings where substance use is identified as a primary predictor of risky sexual practices by lowering cognitive inhibitions [8, 9, 10]. Furthermore, 83.8% of students associated exposure to sexual content in media with increased activity, aligning with research noting that digital media consumption significantly shifts social norms and behavioural trends among young adults [11, 12]. Internally, curiosity was the most potent driver (92.3%), while 80% identified low self-esteem and peer comparison as significant factors, matching literature that highlights how the desire for social acceptance often supersedes personal health considerations in higher education settings [13, 14].

Social Factors: Gendered Engagement and Interpersonal Dynamics

Social determinants were characterized by a distinct gendered disparity and intense interpersonal pressure. While the total number of sexually active females (n=39) was higher due to the sample's composition, the proportion of males engaging in sexual activity was significantly higher at 76.7%, compared to 55.7% for females. This indicates that gender remains a strong predictor of engagement, often dictated by variations in sexual power dynamics within medical training environments [15, 16].

Peer influence remains a dominant social correlate, with 84.8% of respondents agreeing that peer pressure encourages sexual engagement. Among those already sexually active, 70.7% confirmed that relationship expectations from friends dictated their behaviours, a trend frequently observed among undergraduates in Nakuru County [17]. Economic factors also played a substantial role; 44.8% of respondents agreed that financial challenges drive students toward sexual activities. This mirrors broader tertiary education contexts where material resource needs are strongly linked to transactional sexual choices [4, 18]. Interestingly, environmental factors like hostel privacy (48.57%) showed a lower association than digital influences, suggesting that social media exposure is now a more potent driver of risky behaviour than physical opportunity [1, 17].

Cultural Factors: The Paradox of Silence and Traditional Norms

The study reveals that cultural background serves as a psychological anchor, yet often creates a "Culture of Silence." While 39.0% of participants acknowledge that cultural taboos influence attitudes, a staggering

72.38% agree that community taboos correspond with a lack of open discussion. This communication barrier creates a "knowledge vacuum," forcing students to rely on unverified peer information rather than formal guidance [2, 3]. This aligns with findings that community expectations and religious teachings often guide students away from open dialogue, even when they are sexually active [19, 20].

A notable paradox emerged regarding traditional regulation: 45.7% of respondents believe that certain traditional taboos actually encourage early sexual involvement. This suggests a "forbidden fruit" dynamic or the influence of traditional initiation rites that signal sexual maturity, thereby accelerating sexual debut [5, 21]. The majority acceptance of gender norms indicates that students face pressure to perform specific roles—such as males demonstrating masculinity—which directly correlates with the observed engagement patterns [15, 19]. Finally, the reported lack of guidance and counselling (76.7%) represents a critical structural gap, failing to provide the necessary bridge between cultural silence and modern social pressures as envisioned in national reproductive health policies [6, 7].

Conclusion

This study concludes that sexual engagement among students at KMTC Nakuru is a prevalent phenomenon, with a reported engagement rate of **61.9%**. The findings demonstrate that sexual decision-making is not a purely autonomous process but is significantly moderated by a complex interplay of individual, social, and cultural determinants.

Individual Factors: The Knowledge-Behaviour Paradox

A significant disconnect exists between high theoretical awareness (92.38%) and practical application. Notably, 100% of sexually active students identify substance use (alcohol/drugs) as the primary catalyst for impaired decision-making, while 92.3% cite curiosity as the dominant internal motivator for engagement.

Social Factors: Peer and Digital Influence

Sexual activity is largely moderated by external facilitators, specifically peer pressure (84.8%) and social media (80%). These factors drive a gendered disparity—76.7% of males engage in sexual activity compared to 55.7% of females—and are reinforced by financial challenges (44.8%) and hostel privacy (48.6%).

Cultural Factors: The Paradox of Silence

A pervasive communication barrier exists, with 72.38% of respondents identifying community taboos as an impediment to open discussion. This creates a "knowledge vacuum" where 45.7% of students paradoxically perceive traditional restrictions as catalysts for early involvement, further exacerbated by a 76.7% structural deficiency in institutional guidance.

Recommendations

To mitigate risky sexual behaviours and promote reproductive health, the following evidence-based interventions are recommended:

Addressing Individual Factors: Integrated Behavioural Interventions

- **Harm Reduction and Wellness Programming:** Given the **100% correlation** between substance use and sexual activity, the institution must implement mandatory, integrated wellness programmes. These should move beyond basic SRH education to address the cognitive impacts of alcohol and drug abuse on sexual decision-making.
- **Curiosity-Driven Digital Advocacy:** To counter the **92.3%** curiosity driver and **80%** social media influence, the college should adopt "Digital Health" strategies. This involves using institutional social media platforms to disseminate evidence-based reproductive health content that counters the risky scripts prevalent in popular media.

Addressing Social Factors: Structural and Peer-Led Support

- **Revitalisation of Psychosocial Systems:** The administration must bridge the **76.7% gap** in professional support by strengthening the Guidance and Counselling department. Implementing structured peer-led mentorship is essential to transform negative peer pressure (**84.8%**) into positive social modelling.
- **Socio-Economic Safeguards:** To mitigate the **44.8%** of students driven by financial challenges, the institution should expand work-study programmes and bursary allocations. These measures provide an economic safety net, reducing the reliance on transactional sexual engagement as a survival strategy.

Addressing Cultural Factors: Dismantling the "Culture of Silence"

- **Institutionalising Open Dialogue:** To overcome the **72.38%** communication barrier created by community taboos, the college should establish "Safe Space" forums. Facilitating science-based, transparent dialogue can dismantle "forbidden fruit" dynamics and empower students with factual knowledge over traditional myths.
- **Gender-Responsive Programming:** Tailored interventions must address the distinct engagement rates discovered (**76.7% male vs. 55.7% female**). Programming should challenge traditional notions of masculinity and sexual maturity for males while enhancing agency, negotiation skills, and reproductive rights for female students.

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