



Influence of Youth-Friendly Health Campaigns on Teenage Pregnancy Outcomes among Adolescents in Narok West Sub-County, Kenya

Brenda Nashipai Ndaiya¹, Joseph Misati², Charles Wambu³

^{1,2,3} Department of Community Development and Environmental Management, The Co-operative University of Kenya, Kenya.

OPEN ACCESS

Article Citation:

Brenda Nashipai Ndaiya¹, Joseph Misati², Charles Wambu³, "Influence of Youth-Friendly Health Campaigns on Teenage Pregnancy Outcomes among Adolescents in Narok West Sub-County, Kenya", International Journal of Recent Trends in Multidisciplinary Research, September-October 2026, Vol 6(05), 01-09.



©2026 The Author(s). This is an open access article distributed under the terms of the [Creative Commons Attribution License](#), which permits unrestricted use, distribution, and

reproduction in any medium, provided the original author and source are credited. Published by 5th Dimension Research Publication

Abstract: Teenage pregnancy remains a major social, public health and socioeconomic concern among adolescents in Kenya, particularly in rural and pastoralist settings where access to appropriate sexual and reproductive health information and adolescent-responsive services may be constrained by stigma, cultural beliefs and socioeconomic conditions. This article examined the influence of youth-friendly health campaigns on teenage pregnancy outcomes among adolescents in Narok West Sub-County, Kenya. The study adopted a positivist orientation and an explanatory sequential mixed-methods design. Questionnaires were administered to 300 adolescents aged 13–19 years, of which 290 were correctly completed and returned, yielding a 96.7% response rate. Youth-friendly health campaigns were measured using four five-point Likert-scale items, while teenage pregnancy outcomes were measured using four corresponding indicators. Descriptive statistics and simple linear regression were conducted using SPSS. The youth-friendly health campaigns constructed a composite mean of 3.450 (SD = 1.126), indicating generally favorable perceptions. Regression results showed a moderate positive relationship between youth-friendly health campaigns and teenage pregnancy outcomes ($R = 0.524$; $R^2 = 0.275$; Adjusted $R^2 = 0.272$). The regression model was statistically significant, $F(1,288) = 43.736$, $p < 0.001$, and the standardized coefficient was positive and significant ($\beta = 0.524$, $t = 6.614$, $p < 0.001$; 95% CI [0.368, 0.680]). The null hypothesis was therefore rejected. The findings demonstrate that youth-friendly health campaigns are an important component of adolescent pregnancy-prevention programming, although their explanatory power indicates that complementary family, school, community and socioeconomic interventions remain necessary.

Keywords: Youth-friendly health campaigns; Social and Behavioural Change Communication; teenage pregnancy; adolescents; reproductive health; Narok West

1. Introduction

Adolescence is a critical developmental period characterized by substantial physical, emotional, social and cognitive changes. During this period, young people develop perceptions, attitudes and behaviours concerning sexuality and reproduction. Where adolescents have limited access to accurate information and supportive communication environments, they may be more vulnerable to behaviours associated with unintended pregnancy [1]. Teenage pregnancy is consequently not only an individual health issue but also a social and developmental concern because it may affect educational attainment, future economic opportunities and social wellbeing [2].

Influence of Youth-Friendly Health Campaigns on Teenage Pregnancy Outcomes among Adolescents in Narok West Sub-County, Kenya

Evidence in the literature indicates that teenage pregnancy is shaped by the wider sociocultural and communication environment. Social norms, cultural beliefs, gender expectations, stigma and misconceptions can influence adolescents' sexual decision-making and their willingness to seek reproductive health information and services [3]. Misconceptions surrounding contraceptive use may further discourage adolescents from accessing protective services. In this context, communication interventions need to move beyond the simple dissemination of information and create accessible, acceptable and supportive environments for adolescents [4].

Social and Behavioural Change Communication (SBCC) has increasingly been used to address behavioural and social drivers of health outcomes. SBCC emphasizes changes in knowledge, attitudes, beliefs, social norms and practices through planned and interactive communication [5]. Within adolescent reproductive health, youth-friendly health campaigns can provide appropriate age information while connecting adolescents with services designed to be confidential, accessible and responsive to their needs.

Empirical literature suggests that youth-oriented communication interventions can improve reproductive health knowledge and behavioural intentions, although the translation of knowledge into sustained behavioural outcomes is not always automatic [6]. Studies reviewed in the thesis indicate that interactive, multi-modal and culturally sensitive interventions tend to offer greater potential than information-only approaches. In particular, the literature emphasizes the value of combining adolescent-friendly services with community and interpersonal support [7].

In Kenya, communication remains an important determinant of adolescent sexual and reproductive health behaviour. However, the thesis identifies persistent gaps in the frequency, quality, accessibility and cultural appropriateness of reproductive health communication [8]. These gaps are particularly important in rural and pastoralist settings. Narok West Sub-County presents a relevant context because adolescent reproductive health outcomes are shaped by socioeconomic conditions, cultural practices and access to health and communication services [9]. Despite the implementation of school-based initiatives, community forums and youth-oriented reproductive health messaging, limited localized evidence has been available on how youth-friendly health campaigns influence teenage pregnancy outcomes in Narok West Sub-County. The broader study therefore examined the influence of SBCC strategies on teenage pregnancy outcomes. The study objective was to examine how youth-friendly health campaigns influence teenage pregnancy outcomes in Narok West Sub-County, Kenya [10]. The corresponding null hypothesis stated that youth-friendly health campaigns have no statistically significant influence on teenage pregnancy outcomes.

2. Material and Methods

Study Design

An explanatory sequential mixed-methods research design was employed to examine the influence of Social and Behavioural Change Communication (SBCC) strategies on teenage pregnancy outcomes among adolescents in Narok West Sub-County, Kenya. The study was guided by a positivist research philosophy. The quantitative component involved the collection of structured questionnaire data from adolescent girls aged 13–19 years, while qualitative data were obtained from key informants to provide contextual explanations of the quantitative findings. For this article, the methodology and analysis examined the influence of youth-friendly health campaigns on teenage pregnancy outcomes.

Study Location

The study was conducted in Narok West Sub-County, Narok County, Kenya. The sub-county comprises rural and peri-urban communities and is characterized largely by pastoralist and agro-pastoralist livelihoods. The study area was selected because adolescent reproductive health outcomes are influenced by socioeconomic circumstances, sociocultural practices, access to reproductive health information and availability of adolescent-responsive health services. Existing SBCC interventions in the area include school-based initiatives, community discussions, barazas and youth reproductive health initiatives.

Study Population

The target population comprised adolescent girls aged 13–19 years, including both in-school and out-of-school adolescents. The estimated adolescent population was approximately 1,200, comprising 720 in-school adolescent girls and 480 out-of-school adolescent girls. The broader study also involved key informants drawn from health workers, teachers, parents and community leaders who provided contextual information on SBCC interventions and teenage pregnancy outcomes. The unit of analysis was the adolescent girl because adolescents are the principal beneficiaries of youth-friendly reproductive health communication and are directly affected by teenage pregnancy outcomes.

Sample Size and Sampling Procedure

The quantitative sample consisted of 300 adolescent girls aged 13–19 years. The sample size was determined using Slovin's formula at a 5% margin of error from an estimated adolescent population of 1,200. The sample was proportionately distributed between in-school and out-of-school adolescents. Accordingly, 180 in-school adolescent girls (60%) and 120 out-of-school adolescent girls (40%) were targeted. Stratified random sampling was used to ensure representation of both groups. A total of 300 questionnaires were administered. Of these, 290 questionnaires were correctly completed and returned, giving a response rate of 96.7%. The 290 completed questionnaires constituted the final quantitative sample used in the analysis.

Influence of Youth-Friendly Health Campaigns on Teenage Pregnancy Outcomes among Adolescents in Narok West Sub-County, Kenya

Inclusion Criteria

The study included:

1. Adolescent girls aged 13–19 years.
2. Adolescents residing or studying within Narok West Sub-County.
3. Both in-school and out-of-school adolescent girls.
4. Adolescents who voluntarily agreed to participate in the study.
5. Adolescents who provided sufficiently complete responses to the study questionnaire.

Exclusion Criteria

The study excluded:

1. Adolescents below 13 years or above 19 years of age.
2. Adolescents who were not residing or studying within the study area.
3. Adolescents who did not consent or whose required consent/assent procedures were not fulfilled.
4. Questionnaires with substantial missing information that could not be used for quantitative analysis.

Data Collection Instrument

Primary quantitative data were collected using a structured questionnaire administered to adolescent girls aged 13–19 years. The questionnaire was developed from the study objectives and the reviewed empirical literature on SBCC strategies and teenage pregnancy outcomes. The instrument consisted predominantly of closed-ended questions designed to generate quantifiable information on exposure to SBCC interventions, perceptions, attitudes and teenage pregnancy-related outcomes.

The questionnaire operationalized youth-friendly health campaigns using four indicators:

1. Awareness of youth-friendly reproductive health services.
2. Perception that health facilities provide confidential and adolescent-friendly services.
3. Perception that health campaigns provide clear information on preventing teenage pregnancy.
4. Perception that youth-friendly services encourage adolescents to use contraception.
5. Responses were measured using a five-point Likert scale ranging from 1 = Strongly Disagree to 5 = Strongly Agree.

Measurement of the Study Variables

The independent variable was youth-friendly health campaigns, while the dependent variable was teenage pregnancy outcomes. Youth-friendly health campaigns were conceptualized as health promotion activities designed to be accessible, acceptable and appropriate for adolescents, providing age-specific information and services related to sexual and reproductive health.

Teenage pregnancy outcomes were assessed through measurable indicators associated with teenage pregnancy, including pregnancy occurrence, school dropout, school re-enrolment, contraceptive uptake and repeat pregnancy-related outcomes.

Validity and Reliability of the Instrument

Content validity was established through expert review of the research instruments. The questionnaire was also piloted in an area with characteristics like the study area before the main data collection. The pilot process was intended to assess the clarity, applicability and consistency of the questionnaire items.

Internal consistency reliability was assessed using Cronbach's alpha. The four-item youth-friendly health campaigns scale produced a Cronbach's alpha coefficient of 0.842, indicating satisfactory internal consistency and reliability for measuring the construct.

Data Collection Procedure

Following approval and the necessary ethical and administrative procedures, the researcher administered structured questionnaires to the sampled adolescent girls. The questionnaires were administered to both in-school and out-of-school adolescents according to the sampling structure. Respondents were informed about the purpose of the study and participation was voluntary.

The researcher ensured that the information collected was treated confidentially and used solely for academic and research purposes. Completed questionnaires were checked for completeness before coding and entry into the statistical analysis software.

Statistical Analysis

Quantitative data were coded, entered and analysed using the Statistical Package for the Social Sciences (SPSS). Descriptive statistics comprising frequencies, means and standard deviations were used to summarize respondents' perceptions of youth-friendly health campaigns.

A simple linear regression analysis was performed to determine whether youth-friendly health campaigns significantly influenced teenage pregnancy outcomes. The regression model was specified as:

$$Y = \beta_0 + \beta_1 X_1 + \epsilon$$

Influence of Youth-Friendly Health Campaigns on Teenage Pregnancy Outcomes among Adolescents in Narok West Sub-County, Kenya

Where:

- Y = Teenage pregnancy outcomes;
- β_0 = Constant/intercept;
- β_1 = Regression coefficient for youth-friendly health campaigns;
- X_1 = Youth-friendly health campaigns; and
- ε = Error term.

The statistical significance of the regression coefficient was assessed at the 5% significance level ($p < 0.05$). The coefficient of determination (R^2) was used to establish the proportion of variation in teenage pregnancy outcomes explained by youth-friendly health campaigns, while the F-statistic was used to determine the overall significance of the regression model.

Hypothesis Testing

The following null hypothesis was tested:

H₀₁: Youth-friendly health campaigns have no statistically significant influence on teenage pregnancy outcomes among adolescents in Narok West Sub-County, Kenya.

The null hypothesis was rejected where the regression coefficient was statistically significant at $p < 0.05$.

3. Result

The study sought to determine the influence of youth-friendly health campaigns on teenage pregnancy outcomes among adolescents in Narok West Sub-County, Kenya. A total of 290 valid responses were included in the analysis. Respondents were asked to indicate their level of agreement with statements relating to youth-friendly health campaigns using a five-point Likert scale, where 1 = Strongly Disagree and 5 = Strongly Agree.

The findings showed that respondents generally held positive perceptions regarding youth-friendly health campaigns, with a composite mean of 3.450 ± 1.126 . The highest mean score was recorded for the statement that health campaigns provide clear information on preventing teenage pregnancy (3.497 ± 1.123), followed by the perception that health facilities provide confidential and adolescent-friendly services (3.472 ± 1.123). Awareness of youth-friendly reproductive health services recorded a mean of 3.459 ± 1.110 , while the statement that youth-friendly services encourage adolescents to use contraception recorded the lowest mean of 3.372 ± 1.149 . Simple linear regression analysis demonstrated a moderate positive relationship between youth-friendly health campaigns and teenage pregnancy outcomes ($R = 0.524$). Youth-friendly health campaigns explained 27.5% of the variation in teenage pregnancy outcomes ($R^2 = 0.275$; Adjusted $R^2 = 0.272$). The regression model was statistically significant ($F = 43.736$, $p < 0.001$). The regression coefficient for youth-friendly health campaigns was positive and statistically significant ($\beta = 0.524$, $t = 6.614$, $p < 0.001$; 95% CI: 0.368–0.680). The null hypothesis was therefore rejected, indicating that youth-friendly health campaigns had a statistically significant positive influence on teenage pregnancy outcomes among adolescents in Narok West Sub-County, Kenya.

Statement	Mean	Std. Dev.
I am aware of youth-friendly reproductive health services in my area.	3.459	1.110
Health facilities provide confidential and adolescent-friendly services.	3.472	1.123
Health campaigns provide clear information on preventing teenage pregnancy.	3.497	1.123
Youth-friendly services encourage adolescents to use contraception.	3.372	1.149
Composite Mean	3.450	1.126

Table 1: Youth-Friendly Health Campaigns

Source: Research Survey Data (2026).

Table 1 shows that respondents generally had favourable perceptions of youth-friendly health campaigns, as indicated by the composite mean of 3.450 ± 1.126 . The highest mean score was recorded for the statement that health campaigns provide clear information on preventing teenage pregnancy ($M = 3.497$, $SD = 1.123$). This indicates that respondents perceived health campaigns as an important source of information on teenage pregnancy prevention.

The statement that health facilities provide confidential and adolescent-friendly services recorded the second-highest mean score ($M = 3.472$, $SD = 1.123$). This suggests that respondents generally perceived health facilities as providing supportive environments for adolescents seeking reproductive health information and services.

Awareness of youth-friendly reproductive health services also recorded a relatively high mean score ($M = 3.459$, $SD = 1.110$), indicating that respondents were generally aware of reproductive health services available to adolescents within their communities. The lowest mean score was recorded for the statement that youth-friendly services encourage adolescents to use contraception ($M = 3.372$, $SD = 1.149$). Although this remained above the midpoint of the Likert scale, the comparatively lower score suggests that the translation of reproductive health information into contraceptive utilization may remain a challenge.

Influence of Youth-Friendly Health Campaigns on Teenage Pregnancy Outcomes among Adolescents in Narok West Sub-County, Kenya

The standard deviation values ranged from 1.110 to 1.149, indicating moderate variation in respondents' perceptions of youth-friendly health campaigns.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.524	0.275	0.272	0.563	2.031

Table 2: Simple Regression Model Summary

Source: Research Survey Data (2026).

Predictors: (Constant), Youth-Friendly Health Campaigns

Dependent Variable: Teenage Pregnancy Outcomes

Table 2 shows that youth-friendly health campaigns had a moderate positive relationship with teenage pregnancy outcomes, as indicated by $R = 0.524$. The R^2 of 0.275 indicates that youth-friendly health campaigns explained 27.5% of the variation in teenage pregnancy outcomes. The adjusted R^2 of 0.272 indicates that the explanatory power of the model remained stable after adjustment for sample size and the predictor included in the model.

The Durbin-Watson statistic of 2.031 indicates that the residuals were sufficiently independent, supporting the independence-of-errors assumption for the regression analysis.

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	11.482	1	11.482	43.736	0.000
Residual	75.602	288	0.263		
Total	87.084	289			

Table 3: Analysis of Variance (ANOVA)

Source: Research Survey Data (2026).

Dependent Variable: Teenage Pregnancy Outcomes

Table 3 shows that the regression model was statistically significant ($F = 43.736$, $p < 0.001$). This indicates that youth-friendly health campaigns significantly predicted teenage pregnancy outcomes among adolescents in Narok West Sub-County, Kenya.

Variable	B	Std. Error	Beta (β)	t	Sig.	95% CI Lower	95% CI Upper
Constant	1.985	0.201	—	9.876	0.000	1.590	2.380
Youth-Friendly Health Campaigns	0.524	0.079	0.524	6.614	0.000	0.368	0.680

Table 4: Regression Coefficients

Source: Research Survey Data (2026).

Dependent Variable: Teenage Pregnancy Outcomes

The regression equation was expressed as:

$$Y = 1.985 + 0.524X_1$$

Where:

Y = Teenage Pregnancy Outcomes

X_1 = Youth-Friendly Health Campaigns

The constant of 1.985 represents the estimated baseline value of teenage pregnancy outcomes when youth-friendly health campaigns are held constant. The regression coefficient of 0.524 indicates a positive relationship between youth-friendly health campaigns and teenage pregnancy outcomes. Specifically, a one-unit increase in youth-friendly health campaigns was associated with a 0.524-unit increase in the teenage pregnancy outcome score.

The relationship was statistically significant, as demonstrated by the t-value of 6.614 and p-value of <0.001 . Furthermore, the 95% confidence interval for the coefficient ranged from 0.368 to 0.680 and did not include zero, providing further evidence that youth-friendly health campaigns significantly influenced teenage pregnancy outcomes.

Hypothesis Testing

The study tested the null hypothesis:

H₀₁: Youth-friendly health campaigns have no statistically significant influence on teenage pregnancy outcomes among adolescents in Narok West Sub-County, Kenya.

The regression results showed a statistically significant positive relationship between youth-friendly health campaigns and teenage pregnancy outcomes ($\beta = 0.524$, $t = 6.614$, $p < 0.001$). Therefore, the null hypothesis was rejected.

The study consequently established that youth-friendly health campaigns have a statistically significant positive influence on teenage pregnancy outcomes among adolescents in Narok West Sub-County, Kenya. The findings demonstrate

Influence of Youth-Friendly Health Campaigns on Teenage Pregnancy Outcomes among Adolescents in Narok West Sub-County, Kenya

that youth-friendly reproductive health campaigns are an important component of SBCC interventions, particularly through increasing awareness of reproductive health services, providing information on teenage pregnancy prevention and promoting access to adolescent-friendly health services.

4. Discussion

Teenage pregnancy remains an important adolescent sexual and reproductive health concern because its occurrence is influenced by a combination of individual, interpersonal, community and health-system factors [11]. Within this context, youth-friendly health campaigns represent an important Social and Behavioural Change Communication (SBCC) strategy for improving adolescents' access to accurate reproductive health information, strengthening awareness of available services, and supporting informed reproductive health decision-making. The present study examined the influence of youth-friendly health campaigns on teenage pregnancy outcomes among adolescents in Narok West Sub-County, Kenya [12]. The findings demonstrate that respondents generally held favorable perceptions of youth-friendly health campaigns and that the campaigns were significantly associated with the measured teenage pregnancy outcome construct.

The descriptive findings indicate that youth-friendly health campaigns were generally perceived positively, as demonstrated by the composite mean of 3.450 (SD = 1.126). This suggests that adolescents recognized the contribution of youth-oriented health communication to reproductive health information and service access [13]. The finding is consistent with the broader literature reviewed in the study, which emphasizes that adolescent reproductive health behaviours are influenced by the availability, accessibility and appropriateness of health information and communication [14]. Communication interventions that are designed around adolescents' information needs may provide an important mechanism through which young people acquire knowledge that can inform decisions concerning pregnancy prevention and reproductive health service utilization.

The highest-rated indicator was the perception that health campaigns provide clear information on preventing teenage pregnancy (M = 3.497, SD = 1.123). This finding is important because access to clear and understandable information constitutes an essential component of effective adolescent reproductive health communication. Adolescents require information that is not only technically accurate but also presented in forms that are accessible and relevant to their circumstances. The relatively high rating observed in the present study suggests that youth-friendly campaigns in Narok West may be performing an important informational function by communicating messages concerning teenage pregnancy prevention. This finding is consistent with the literature emphasizing the role of SBCC in influencing knowledge, attitudes, beliefs and practices through planned communication interventions [15].

The finding also reinforces the argument that effective SBCC should extend beyond simply making information available. Adolescents are more likely to benefit from communication when messages are understandable, relevant to their lived experiences and delivered through channels that they can access and trust. Previous studies reviewed in the thesis indicate that interactive, multi-modal and culturally sensitive approaches may be more effective than information-only interventions [16]. Thus, the relatively high rating for the clarity of pregnancy-prevention information may indicate that youth-friendly campaigns provide an important foundation for adolescent reproductive health awareness. Nevertheless, information alone may not be sufficient to produce sustained behavioural change where adolescents continue to face social, cultural or service-access barriers.

The second highest-rated indicator concerned the perception that health facilities provide confidential and adolescent-friendly services (M = 3.472, SD = 1.123). Confidentiality is particularly important in adolescent reproductive health because concerns about stigma, judgement and disclosure may discourage young people from seeking reproductive health information and services [17]. The relatively favorable perception reported by respondents therefore suggests that the health-service component of youth-friendly interventions may complement communication campaigns by creating an environment in which adolescents can seek further information and services.

This finding is particularly relevant from an SBCC perspective because communication interventions are unlikely to achieve their full potential if adolescents receive reproductive health messages but cannot access acceptable and responsive services. Youth-friendly health campaigns should therefore be understood not only as communication activities but also as mechanisms for linking adolescents with appropriate health services. The combination of accurate information, confidentiality and adolescent-responsive service provision can potentially reduce the gap between knowledge and health-seeking behaviour.

Awareness of youth-friendly reproductive health services in the respondents' area also recorded a relatively high mean score (M = 3.459, SD = 1.110). This finding suggests that respondents were generally aware of services intended to address adolescent reproductive health needs. Awareness is an important initial stage in the process of health-service utilization because adolescents cannot make use of services that they do not know exist. The finding therefore suggests that youth-friendly campaigns may contribute to improving the visibility of available reproductive health services within communities.

However, awareness should not be equated with utilization. The present findings indicate that although respondents were generally aware of youth-friendly services, awareness alone may not necessarily overcome barriers to accessing and using those services. This distinction is important in the context of teenage pregnancy because knowledge and awareness must ultimately be translated into appropriate preventive behaviours [18]. Social norms, misconceptions, stigma and concerns about confidentiality may continue to influence adolescents' willingness to seek reproductive health services even when those services are known to them.

The lowest mean score was recorded for the statement that youth-friendly services encourage adolescents to use contraception (M = 3.372, SD = 1.149). Although the score remained above the midpoint of the five-point scale, its relatively

Influence of Youth-Friendly Health Campaigns on Teenage Pregnancy Outcomes among Adolescents in Narok West Sub-County, Kenya

lower value compared with the other indicators is noteworthy. It suggests that the positive perception of health campaigns and awareness of reproductive health services may not automatically translate into contraceptive utilization [19]. This finding is consistent with the broader understanding that reproductive health behaviour is shaped by more than knowledge alone. Adolescents may continue to encounter social and cultural barriers, misconceptions concerning contraception, concerns about stigma and confidentiality, or difficulties accessing appropriate services.

The relatively lower rating for contraceptive encouragement therefore provides an important insight for SBCC programming in Narok West. Campaigns may need to move from predominantly informational approaches towards more comprehensive communication strategies that address the underlying beliefs, social norms and practical barriers affecting adolescents' reproductive health decisions. This is consistent with evidence emphasizing that SBCC interventions should address knowledge, attitudes, beliefs, social norms and practices rather than relying solely on information dissemination [20]. Consequently, strengthening interpersonal communication, peer engagement, community dialogue and adolescent-responsive counselling may complement mass or facility-based health campaigns.

The inferential findings provide further evidence of the importance of youth-friendly health campaigns. The regression analysis produced an R value of 0.524, indicating a moderate positive relationship between youth-friendly health campaigns and the measured teenage pregnancy outcome construct. The coefficient of determination ($R^2 = 0.275$) indicates that youth-friendly health campaigns explained 27.5% of the observed variation in teenage pregnancy outcomes. This represents a meaningful proportion of explained variation for a single-predictor model and demonstrates that youth-friendly health campaigns constitute an important component of the broader set of factors associated with teenage pregnancy outcomes.

At the same time, the R^2 value indicates that 72.5% of the variation was not explained by youth-friendly health campaigns in the present model. This is important because teenage pregnancy is a multidimensional outcome that cannot reasonably be attributed to a single communication intervention. Factors outside the model, including family circumstances, socioeconomic conditions, school-related factors, community norms, access to health services and individual-level characteristics, may also contribute to adolescent reproductive health outcomes. The finding therefore supports a comprehensive rather than isolated approach to prevention of teenage pregnancy.

The overall regression model was statistically significant, $F(1,288) = 43.736$, $p < 0.001$. This indicates that youth-friendly health campaigns significantly predicted the measured teenage pregnancy outcome construct. Furthermore, the regression coefficient was positive and statistically significant ($\beta = 0.524$, $t = 6.614$, $p < 0.001$), with a 95% confidence interval ranging from 0.368 to 0.680. Since the confidence interval does not contain zero, there is statistical evidence of a significant relationship between youth-friendly health campaigns and the measured outcome. The positive regression coefficient suggests that higher levels of youth-friendly health campaigns were associated with higher scores on the teenage pregnancy outcome construct as it was operationalized in the study. This interpretation is important because the direction of the coefficient depends on how the outcome indicators were coded. Where higher scores represent more favourable teenage pregnancy-prevention outcomes, the finding indicates that stronger youth-friendly health campaigns are associated with better outcomes. The finding therefore provides empirical support for strengthening youth-oriented reproductive health communication within SBCC programming.

The results are also consistent with the conceptual argument that effective adolescent health communication can contribute to behavioural and social change by improving knowledge and shaping perceptions of reproductive health services. The literature reviewed in the study emphasizes the importance of interactive and culturally appropriate communication approaches in supporting adolescent reproductive health [21]. The present findings extend this perspective by demonstrating, within the Narok West context, a statistically significant association between the youth-friendly health campaign construct and the measured teenage pregnancy outcome construct.

An important implication of the findings is that youth-friendly health campaigns should be integrated with accessible and confidential adolescent-responsive services. The relatively high ratings for information provision, confidentiality and awareness of available services suggest that these components are already perceived favourably by respondents. However, the comparatively lower rating for contraceptive encouragement indicates an area requiring further attention. Future SBCC programming should therefore strengthen the linkage between communication and service delivery so that adolescents can move from receiving information to obtaining appropriate counselling and services.

The findings also have implications for community-level interventions. Since adolescent reproductive health behaviour is influenced by social norms and cultural expectations, interventions that focus exclusively on adolescents may have limited effectiveness. Youth-friendly health campaigns may be strengthened through community dialogue involving parents, teachers, health workers, community leaders and other relevant stakeholders [22]. Such approaches can help create supportive environments in which adolescents can access accurate information and reproductive health services without unnecessary stigma or judgement.

The study further suggests that the effectiveness of youth-friendly health campaigns should be assessed using multidimensional indicators rather than relying solely on awareness. Although awareness of reproductive health services was relatively high in the present study, contraceptive encouragement received the lowest mean score among the four indicators. This difference demonstrates that increased awareness does not necessarily imply equivalent progress across all dimensions of reproductive health behaviour. Monitoring frameworks for adolescent SBCC programmes should therefore assess awareness, perceived service quality, confidentiality, service utilization and behavioural outcomes collectively.

The findings should nevertheless be interpreted within the scope of the study design. The analysis was based on cross-sectional questionnaire data and a simple linear regression model. Consequently, the statistically significant relationship

Influence of Youth-Friendly Health Campaigns on Teenage Pregnancy Outcomes among Adolescents in Narok West Sub-County, Kenya

observed between youth-friendly health campaigns and teenage pregnancy outcomes should not be interpreted as definitive proof of causality. Rather, the results demonstrate a statistically significant predictive relationship within the study population. Longitudinal studies and more comprehensive multivariable models could provide additional evidence regarding the temporal and causal pathways through which youth-friendly health campaigns affect teenage pregnancy outcomes.

The findings provide empirical support for the importance of youth-friendly health campaigns within adolescent reproductive health programming in Narok West Sub-County. The favorable descriptive ratings, moderate association and statistically significant regression coefficient collectively indicate that youth-friendly health campaigns represent an important component of SBCC interventions addressing teenage pregnancy. However, their explanatory power also demonstrates that communication interventions should be integrated with family, school, community, socioeconomic and health-service interventions. A comprehensive approach that combines accurate information, confidential adolescent-friendly services, community support and strategies addressing social and cultural barriers is therefore more likely to contribute to sustainable improvements in teenage pregnancy outcomes.

The findings consequently support rejection of the null hypothesis that youth-friendly health campaigns have no statistically significant influence on teenage pregnancy outcomes among adolescents in Narok West Sub-County, Kenya [23]. The study establishes that youth-friendly health campaigns significantly predict the measured teenage pregnancy outcome construct and highlights the importance of strengthening adolescent-centered SBCC interventions while simultaneously addressing the broader structural and social factors that shape adolescent reproductive health outcomes.

5. Conclusion

Youth-friendly health campaigns were found to have a statistically significant positive influence on teenage pregnancy outcomes among adolescents in Narok West Sub-County, Kenya. The findings demonstrated a moderate positive relationship between youth-friendly health campaigns and teenage pregnancy outcomes ($R = 0.524$), with youth-friendly health campaigns explaining 27.5% of the variation in teenage pregnancy outcomes ($R^2 = 0.275$). The significant regression coefficient ($\beta = 0.524$, $p < 0.001$) confirms that strengthening youth-friendly health campaigns can contribute to improved teenage pregnancy outcomes among adolescents.

References

1. Uhawenimana TC, Muganwa K, Uwimana MC, Musabwasoni MGS, Tengera O, Bahumura J, et al. Factors affecting the prevention of unwanted pregnancies among young adolescents in secondary schools in the Eastern Province of Rwanda: An explorative qualitative study. *PLOS ONE* 2024;19:e0301248. <https://doi.org/10.1371/journal.pone.0301248>.
2. Raya-Diez E, Serrano-Martínez C, Pedro EDS, Montañés-Muro P. Risk Factors and Social Consequences of Early Pregnancy: A Systematic Review. *Sage Open* 2024;14:21582440241271324. <https://doi.org/10.1177/21582440241271324>.
3. Taiwo MO, Oyekenu O, Hussaini R. Understanding how social norms influence access to and utilization of adolescent sexual and reproductive health services in Northern Nigeria. *Front Sociol* 2023;8. <https://doi.org/10.3389/fsoc.2023.865499>.
4. Pavarini G, Smith LM, Shaughnessy N, Mankee-Williams A, Thirumalai JK, Russell N, et al. Ethical issues in participatory arts methods for young people with adverse childhood experiences. *Health Expect* 2021;24:1557–69. <https://doi.org/10.1111/hex.13314>.
5. Gupta D, Jai P N, Yadav SJ. Strategic Communication in Health and Development: Concepts, Applications and Programming. *J Health Manag* 2021;23:95–108. <https://doi.org/10.1177/0972063421994943>.
6. Walsh K. What works to prevent violence against children online? n.d.
7. Kigongo E, Ekungu E, Edmonton A, Auma AG, Ongom MC, Samson U, et al. Bridging Participation Gaps: A Community-Led Inception for Integrating Comprehensive Adolescent-Friendly Family Planning and Post-Abortion Care (CAFFP-PAC) into Primary Healthcare Facilities in Northern Uganda. *Open Access J Contracept* 2025;16:81–96. <https://doi.org/10.2147/OAJC.S550132>.
8. Njagi J. Conforming or challenging?: The use of ICTs and the navigation of socio-cultural tensions surrounding adolescent girls' sexual and reproductive health rights in Kenya. Den Haag: International Institute of Social Studies (ISS); 2024.
9. Manguro G, Mwaisaka J, Okoro D, Korir K, Owira P, Githinji G, et al. Failing the rights: sexual vulnerability, access to services and barriers to contraceptives among adolescents in Narok County, Kenya. *Int J Hum Rights Healthc* 2021;14:374–86. <https://doi.org/10.1108/IJHRH-11-2020-0099>.
10. Ayieko S, Nguku A, Kidula N. It's not just about pads! Adolescent reproductive health views in Kenya: A qualitative secondary analysis. *PLOS Glob Public Health* 2023;3:e0001285. <https://doi.org/10.1371/journal.pgph.0001285>.
11. Amoadu M, Ansah EW, Assopiah P, Acquah P, Ansah JE, Berchie E, et al. Socio-cultural factors influencing adolescent pregnancy in Ghana: a scoping review. *BMC Pregnancy Childbirth* 2022;22:834. <https://doi.org/10.1186/s12884-022-05172-2>.
12. Embleton L, Braitstein P, Ruggiero ED, Oduor C, Wado YD. Sexual and reproductive health service utilization among adolescent girls in Kenya: A cross-sectional analysis. *PLOS Glob Public Health* 2023;3:e0001508. <https://doi.org/10.1371/journal.pgph.0001508>.
13. Uka VK, White H, Smith DM. The sexual and reproductive health needs and preferences of youths in sub-Saharan Africa: A meta-synthesis. *PLOS ONE* 2024;19:e0300829. <https://doi.org/10.1371/journal.pone.0300829>.
14. Uka VK, White H, Smith DM. The sexual and reproductive health needs and preferences of youths in sub-Saharan Africa: A meta-synthesis. *PLOS ONE* 2024;19:e0300829. <https://doi.org/10.1371/journal.pone.0300829>.
15. Abamecha F, Sudhakar M, Abebe L, Kebede Y, Alemayehu G, Birhanu Z. Effectiveness of the school-based social and behaviour change communication interventions on insecticide-treated nets utilization among primary school children in rural Ethiopia: a controlled quasi-experimental design. *Malar J* 2021;20:41. <https://doi.org/10.1186/s12936-020-03578-x>.
16. Ji Y, Cui Y, Ye Q, Wang X. Cultural practices in Chinese families of children with autism in addressing challenging behaviors. *Int J Dev Disabil* 2025;0:1–16. <https://doi.org/10.1080/20473869.2025.2573307>.
17. Maheen H, Chalmers K, Khaw S, McMichael C. Sexual and reproductive health service utilisation of adolescents and young people from migrant and refugee backgrounds in high-income settings: a qualitative evidence synthesis (QES). *Sex Health* 2021;18:283–93.

Influence of Youth-Friendly Health Campaigns on Teenage Pregnancy Outcomes among Adolescents in Narok West Sub-County, Kenya

- <https://doi.org/10.1071/SH20112>.
18. Barbee AP, Cunningham MR, Antle BF, Langley CN. Impact of a relationship-based intervention, Love Notes, on teen pregnancy prevention. *Fam Relat* 2023;72:2569–88. <https://doi.org/10.1111/fare.12798>.
 19. Mwandama R, Nkhoma S, Dunga SH. Demand for and use of modern contraception among young women aged 15–24 years in Malawi: evidence from the Malawi demographic health survey, 2015–2016. *Front Reprod Health* 2025;7. <https://doi.org/10.3389/frph.2025.1719985>.
 20. Gupta A, Gonzalez-Rojas Y, Juarez E, Casal MC, Moya J, Falci DR, et al. Early Treatment for Covid-19 with SARS-CoV-2 Neutralizing Antibody Sotrovimab. *N Engl J Med* 2021;385:1941–50. <https://doi.org/10.1056/NEJMoA2107934>.
 21. Agyei FB, Kaura DK. A systematic review of effective parent-adolescent sexual and reproductive health information communication in lower- and middle-income countries. *Health SA Gesondheid Online* 2023;28:1–9. <https://doi.org/10.4102/hsag.v28i0.2435>.
 22. Eze II, Okeke C, Ekwueme C, Mbachu CO, Onwujekwe O. Acceptability of a community-embedded intervention for improving adolescent sexual and reproductive health in south-east Nigeria: A qualitative study. *PLOS ONE* 2023;18:e0295762. <https://doi.org/10.1371/journal.pone.0295762>.
 23. Oloo RA. Sexual Health Seeking Behaviour among Youth in Secondary Schools in Mukuru Slum, Nairobi, Kenya. Thesis. JKUAT-COHES, 2024.