



WWJMRD 2021; 7(6): 61-67  
www.wwjmr.com  
International Journal  
Peer Reviewed Journal  
Refereed Journal  
Indexed Journal  
Impact Factor SJIF 2017:  
5.182 2018: 5.51, (ISI) 2020-  
2021: 1.361  
E-ISSN: 2454-6615  
DOI: 10.17605/OSF.IO/89EQF

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## Social-Cultural Factors Associated with Risky Sexual Behaviours among Young People in Gatsata and Remera Sectors, Gasabo District in Rwanda

David Baguma Kagoro, Onesmas Marete and Rosemary Okova

### Abstract

**Background:** Sexual behaviors of young people are becoming one of the critical social and major public-health concerns in recent years. The study aimed to examine social-cultural factors associated with risky sexual behaviours among young people in Remera and Gatsata sectors of Gasabo district of Rwanda.

**Material and Methods:** This was a cross-sectional study that exclusively utilized quantitative approaches. The study was conducted in Gasabo district among young people between 15 and 25 years of age. A standardized, validated questionnaire for interviewing young people was adopted, contextualized to the Rwanda context and used. Data was entered in EpiData Entry Client version 4.6.0.2, cleaned and analyzed in STATA version 15.

**Results:** The study reports the prevalence of engaging in risky sexual behaviours among young people at 49%. Social cultural factors namely religiosity measured by regular church attendance (OR = 3.23; 95%CI = 1.985- 5.282; P-Value = 0.0001) and perceived importance of religion (OR = 6.5; 95%CI = 2.269- 18.624; P-Value = 0.0001) were associated with risky sexual behaviours at bivariate level. Additionally, living with a father was protective against engaging in risky sexual behaviours (AOR = 0.16; 95%CI = 0.042-0.665; P-Value = 0.01) while alcohol consumption (AOR=5.22; 95%CI=2.02-13.46; P-Value = 0.001) and a previous history of having multiple girl/boy friends (AOR =2.40; 95%CI = 1.009-5.721; P-Value = 0.04) were positively associated with risky sexual behaviours.

**Conclusion:** The study findings suggest that young people engage in risky sexual behaviours and that several social cultural factors including religiosity, parental control, alcohol consumption and having multiple girl/boy friends are associated with risky sexual behaviours. Therefore, there is need for health promotion programs targeting young people to avert their engagement in risky sexual behaviours. Needless to say, such intervention should consider social cultural factors but also endeavor to be youth friendly.

**Keywords:** Risky sexual behaviours, young people and social-cultural factors.

### Background

The sexual behaviours of young people are becoming one of the critical social and major public-health concerns in recent years (1). Evidence suggests that sexual and reproductive health issues remain among the leading causes of ill-health among young people (2). Young women in particular and young people in general in Africa, South of the Sahara, are among the most prone individuals towards HIV infection in addition to other STIs (3) (2). In the context of Rwanda, evidence supports the narrative that some young people engage in risky sexual behaviours, which put them at risk of contracting or spreading STIs. The last concluded Rwanda Health and Demographic Survey 2019-2020 revealed that around 52.8% and 40.6% of young women and men respectively did not use a condom on the most recent sexual encounter (4).

Evidence suggests further that several factors are associated with risky sexual behaviours and

accelerate STIs contraction and spread. These factors include social-cultural factors such as religious affiliation, parental control (5), religiosity (6), alcohol consumption and communication with parents on sex-related topics. In addition, several studies have found a correlation between social-cultural factors and both risky sexual behaviours and STIs transmission, respectively (7).

However, limited studies have been undertaken in Rwanda, let alone in specific age groups of the youth and adolescents. Therefore, this study aims to plug part of this void by assessing social-cultural factors associated with risky sexual behaviours in Gatsata and Remera Sectors among young people.

## Material and Methods

Gasabo, the study area was randomly sampled among the three districts making up the City of Kigali (CoK). Among the districts in the CoK, Gasabo district has the highest population, yet it has the lowest population density. In addition, according to the last concluded census of 2012, Gasabo had about 529,561 adults, with males accounting for 51.7% and females 48.3%. However, data for young people was not available for Gasabo district (8). In terms of the study population, individuals in the age groups of 15 to

24 years were selected for the study in the study area, which is Gasabo district.

The study adopted and used the Kish Leslie (1965) cross-sectional sample sizes determination formula (9). Overall, the study targeted 421 respondents but achieved to interview 409, representing a response rate of 97.2%. Multistage sampling method, which combines a series of different sampling methods, both probability and non-probability based, was used as the sampling procedure. A standardised, validated questionnaire, in particular, Cleland's (2002) questionnaire for interviewing young people (10) was contextualised to the Rwandan context and after that used for data collection. Data was entered in EpiData Entry Client version 4.6.0.2, cleaned and exported to STATA 15 from where it was analysed. The research protocol was presented to the Internal Review Board of Mount Kenya University for ethical review and approval. During fieldwork and indeed after, ethical principles were observed.

## Results and Discussion

### Social Demographic Characteristics of Respondents

This section presents and briefly discusses the social demographic characteristics.

**Table 1:** Social demographic characteristics.

Variable	Response Options	Frequency and Percentage (%) n=409
Age group	15-17 years	23 (5.6)
	18-21 years	110 (26.9)
	22-25 years	276 (67.5)
Sex	Male	205 (50.1)
	Female	204 (49.9)
Literacy	Yes	369 (90.2)
	No	40 (9.8)
Sector of Residence	Gatsata	204 (49.9)
	Remera	205 (50.1)
Marital Status	Single	374 (90.4)
	Married	23 (5.6)
	Separated	6 (1.5)
	Cohabiting	5 (1.2)
	Others	1 (0.2)
Religion	Christian	311 (76.1)
	Muslim	84 (20.5)
	No religion	14 (3.4)
<b>Mean age = 21.9 Median age = 22 Standard deviation = 2.2</b>		

As illustrated in Table 1, a majority (67.5%) of respondents are in the age group of 22-25 years, while the age group of 18-22 years accounts for 26.9%. The gender of the respondents is distributed equally among the respondents, with 50.1% representing male and 49.9% representing females. Interestingly, an overwhelming majority (90.2%) of respondents are literate compared to 73.2 in the general adult population (11). This could potentially be attributed to the Government of Rwanda (GoR) policy of universal free education that was introduced back in 2003 to bridge the gap in school enrolment and access to education for all (12). Ever since, this policy has opened opportunities for all

to access education and hence the increased literacy rate observed in this study. Similarly, the majority (90.45) of respondents is understandably single, considering the study at hand sampled young people between the age groups of 15-25 years of age. Lastly, majority of respondents (76.1%) identified themselves as Christians compared to 20.5% that were Muslims.

### 3.2 Social Cultural Characteristics of Respondents

This section presents findings on the social-cultural factors of respondents.

**Table 2:** Social cultural characteristics of respondents.

Variable	Response Options	Frequency and Percentage (%) n=409
Religion	Catholic	84 (20.5)
	Protestant	101 (24.7)
	Seventh Day Adventist	96 (23.5)
	Pentecostals	29 (7.1)

	Muslim	79 (19.3)
	No religion	7 (1.7)
	Others	13 (3.2)
<b>Regularity of attending religious services</b>	Everyday	20 (4.9)
	At least once a week	109 (27.1)
	At least twice a month	178 (44.3)
	At least once a year	55 (13.7)
	Less than once a year	22(5.5)
	Never	18 (4.5)
<b>Perceived importance of religion</b>	Very Important	154 (37.7)
	Important	224 (54.8)
	Not Important	31 (7.6)
<b>Living in the same house as father</b>	Yes	206 (69.8)
	No	89 (30.2)
<b>Ever Discussed sex-related topics with father</b>	Yes	74 (36.1)
	No	131 (63.9)
<b>Living in the same house as mother</b>	Yes	201 (60.2)
	No	133 (39.8)
<b>Ever discussed sex-related topics with your mother</b>	Yes	178 (86.8)
	No	27 (13.2)
<b>Ever going to places like clubs and parties where people dance</b>	Yes	208 (50.9)
	No	201 (49.1)
<b>Ever drinking alcohol</b>	Yes	202 (49.4)
	No	207 (49.7)
<b>Ever smoked cigarettes</b>	Yes	52 (12.7)
	No	357 (87.3)
<b>Gender of the head of household</b>	Male	258 (63.6)
	Female	131 (32.3)
	Not Applicable	17 (4.2)
<b>Ever had a boy or girlfriend</b>	Yes	387 (94.6)
	No	22 (5.4)
<b>Dating multiple partners at a single time</b>	Yes	200 (51.8)
	No	186 (49.2)

Table 2 illustrates the study findings on the social-cultural characteristics of respondents. Overall the study respondents are religious; almost all (98.3%) identified with a particular religious group. Most of the respondents belong to Christian based denominations, including Catholic (20.5%), Protestant (24.7%), and Seventh Day Adventist (23.5%). This is consistent with the last conducted national census results that reported that Christian-based denominations cover over 90% of the population (8). Cumulatively, the majority (76.3%) of the respondents regularly attend religious services at least once each month while 19.2% rarely participate in religious services, and lastly, only 4.5% reported having never attended religious services. Understandably then, an overwhelming majority (92.5%) of respondents ranked affiliation to a religious group as either important or very important.

Significant majorities of respondents live with their parents, with 69.8% living with their father and 60.2% living with their mother. However, when it comes to discussing sex related topics, the study paints a different picture as findings indicate respondents are more comfortable discussing sex related topics with their mother (86.8%) compared to the father (36.1%). Similar results are revealed by a different study conducted by the Health Development

Initiative (2019), which reported that mothers (65.5%) were more comfortable discussing sex-related topics compared to fathers (43.5%) (13). The hesitance of parents to speak about sex with their children stems from a number of factors, including cultural norms, religious beliefs, parents considering their children as too young and fear that such discussion could encourage their children to engage in sexual behaviours, and some parents feel ashamed to discuss sex-related topics with their children (14) (13). Additionally, similar proportions of respondents reported going to social events (50.9%) where young people dance like in night clubs and parties and have ever consumed alcoholic beverages (49.4%). On the contrary, only 12.7% of the respondents reported having ever smoked cigarettes. Furthermore, a significant majority (63.6%) of respondents hail from male-headed households. Nevertheless, an overwhelming majority (94.6%) of respondents have ever had a boy or girlfriend in their lives, while slightly more than a half (51.8%) has ever dated multiple girls or boyfriends simultaneously.

### 3.3 Findings on risky sexual Behaviors

This section presents the findings regarding the prevalence of different risky sexual behaviours and related parameters.

**Table 3:** Indicators related to risky sexual behaviours.

Variable	Response Option	Frequency and Percentage (%) n=409
<b>Ever had sex</b>	Yes	345 (84.4)
	No	64 (15.7)
<b>Age of sexual debut</b>	Below 15 years	27 (7.8)
	From 16 to 20 years	210 (60.7)

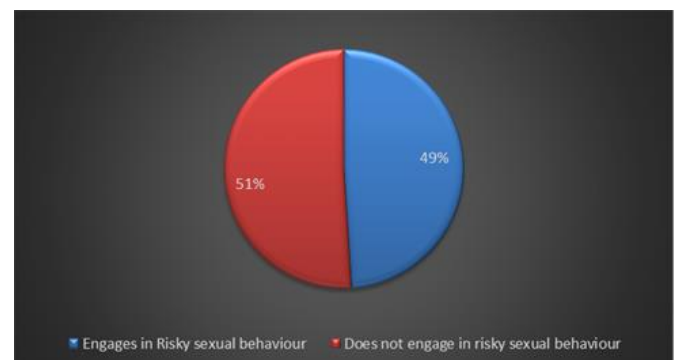
	From 21-25 years	109 (31.5)
<b>Condom use on sexual debut</b>	Yes	269 (77.9)
	No	76 (22.1)
<b>Last sexual activity</b>	In the last 3 months	279 (80.9)
	In the last 6 months	37 (10.7)
	In the last 12 months	3 (0.9)
	Over the past 12 months	19 (5.5)
	Others	7 (2.0)
<b>Condom use on last sexual encounter</b>	Yes	295 (85.5)
	No	50 (14.5)
<b>Ever had unprotected sex</b>	Yes	214 (62.1)
	No	131 (37.9)
<b>Number of sexual partners in the last 12 months</b>	One sexual partner	198 (57.4)
	More than one sexual partners	127 (36.8)
	More than five sexual partners	20 (5.8)
<b>Number of lifetime sexual partners</b>	One	143 (41.5)
	More than one	118 (34.2)
	More than two	52 (15.1)
	More than three	32 (9.3)
<b>Ever paid or received gifts for sex</b>	Yes	73 (21.1)
	No	274 (78.9)
<b>Number of times paid or received gifts for sex</b>	Once	19 (27.9)
	Twice or more	49 (72.1)
<b>Regularity of condom use</b>	Always	160 (46.5)
	Not always	144 (41.9)
	Rarely	40 (11.6)
<b>Having sexual intercourse under the influence of alcohol or drugs</b>	Yes	196 (55.8)
	No	155 (44.2)
<b>Perceived risk of HIV infection</b>	Yes	302 (86.3)
	No	48 (13.7)

Overall, a vast majority (84.4%) of respondents have ever had sexual intercourse, while around 7.4% had their sexual debuts before 15 years. However, the majority (77.9%) of respondents reported using condoms on their sexual debut. Furthermore, the study reveals that respondents are sexually active. At least eight in ten (80.9%) respondents had had sexual activity in the last three months, while only 14.5% reported using a condom on their previous sexual encounter. This means that 84.5% of respondents did not use a condom on their last sexual encounter, which is higher than the findings of Maonga et al., (2018) (15). In his study conducted in Malawi assessing the determinants of risky sexual behaviours, Maonga found that 63% of young people did not use a condom on their last sexual encounter. Cumulatively, around four in ten (42.6%) respondents revealed engaging in sexual intercourse with more than one partner during the previous twelve months. More than half (53.5%) of respondents confessed using condoms inconsistently in the last 12 months. This finding differs from Gashema et al. (2019) in a study assessing risky sexual behaviours among university students. The study revealed that only 10% of respondents had used a condom in the last 12 months (16).

In the same vein, the study report that a significant proportion (55.8%) of respondents acknowledged engaging in sexual intercourse while intoxicated with alcohol or drugs. This finding is consistent with Wells et al. (2010) that studied alcohol consumption in nightclubs and engaging in risky sexual behaviours, which revealed that at least 63% of respondents reported engaging in sexual activity while under the influence of alcohol (17). Understandably then, a significant majority (86.3%) of respondents perceived themselves as being at risk of contract HIV/AIDS.

### 3.4 Prevalence of risky sexual behaviors among young people in Remera and Gatsata sectors

This section presents the prevalence of risky sexual behaviours among young people. A composite variable was created to calculate the prevalence of risky sexual behaviours by combining the following variables: inconsistent condom use, engaging in sexual intercourse under the influence of alcohol or drugs, not using a condom on last sexual encounter, and having multiple sexual partners. Overall, close to half (49%) of respondents engage in risky sexual behaviours in Remera and Gatsata Sectors



**Fig 1:** Prevalence of risky sexual behaviour among young people in Remera and Gatsata sector.

### 3.5 Social-cultural factors associated with risky sexual behaviours among young people

This subsection presents findings on the various social-cultural factors that are associated with risky sexual behaviours.

Variables	Risky Sexual Behaviours		Crude Odds Ratio	95% Confidence Interval	P-Value	Adjusted Odds Ratio	Confidence Interval	P-Values
	Yes	No						
<b>Religion</b>								
No religion	14	4	3.50	1.152-10.632				
Catholic	38	27	1.40	0.859-2.305				
Protestant	36	45	0.80	0.516- 1.240	0.03*	0.84	0.604-1.183	0.3
Adventist	45	45	1	0.662- 1.512				
Pentecostals	10	16	0.63	0.284- 1.377				
Muslim	29	42	0.69	0.430- 1.108				
<b>Regular church attendance</b>								
Yes	99	158	0.63	0.487- 0.806	0.0001*	0.36	0.126 -1.089	0.07
No	68	21	3.23	1.985- 5.282				
<b>Religion's Perceived Importance</b>								
Important	146	175	0.83	0.669- 1.039	0.0001*	0.3.59	0.237 -54.33	0.35
Not Important	26	4	6.50	2.269- 18.624				
<b>Living with Father</b>								
Yes	45	133	0.34	0.241- 0.474	0.0001*	0.16	0.042-0.665	0.01*
No	46	28	1.64	1.027- 2.628				
<b>Living with mother</b>								
Yes	44	126	0.35	0.248 - 0.492	0.0001*	2.76	0.733- 10.44	0.1
No	78	38	2.0	1.393 - 3.025				
<b>Living with Siblings</b>								
Yes	94	134	0.65	0.527 - 0.895	0.0002*	0.86	0.303 -2.496	0.7
No	64	37	1.72	1.154 - 2.593				
<b>Attending peer social events (parties and nightclubs)</b>								
Yes	132	53	2.49	1.811 - 3.425	0.0001*	2.26	0.909-5.589	0.07
No	40	126	0.32	0.222- 0.453				
<b>Alcohol Consumption</b>								
Yes	138	50	2.76	1.997 - 3.814	0.0001*	5.22	2.02-13.46	0.001*
No	34	129	0.26	0.181- 0.385				
<b>Smoking Cigarettes</b>								
Yes	38	9	4.22	2.042 - 8.732	0.0001*	2.92	0.575-14.82	0.1
No	134	170	0.78	0.629 - 0.989				
<b>Dating multiple boy or girlfriends</b>								
Yes	135	34	2.50	1.823 - 3.428	0.0001*	2.40	1.009-5.721	0.04*
No	36	122	0.29	0.203 - 0.428				
<b>Gender of head of household</b>								
Female	50	63	0.79	0.547-1.150				
Male	107	112	0.96	0732-1.245	0.03*	0.66	0.295-1.471	0.3
Not Applicable	12	4	3.00	0.968-9.302				

At the bivariate level, all the social-cultural characteristics were associated with risky sexual behaviours in a statistically significant manner. However, only a limited number of variables are related to risky sexual behaviours at the multivariate level.

Firstly, parental control measured by whether young people were either living mother or father was also significantly associated with risky sexual behaviours. For example, young people that live with their fathers were less likely to engage in risky sexual behaviours (AOR = 0.16; 95%CI = 0.042-0.665; P-Value = 0.01). In other words, staying with a father was protective indicating that young people who stay with their father were less likely to engage in risky sexual behaviours. Consumption of alcohol was another factor that was positively associated with risky sexual behaviours (AOR=5.22; 95%CI=2.02-13.46; P-Value = 0.001). Respondents that consume alcohol are five times more likely to engage in risky sexual behaviours. This is consistent with findings from other scholars such as Bello et al. (2017) and Choudhry et al (2014), which revealed a strong association between risky sexual behaviours and

alcohol consumption (18) (19). While other factors such as religiosity and smoking of cigarettes were associated with engaging in risky sexual behaviours at the bivariate level, it was not the case at the multivariate level. To elaborate a little, respondents who considered religion as not important were 6.5 times more likely to engage in risky sexual behaviours (OR=6.5; 95%CI= 2.3- 18.6; P-Value = 0.0001). Consistently, Somefun (2019) and Francis et al. (2019) reported similar findings where their respective studies conducted in Nigeria and South Africa respectively found that increased religiosity characterized by the importance attached to religion and church attendance were protective against risky sexual behaviours (20) (21). On the contrary, non-religiosity was associated with an increased likelihood to engage in risky sexual behaviours. Young people with a previous history of having multiple girl or boys friends simultaneously were 2.4 times more likely to engage in risky sexual behaviours (AOR =2.40; 95%CI = 1.009-5.721; P-Value = 0.04) compared those that did not engage in multiple relationships.

## Discussion

Despite the importance of risky sexual behaviours among young people especially considering they increase the likelihood of spreading STIs, studies about this topic have been far and few between in Rwanda even more so among young people. This study aimed to determine the prevalence of risky sexual behaviours and examining the associated social-cultural factors.

The study indeed suggests that young people between the ages of 15-25 years in the sectors of Gatsata and Remera are sexually active. Worryingly, young people engage in risky sexual behaviours which literally means, they engage in behaviours that increase the probability of contracting or spreading sexually transmitted illnesses among other undesirable outcomes. This study reveals a prevalence of risky sexual behaviours at 49% which indicates that almost half of young people surveyed have ever taken part in risky sexual behaviours. This finding differs from Srahbzu and Tirfeneh (2020) and Geremew et al (2020) in their studies conducted among young people that reported prevalence of 17.2% and 27.5% respectively (7) (22). The difference in prevalence could be attributed to the fact that Srahbzu study was conducted among high school students that are more knowledgeable compared to this study. However, the risky sexual behaviours prevalence reported in this study closely mirrors those of Fetene and Mekonnen (43.1%) in a study conducted in Ethiopia assessing risky sexual behaviours of the youth at an out-patient clinic (23).

This study discloses a number of social –cultural factors associated with risky sexual behaviours. For starters, the study findings suggested that living with a father is protective against engaging in risky sexual behaviours (AOR = 0.16; 95% CI = 0.042-0.665; P-Value = 0.01). This finding is echoed by Ssewanyana and Srahbzu in their respective studies among young of which both allude of an association between risky sexual behaviours and low parental monitoring (24) (7). This similarity may stem from the African culture where fathers are tough and most likely controlling towards their sons and daughters.

Consumption of alcohol was another factor that was positively associated with risky sexual behaviours (AOR=5.22; 95%CI=2.02-13.46; P-Value = 0.001). This is consistent with findings from other scholars such as Bello et al, Srahbzu and Choudhry et al, which revealed a strong association between risky sexual behaviours and alcohol consumption (18) (19) (7). Furthermore, previous history of having multiple girl or boys friends was associated with engage in risky sexual behaviours (AOR =2.40; 95%CI = 1.009-5.721; P-Value = 0.04). Such a findings, agrees with Amoateng et al, in their study, they suggest an association between risky sexual behaviours and history having boy/girlfriend (25). Last but not least, other factors such as religiosity and smoking of cigarettes were associated with engaging in risky sexual behaviours only at the bivariate level. For example, respondents who considered religion as not important were 6.5 times more likely to engage in risky sexual behaviours (OR=6.5; 95%CI= 2.3- 18.6; P-Value = 0.0001). Consistently, Somefun and Francis et al reported similar findings where their respective studies conducted in Nigeria and South Africa respectively where they found that increased religiosity characterized by the importance attached to religion and church attendance were protective against risky sexual behaviours (20) (21).

Nevertheless, it's imperative to note that this study was

conducted in only two sectors of the 15 sectors that make up Gasabo district. In addition, the study sampled 409 respondents. Therefore, the findings of this study cannot be generalized to the whole district let alone the whole country and accordingly the findings should be interpreted with caution. However, these findings give a clear picture in the specific sector where the study was conducted but can also form a basis for a study that can be conducted on a larger scale.

## Conclusion

Risky sexual behaviours pose a significant public concern considering they increase the likelihood of contracting or spreading STIs, among other adverse outcomes. This study throws light on existence risky sexual behaviours among young people in the Remera and Gatsata sectors Gasabo district. In the same vein, the research reports several social-cultural factors associated with risky sexual behaviours. The association is statistically significant with a confidence interval of 95% at both bivariate and multivariate levels. These factors include living with a father and alcohol consumption, and a history of dating multiple girls or boyfriend partners. However, other factors, namely religiosity of respondents, smoking cigarettes and religion, were significant only at the bivariate level. In conclusion, the study at hand brings to light some interesting insights regarding young people and how they engage in risky sexual behaviours. Such insights can be a basis to form actionable recommendations that can lead to interventions to prevent young people from engaging in risky sexual behaviours.

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