Chapter 16

Socio-Demographic Determinants Of Risky Sexual Behavior Among Adolescents: A Case-Study Of Homa-Bay County, Kenya

By

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Abstract

Over the past decade, prevalence of risky sexual behavior among adolescent 15-19 years has been on upward trajectory. Globally, more than a half of adolescents engage in risky sexual behaviour. Sub-Saharan region has highest early sexual debut (46.3%). There is low (41.2%) condom use while prevalence of multiple sexual partners is 44.5%. In Homa-Bay County, more than 60% of adolescents engage in risky sexual behaviour; approximately 60% of adolescent males have their sexual debut before 15 years which is thrice the national prevalence of (21%). Studies have shown risky sexual behavior to be more prevalence among the low and middle income countries with more girls engaging in risky sexual behavior compared to their male counterparts. This study endeavored to assess determinants of risky sexual behavior among adolescents in Homa-Bay County, Kenya. The study used descriptive study design. A sample size of 306 participants were interviewed by use of interviewer led questionnaire. Key informant interview guide was used to collect qualitative data from 12 key informants. Data analysis tools were MS-Excel and Stata V 14 and thematic content analysis. Findings indicated other than sex (O.R.=2.016; C.I.=0.23-1.16; P=0.008) and age (O.R.=1.033; C.I.=0.61-3.32; P=0.043) other factors showed no significant association (P>0.05) with risky sexual behavior. Age was positively correlated with indulgence in risky sexual behavior among adolescents 15-19 years. Males were twice more likely to engage in risky sexual behavior compared to their female counterparts. The study concluded that age and sex as determinants of adolescents' risky sexual behavior.

Key words: Adolescents, risky sexual behaviour, social determinants

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1.1: Introduction

Globally, there is a growing concern about high prevalence of young people engaging in risky sexual behaviours (Ganchimeg, Ota, Morisaki, Laopaiboon, Lumbiganon, Zhang, Yamdamsuren, Temmerman, Say & Tuncalp et al., 2014). These behaviours include early sexual debut, multiple sexual partners, engaging in sexual activity without protection and under influence of drugs/alcohol (Fleming, Eisenberg, Catalano, Kosterman, Cambron, David, Hobbs, Berman, & Watrous, 2019; Isaksson, Stickley, Koposov & Ruchkin, 2018). Adolescents (10-19 years) form 1.2 billion (16%) of the world's population; 90% live in developing countries (WHO, 2020). World-wide, more than a half of adolescents engage in risky sexual behaviour. The level of risk varies substantially by region and sex (Kreager, Staff, Gauthier, Lefkowitz & Feinberg, 2016).; Isaksson et al., 2018). In developed world approximately 45% of adolescents practice inconsistent/non-condom use during sexual activity. Less than 19% have more than one sexual partner with high early sexual debut among males compared to females (Szucs, Lowry & Fasula et al., 2019).

Sub- Saharan Africa has an overall of approximately 36% of low risky sexual behaviour. The region has highest early sexual debut (46.3%) especially amongst the girls compared to males. There is low (41.2%) condom use while prevalence of multiple sexual partners is 44.5% (Liang, Simelane, Fortuny, Chalasani, Weny & Salazar 2019); Witwer, Jones & Lindberg, 2018). Kenya has low prevalence of consistent condom use of 36%, early sexual debut of 21% and more than 60% of males while 32% of females engage in multiple sexual partners respectively. In Homa-Bay County more than 60% of adolescents engage in high risky sexual behaviour; approximately 60% of adolescent males have their sexual debut before 15 years which is thrice the national prevalence of 21%.

Consequently, risky sexual behaviour has been associated with adolescents' unplanned pregnancies, risks of abortion, miscarriage, hemorrhage, early childbearing and early marriages. It has greatly contributed to high adolescent morbidity (HIV/AIDS/STI's) and maternal mortality rate and negative social problems like stigma poor academic performance and school dropout (Ganchimeg et al., 2014). Globally, more than 30% of adolescents are infected with HIV/AIDS world-wide (Piot, Abdool, Hecht, Legido-Quigley, Buse, Stover, Resch, Ryckman, Mogedal and Dybul et al., 2015).

1.2: Problem statement

Homa-Bay County has the worst indicators of adolescents' risky sexual behavior compared to the national prevalence. The County has a prevalence of sexual debut of 60% while the national prevalence of 21%. It has a high prevalence of multiple sexual partners is 62% in comparison to the national prevalence of 42%. Homa-Bay county has low condom use of 36.8% compared to the national prevalence of 42%. Also, there is high prevalence of adolescents who practice sex while under alcohol/drug influence at 25.9% compared to the national prevalence of 23.5%. Consequently, Homa-Bay County has the second highest prevalence of adolescent pregnancy at

38% compared to the national prevalence of 18%. As a result, adolescent motherhood is at 31.2% compared to the national prevalence of 14.7%. In addition, the County has the highest HIV prevalence of 19.4% compared to the national prevalence of 4.9%.

1.3: Theoretical Framework

According to ecological model, a persons' behaviour results from inter-play of an individual with his/her environment (Bronfenbrenner, 1994). The model theorizes that the environment plays an enabling and reciprocal role of enhancement of a behaviour through reinforcement or punishment. The theory is grounded on six explanatory domains; individual, family, peers, school, social environment and macro environment. Findings have been reported that adolescents' risky sexual behaviour is influenced by micro-level (neighborhood poverty, discrimination, inequality, peers) and proximal levels (individual factors) (Jaccard, Chassin, Osgood, Williams, Dahl, Conger & Brown, 2010). This study focused on individual and health facility factors such as age, sex, education level, marital status, child-parenthood, income, access to health facility, cost and availability of supplies.

Individual factors such as age, the period at which adolescents initiate sexual activities plays a great role in ASRH outcome. Reports indicate about 30% to 50% adolescents bring forth a child before they celebrate their 18th birthday (UNAIDS, 2017). A study in Busia and Nairobi Kenya, showed significant association between age and sex with risky sexual behaviour (Mayabi, 2016). Findings showed that 50% of women reported to have had sex below 18 years were more likely to engage in risky sexual behaviour. Studies have shown male adolescents to be more likely to engage in risky sexual behaviour than female adolescents (Dutt, 2017).

Religion has been positively associated with risky sexual behaviour. A study in Nigeria which showed out of school adolescents were less likely to exert autonomy in decision to engage in safer sexual intercourse compared to those in school (Darroch et al., 2016). Survey reports revealed literacy enabled adolescents to acquire basic cognitive skills, and develop capacity for critical reflection as underscored (UNESCO, 2016; Henry, Lehnertz & Alam, 2015). Studies have indicated a relationship between economic status and sexual *coitarche* with girls in the lowest wealth quintile initiating sexual debut much earlier (Garwood, Gerassi, Jonson-Reid, Plax & Drake, 2015).

1.4: Conceptual Framework

Independent Variables   **Dependent variable**
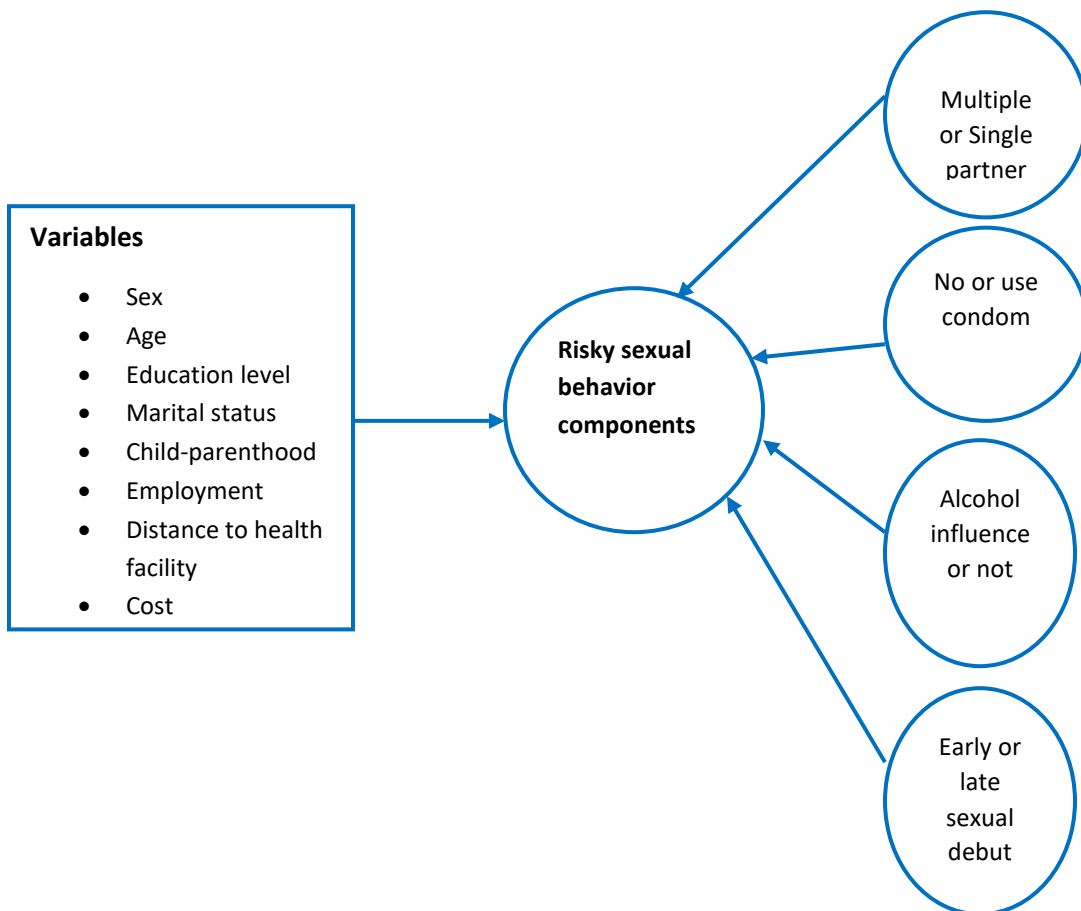

Figure1. 1: Conceptual Framework: Modified From Ecological Model (Bronfenbrenner, 1994). Source: Field Survey, 2020)

1.5: Research objective

1. To assess determinants of risky sexual behavior among adolescents in Homa-Bay County, Kenya

1.6: Methodology

Descriptive study design was used. The target population were adolescent 15-19 years old. The study population were adolescents 15-19 years within Homa-Bay County.

Cluster sampling was employed where the sub-county was clustered in the four administratively existing wards: East, West, South and Central. Through simple random sampling, a half (50%) of the wards was randomly identified. The wards selected were West and central ward. More so, a half 50 % of villages from every ward were by simple random sampling selected for the study. Finally, a half 50 % of households from each village were included in the study by simple random sampling. All the households with eligible adolescents 15-19 years were mapped out to generate a sampling frame of 1292. A sampling interval of 4 was arrived at by dividing the total number of population in the sampling frame 1292 by a sample size of 325. Sample size determination was by use of standard Fischer's Formula is $n = Z^2 pq/d^2$ formula where p=0.36.

Through systematic sampling, every 4th household with eligible adolescent was selected for the study. A total of 306 (94%) participants were interviewed. Research instruments were structured questionnaire and key informant interview guide. Quantitative data was collected from the participants by use of a structured closed ended interviewer led questionnaire. Qualitative data was collected by use of key informant interview guide. Quantitative data was analyzed by used of MS-excel package and Stata V- 14. Regression analysis was computed where Chi-square and p-value of ≤ 0.05 were used to determine significance. Odds ratio determined probability. Descriptive data were presented in bars, figure and tables. Thematic content analysis of qualitative data was conducted and cross-cutting themes were organized and presented verbatim.

1.7: Findings
1.7.1: Socio-demographic characteristics

Table 1.1 shows summary of participants socio-demographic variables. Majority 176(57.5%) of the participants were males while 130(42.5%) were females. Majority 192(62.7%) of the participants were between 15-17 years with a mean of 17 years (mean=17 S. D ±1.44). Majority 217(70.9%) of the participants had completed their primary level of education. Most 123(40.2%) of the participants were Protestants and more than a half 213(69.6%) preferred to be interviewed in English language over their native *Dholuo* language. Most 297(97.1%) of the participants were not in any form of employment. However, those who were employed 7(77.8%) were in informal sector where slightly more than a half 5(55.6%) earned less than Kshs 200 (<2 USD) daily wages. Most 274(98.5%) of the participants were schooling. More than a half 189(61.8%) lived less than one Kilometer from their nearest health facility while 170(55.6%) paid less than Kshs 100 (<1 USD) as transport cost. In addition, more than a half 167(54.6%) reported unavailability of supplies in health facilities.

Table 1.1: Summary statistics on covariates and personal variables

Variable	Category	n	%
Sex	Males	176	57.5
	Females	130	42.5
Age in years	15-17	192	62.7
	18-19	114	37.2
Education level completed	None	38	12.4
	Primary complete	217	70.9
	Secondary complete	51	16.7
Adolescent parenthood	Have children	15	4.9
	No children	291	95.1
Religion	Catholic	111	36.3
	Protestant	123	40.2
	Traditional	55	17.9
	None	17	5.6
Preferred Language	English	213	69.6
	Dholuo	93	30.4
Employment	Employed	9	2.9
	Not employed	297	97.1
Type of work	Informal	7	77.8
	Formal	2	22.2
Daily wages	<Kshs. 200 (<2 USD)	4	44.4
	>Kshs 200 (>USD)	5	55.6
Currently in school	Yes	274	89.5
	No	32	10.5
Distance	< 1km	189	61.8
	>1 km	117	38.2
Cost	<Kshs 100 (1 USD)	170	55.6
	>Kshs 100 (1 USD)	136	44.4
Availability of supplies	Available	139	45.4
	Not available	167	54.6

Source: Field survey, 2020

1.7.2: Prevalence of High Risky Sexual Behaviour

Figure 1.2 show the overall prevalence of high risky sexual behaviour. Findings revealed that 207(67.9%) participants engaged in high risky sexual behaviour. The findings show that overall, 7 in 10 adolescents engaged in high risky sexual behaviour. The study revealed 6 in 10 188(61.5%) participants reported non-use or inconsistent use of condom. Also, 1 in 4 117(38.5%) adolescents had multiple sexual partners, while 3 in 10 83 (27.2%) adolescents engaged in sexual intercourse while under the influence of alcohol/drugs.

These statistical findings were supported by some of the key informants when asked to comment on the prevalence of risky sexual behaviour among adolescents in the County.*K.I.3:*
"From our interaction with adolescents during our sensitization workshops, they say they sometimes fail to use condoms during their sexual activity because they do not have the condoms. They say that health facilities are far way and sometimes there are no   supplies."

K.I. 1: "We encourage our adolescents to abstain from sexual activity or use protection. Some follow through with condom use. However out of stock and erratic availability of supplies affects their consistent in their consumption.

Findings showed 117(38.5%) participants had multiple sexual partners. These statistical findings were supported by qualitative information.

K.I.2: "From our counselling sessions, most of the adolescents say that they engage in sexual activity with more than one sexual partner. Some say that sometimes the sexual partner may not be around or there could be a disagreement and he/she may decide to leave so it is better to have more."

Findings showed 83(27.2%) of participants engaged in sexual intercourse while under the influence of alcohol/drugs.

K.I. 7: 'Most of our adolescents use drugs especially alcohol. With as little as Kshs. 20(0.02 USD) they can buy alcohol popularly known as 'Obama' while others use local brew when they attend 'disco matanga' (funeral dances at night) where they indiscriminately engage in sexual activity."
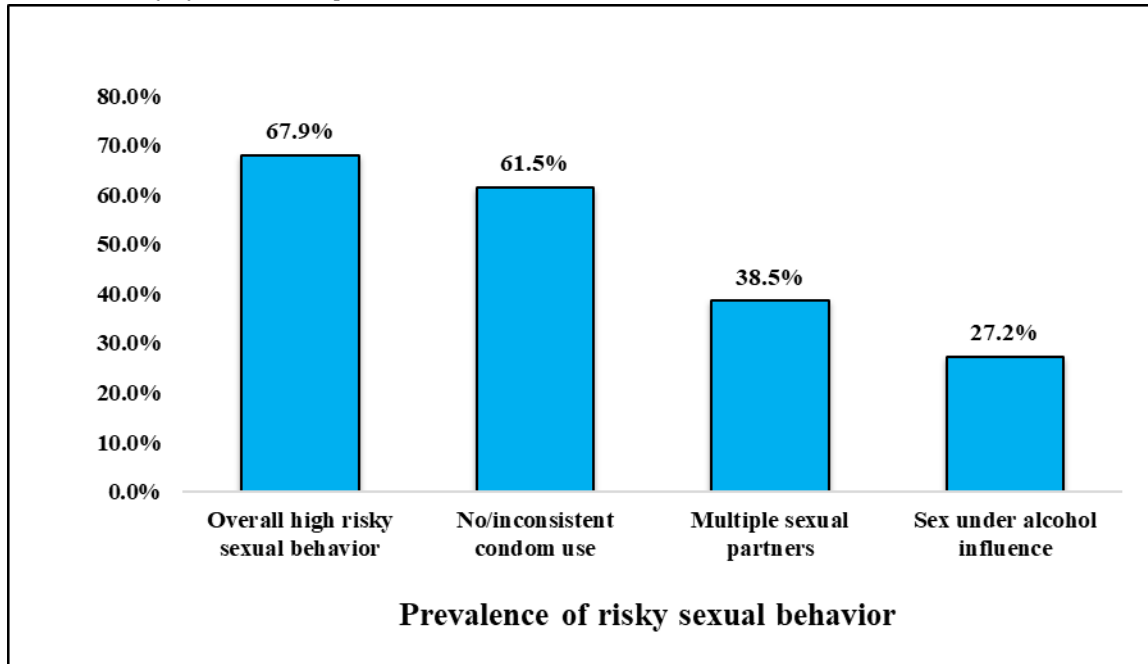
Figure 1.2: Figure Prevalence of Risky Sexual Behavior. Source: Field Survey 2020

1.7.3: Determinants of Risky Sexual Behavior

The study sought to determine socio-demographic characteristics associated with sexual behaviour. An overall logistic regression analysis was computed to determine Pearson's Chi-square. The study focused on the three operational dependent variables and the overall dependent variable on how socio-demographic characteristics are associated with high or low risky sexual behaviour. Table 1.2 shows there was a significant association p<0.05 between high risky sexual behaviour and some factors such as sex p=0.008; O.R.= 1.033 and age p=0.043; O.R.=2.016. The older adolescents 18-19 years were 1.033 times more likely to engage in high risky sexual behaviour compared to younger adolescents 15-17 years. Male adolescents were twice more likely to engage in high risky sexual behaviour compared to females. Other factors recorded no significant association with high risky sexual behaviour p>0.05.

Qualitative data supported these findings. From one of the sub-themes on whether socio-demographic factors can contribute to high prevalence of RSB.

K.I.5: "From our counselling sessions most of the adolescents who say they have never   used protection during their sexual activity are very young. Especially our adolescent girls. They say that they are not able to negotiate for safe sex." Some K.I.I reported that sex of an adolescents plays a role in their engaging in risky sexual behaviour. K.I.1: "Both males and females are vulnerable to risky sexual behaviour. The girls have limited options considering the push factors of them engaging in sexual   activity is poverty. They trade their bodies for basic things like food, sanitary pads and clothing or even transport to school by the 'Boda boda'(motorcyclists) guys. Male adolescents because they have some money, they are the ones who 'buy' the girls hence they end up engaging in sexual activity with as many girls as they can afford." In addition; K.I.7: "Our girls are brought to school by these Boda boda'(motorcyclists)   and   because they can't afford to pay for the transport cost,   they end up having sex with   them."

Table 1. 2: Determinants of risky sexual behavior
Source: Field Survey 2020

Variable	Category	Odds Ratio	P-value/ Exact	Confidence Interval (95%)	
Sex	Female				
	Male	2.016	0.008	0.23	1.16
Age	15-17 years				
	18-19 years	1.033	0.043	0.61	3.32
Education completed	None				
	Primary	0.086	0.173	0.57	2.02
	Secondary	0.314	0.634	0.68	1.99
Employment	Employed				
	Unemployed	0.076	Exact= 0.463	0.33	2.15
Parenthood	Have children				
	No children	0.655	Exact=0.381	0.48	2.99
Distance	Less 1km				
	More 1 km	0.649	0.491	0.412	5.133
Transport cost	<Kshs. 100 (1 USD)				
	>Kshs.100 (1 USD)	0.524	0.903	0.917	3.447

1.7.4: Determinants of Sexual Partners, Condom use and Alcohol Influence

As illustrated in Table1.3 the study established that some factors were significantly association p<0.05 with number of sexual partners. These were sex at p=0.048; O.R.=2.171 whereas age had p=0.027; O.R.=1.295. This infers that males were twice more likely to have multiple sexual partners compared to females. In addition, older adolescents 18-19 years were 1.3 times more likely to have multiple sexual partners compared to younger adolescents 15-17 years. Other factors recorded no significant association with number of sexual partners p>0.05. Also, the study recorded no significant association between the factors and condom use and engaging in sexual activity under alcohol influence p>0.05.

Table 1. 3: Factors Associated with Sexual Partners, Condom use and Alcohol Influence

Variable	Category	O.R	P-value/Exact	C.I (95%)	
Determinants of Sexual Partners					
Sex	Female				
	Male	**2.172**	0.048	0.19	3.46
Age	15-17 years				
	18-19 years	**1.295**	0.027	0.51	4.81
Education completed	None				
	Primary	0.322	0.489	0.88	3.19
	Secondary	0.517	0.811	0.17	2.93
Employment	Employed				
	Unemployed	0.808	Exact= 0.563	0.28	5.26
Parenthood	Have children				
	No children	0.814	Exact=0.091	0.45	1.94
Distance	Less 1km				
	More 1 km	0.655	0.703	0.183	2.133
Transport cost	<Kshs. 100 (1 USD)				
	>Kshs.100 (1 USD)	0.361	0.201	0.634	3.339
Determinants of Condom use					
Sex	Female				
	Male	0.477	0.306	0.92	4.74
Age	15-17 years				
	18-19 years	0.831	0.061	0.15	5.31
Education completed	None				
	Primary	0.642	0.483	0.11	4.22
	Secondary	0.567	0.091	0.52	6.32
Employment	Employed				
	Unemployed	0.086	Exact= 0.501	0.97	2.82
Parenthood	Have children				
	No children	0.802	Exact=0.404	0.15	2.73
Distance	Less 1km				
	More 1 km	0.209	0.502	0.37	2.308
Transport cost	<Kshs. 100 (1 USD)				
	>Kshs.100 (1 USD)	0.806	0.307	0.18	3.166
Determinants of Alcohol Influence					
Sex	Female				
	Male	0.518	0.701	0.43	1.72
Age	15-17 years				
	18-19 years	0.92	0.312	0.78	3.84
Education completed	None				
	Primary	0.743	0.844	0.85	2.13

	Secondary	0.481	0.513	0.29	1.94
Employment	Employed				
	Unemployed	0.516	Exact= 0.663	0.72	3.18
Parenthood	Have children				
	No children	0.829	Exact=0.772	0.78	1.31
Distance	Less 1km				
	More 1 km	0.072	0.981	0.19	1.68
Transport cost	<Kshs. 100 (1 USD)				
	>Kshs.100 (1 USD)	0.615	0.783	0.928	3.19

1.8: Discussion

This study identified a significant association ($p<0.05$) between age and sex of participants with RSB. Males were twice more likely to practice RSB compared to females. Likewise, older adolescents 18-19 years were 1.3 times more likely to practice RSB compared to younger adolescents 15-17 years. Similar findings in other studies showed socio-demographic profile of an adolescent affects their indulgence in sexual behaviour (Darroch et al., 2016). According to a report UNESCO, socio-demographic characteristics such as age, level of education, religion and parenthood have been associated to influence sexual behaviour change among adolescents (UNESCO, 2019).

1.9: Conclusion

Only two socio-demographic factors had had an association with risky sexual behavior: age and sex. All other factors showed no association with association with risky sexual behavior: education completed, employment, religion, parenthood, distance, transport cost and condom availability in health facilities. There is an association between some socio-demographic determinants (age, sex) and risky sexual behavior. This implies that when designing health education programs, one should consider age and sex of the audience for it to be more effective.

1.10: Recommendations

Health educators should design health education programs tailored to specific age groups and sex of the adolescents.

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