

Original Research Paper

Gender differentials in condom use among never married youths in Zambia

ABSTRACT

The present study explored factors affecting gender differentials in condom use among never married youths in Zambia. Data employed in this study was derived from the 2013 Zambia Demographic Health Survey. Logistic regression analysis was used to identify factors affecting gender differentials in condom use by considering socio-economic variables. The study revealed that about 12% females and 16% of males reported having had sex with one partner, three or more partners; and 29% of females and 37% of males reported having used condoms during last sex with their partners. Logistic regression analysis identified age, wealth status, educational level, media exposure and drinking alcohol as strong predictors of respondent's likelihood of condom use. The study showed that females who had completed secondary education were 1.4 times more likely to report having had used condoms with their partners. Moreover, male youths who were working were 1.5 times more likely to report having used a condom during last sex with their partners compared to those who were not working. The study further revealed that to a larger extent, socio-economic and demographic factors were cardinal determinants of condom use among never married youths in Zambia. Most of these findings have shown consistency with other studies done within sub-Saharan Africa and other countries relating to the determinants of condom use among never married youths. This study in its findings recommends that interventions that seek to fight STI and unwanted pregnancies through encouragement of condom use should take into account, gender differentials, age, media exposure, and socioeconomic status of the target population as integral aspects of these interventions to guarantee effectiveness.

Key words: Gender differentials, condom use, never married youths, Zambia

1. Introduction

Over the years, research has revealed that people of all ages are prone to sexually transmitted infections (STIs) including HIV (UNAIDS 2016). However, young people have the highest rates

of increased exposure to the risks of STIs. Various mechanisms have been advocated globally by which STIs can be combated. One such mechanism is correct and consistent condom use. Unfortunately, various studies have also found that condom use among young never married men and women has persistently been low especially in sub-Saharan Africa (Njau et. Al. 2013).

In most of Sub Saharan Africa the rates of STIs have been high with HIV averaging Sub-Saharan Africa (SSA) is most heavily affected by HIV/AIDS with around 66 percent of adults and children were infected every day in 2015 (UNAIDS, 2016). Most of these countries are characterized by young people. Zambia, like most of Sub-Saharan Africa, has a young population with 45.4% of persons aged below 15 years. The population is also characterised by continuing urban drift. Between 2000 and 2010, the percentage distribution of youths aged 15-35 years reduced from 34.5% to 33.3% in rural areas and increased from 41.4% to 41.9% in urban areas. The median age was 16.9 years (Urban: 18.7; Rural: 15.6) (CSO 2012).

Zambian adolescents and young adults are significantly at high risk of HIV infection from unprotected sexual intercourse. A number of proximate and distal determinants of risk include early onset of sexual activity, unprotected sex, sexual abuse, early marriages and pregnancies, substance and alcohol abuse, and unsafe cultural practices. Between the 2007 and 2014 Zambia Demographic Health Survey (ZDHS) reported risky sexual behaviour increased and the percentage of adolescent girls reporting a sexual partner almost doubled, while low rate of reported condom use at last sex did not change (CSO 2007; CSO 2014).

While research studies and other scholarly works in the past and present undermined young people and their use of condoms, particularly concentrating on their risky behaviors, other factors that determine such behavior or attitude towards condom use among young men and women have been considered. For instance, a Demographic and Health Survey conducted in 1997 in Madagascar revealed that some of the reasons that hindered young people from using condoms were lack of information about condoms either as a preventive measure from sexually transmitted diseases or as a mode of family planning, and the attitudes and perception of condom use (Meekers, Silva & Klein, 2005). The survey found that 45% of women aged 15–19 and 54% of those aged 20–24 had never heard of STIs while 31% and 30%, respectively, had never heard about HIV or AIDS. Both groups had also never heard about condoms either as a preventive measure against STIs and HIV or as a form of birth control.

Furthermore, the beliefs of possibly contracting HIV or STIs at first sexual encounter and condom use benefits also served as determinants in young unmarried men and women's use of condoms. According to Adebisi and Asuzu (2009), 42% of the 88 respondents who had never

had sex before were most likely to use condoms as compared to 27.3% of those that did not. This is similar to the findings of Thato et al. (2003) where 46.3% (HIV) and 44.2% (STIs) of the 195 sexually active young men and women attested to having the possibility of contracting sexually related diseases at first sexual encounter. The study further found that young people were more likely to use condoms if they believed in the benefits of using them, had higher levels of knowledge on sexually transmitted diseases, believed that their friends engaged in preventive health behaviors and consumed less alcohol. Aside from that, based on the knowledge they had of condom use and its benefits, males used condoms more if they perceived them to be effective for family planning while females used condoms particularly for family planning (Meekers, Silva and Klein, 2005).

Correct and consistent condom use has been associated with the reduction and prevention of sexually transmitted diseases, re-infections and as a mode of family planning. These among the many advantages of using condoms among sexually active young men and women or those having had sexual intercourse for the first time have proved successful when used correctly and consistently. However, a cross sectional study in Madagascar's Toamasina conducted on 1,915 unmarried sexually active youths found that condom use was relatively low despite its known advantages (Meekers, Silva & Klein, 2005). It was found that amongst the 1,915 respondents, only 42% of males and 21% of females had reported having used a condom in their life time. Out of the 63% of those that had used a condom in their life time, the study found that only 17% of both sexes used condoms consistently. Such findings are similar to those of Adebisi and Asuzu's (2009) cross sectional study conducted in Kajola, Nigeria, on 350 out of school unmarried youths aged 15-24. The study found that of the 350 respondents, 262 (74.9%) reported having had sex before but only 29% of both sexes used condoms.

Correct and consistent use of condoms is a critical component of combination HIV prevention strategies and a core programme area in the UNAIDS Investment Framework (UNAIDS 2015). Thus, condom promotion and distribution is one of the key programme areas for the Zambian multi-sectoral HIV response (NAC 2017). The interventions build on past successes scored by the multi-sectoral HIV response efforts which promoted the increase in the distribution of both male and female condoms whilst intensifying education and awareness-raising. The priority was wide-scale information sharing about the benefits of using condoms and their correct use every time a person has casual sex or has multiple concurrent sexual partners. The national response also promoted the condom as a family planning method and for use in stable relationships among sero-discordant couples. Condom demand creation efforts have scaled

up in many districts despite inconsistent supply of the commodities. Currently, condoms are being distributed by health facilities and non- health facilities to ensure access by all the users

Lastly, most studies showed that as compared to females, males used condoms more than females. Hence gender was also regarded as a determining factor to young people's use of condoms. Meeker, Silva and Klein's (2005) study found that 42% males and 21% of females reported having used a condom in their life time while 13% of males and 10% of females used condoms on an irregular basis. Similarly, condom use was high among males than females in Adebisi and Asuzu's (2009) study; 44.7% and 29.7% respectively, thus showing that use of condoms was dependent on being male. However, Thato et al. (2003) argued to this stating that gender was not a determining factor of condom use as the study found both sexes were most likely to use condoms if they had greater intentions thus stating that condom use is dependent on both sexes. This article we present data on gender differentials in condom use among never married youths in Zambia.

2. METHODOLOGY

The present study used data from the 2013 Zambia Demographic Health Survey (ZDHS). The sample for the survey was designed to provide the estimates of population and health indicators at the provincial and national levels. The survey was based on nationally representative sample carried out by Central Statistical Office with technical assistance from the Demographic Health Surveys Programme at ICF International which was funded by the United States Agency for International Development (USAID). The survey used a two-stage stratified cluster sampling design. At the first stage, 722 Enumeration Areas (EA) were selected using systematic random sampling with probability proportional to size. At the second stage, 25 households per EA were selected again using systematic random sampling. Methods and data collection procedures have been published elsewhere (ZDHS, 2014).

The ZDHS included a special module designed to collect information on various demographic and health indicators including individual characteristics, sexual activity, marriage, family planning knowledge and use, HIV/AIDS related knowledge, attitudes and behaviour. The household questionnaires also collected information on the demographic and economic characteristics of all household members. In this study, the analysis was restricted to never married adolescents aged 15-24 in order to specifically look at their condom use.

2.1 Data Analysis

The data analysis for the study was carried out in two stages. Firstly, cross tabulations were used to examine the relationship between the independent (socio-economic and demographic variables) and dependent (sexual behaviour) variables. For the statistical analysis, chi-square tests were conducted at the bivariate level for independent variables at $p < 0.01$ and $p < 0.05$ significant level. Secondly, the liner logistic regression was used to identify factors influencing condom use by considering socio-economic and demographic variables. The result of the logistic regression models were converted into odds ratios, which represented the effect of a one-unit change in the explanatory variable on the indicator of sexual behaviour. Odds ratios larger than one indicates a greater likelihood of engaging sexual behaviour than for the reference category; odds ratios smaller than one indicates a smaller likelihood compared to the reference category.

Table 1. Description and measurement of independent variables

Variables	Description
Age	Age of the respondent is categorized as 15-19 and 20-24.
Religion	Religion is classified as Catholics and Protestants.
Residence	Place of residence is coded as urban or rural.
Wealth index	To measure socioeconomic status, we used DHS a wealth index, which divides households into three groups: poor, middle and rich according to the number of goods owned by the household.
Work status	Work status of the respondent is classified into two categories; those working and not working.
Educational level	Educational level of the respondent is categorized into primary and secondary or higher education.
Reading newspaper at least once a week	Exposure to media was measured by frequency of reading newspaper at least once a week. It is classified as those who are reading newspapers at least once a week and less than once a week.
Listening to radio at least once a week	It is classified as those who are listening to radio at least once a week and less than once a week.
Watching television at least once a week	It is classified as those who are watching to radio at least once a week and less than once a week.
Drinks alcohol	It is grouped into two those drinking and not drinking alcohol

2. Results

3.1 *Background characteristics of the sample*

The background characteristics of the sample are shown in Table 2. More than half of the respondents were in the age range 15-19 (72% of females and 65.4% of males) while the rest were aged between 20-24 (27.5% females and 34.6% males). With regard to religion, the majority of the respondents were Protestants (78.3% of males and 80.3% of females) while the minority were Catholic (21% of males and 19.7% of females). The results also showed that more than half of the respondents were from rural areas (57.5% of males and 51.2% of females). The distribution of respondents by wealth quintile showed that 24% of females and 27% of males were ranked poor, 19.7% of females and 21.3% of males were categorized as belonging to the middle class and 56.3% of the females and 50.8% of the males were ranked rich. The data further shows that there were more respondents who were not working for both genders (77.9% of females and 54.9% of males).

The education characteristics of the respondents showed that 70% of females and 64.2% of males had completed secondary or higher education whereas 30% of the females and 35.8% of the males had only acquired primary education. Furthermore, 68% of the females and 67.8% of the males reported reading newspapers less than once a week. On the contrary, 31.9% of the females and 32.2% of the males read newspapers at least once a week. Moreover, more than half of the respondents listened to the radio at least once a week (54% of females and 63% of males). On the other hand, 45.8% of the males and 37% of the females listened to the radio less than once a week. With regard to exposure to television, the majority of respondents (51.7% of females and 52.7 % of males) watched television less than once a week. Meanwhile, 48.3% of the females and 47.6% of the males watched television less than once a week. The data further indicated that 5.4% females and 15.1% of males reported drinking alcohol.

197 Table 2: Background characteristics of never married males and females in Zambia (aged 15-24)

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Characteristics		Female	N	Male	n
Age					
	15-19	72.5	3058	65.4	3304
	20-24	27.5	1161	34.6	1750
Religion					
	Catholic	19.7	839	21.7	1093
	Protestant	80.3	3380	78.3	3961
Place of residence					
	Rural	57.5	2428	51.2	51.2
	Urban	42.5	1791	48.8	48.8
Wealth Index					
	Poor	24.0	1013	27.9	1410
	Middle	19.7	831	21.3	1077
	Rich	56.3	2375	50.8	2567
Work status					
	Not-working	77.9	3272	54.9	2767
	Working	22.1	947	45.1	2287
Educational level					
	Primary	30.0	1266	35.8	1808
	Secondary+	70.0	2953	64.2	3246
Reading newspaper at least once a week					
	Less than once a week	68.1	2878	67.8	3425
	At least once a week	31.9	1341	32.2	1629
Listening to radio at least once a week					
	Less than once a week	45.8	1927	37.0	1868
	At least once a week	54.2	2292	63.0	3186
Watching television at least once a week					
	Less than once a week	51.7	2183	52.4	2643
	At least once a week	48.3	2036	47.6	2411
Drinks alcohol					
	No	94.6	3991	84.9	4292
	Yes	5.4	226	15.1	762

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201 **3.2 Number of Sexual Partners**

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203 Overall, fewer females (11.6%) than males (15.9%) reported having had sex with three or more

204 partners in the last 12 months. Respondents aged 20-24 (females 15.2%, males 17.2%) were

205 more likely to report having sex with three or more partners compared to the age group 15-19

206 (females 9.1%, males 14.9%). Respondents from protestant denomination (females 12.1%, males

207 13.7%) were more likely than those from Catholic (9.6%) to report having had sex with three or

208 more partners. The results showed that females from poor backgrounds were likely to report

having sex with three or more partners compared to those from middle and rich backgrounds (poor 13.8%, middle 13.1% and the rich 9.8%). On work status, working females (16.7%) were more likely to report having had sex with three or more partners as compared to women who were not working (9.5%). On listening to the radio, females who listened to the radio less than once a week (12.8%) were more likely to report having had sex with three or more partners compared to those who listened to the radio at least once a week (10.5%). Females who watched television less than once a week (12.5%) were more likely to report having had sex with three or more partners compared to those who watched television at least once a week (10.5%). There was no statistical significance on this domain among the males. With regard to drinking alcohol, those who drank alcohol (19.1%) were more likely to report having had sex with three or more partners as compared to those who did not drink (10.9%). Alcohol consumption did not show any significant results among the males.

Table 3. Never married sexually active females and males who reported having had sex with three or more partners

Characteristics		% females reported having had sex with three or more partners		% males reported having had sex with three or more partners	
		%	N	%	N
Age					
	15-19	9.1**	1254	14.9*	1635
	20-24	15.2	871	17.2	1446
Religion					
	Catholic	9.6*	408	13.7*	687
	Protestant	12.1	1713	16.7	2383
Place of residence					
	Rural	11.1	1191	15.4	1542
	Urban	12.2	934	16.4	1539
Wealth Index					
	Poor	13.8*	550	17.1	888
	Middle	13.1	490	15.0	708
	Rich	9.8	1085	15.7	1485
Work status					
	Not-working	9.5**	1491	15.1	1420
	Working	16.7	622	16.7	1656
Educational level					
	Primary	11.6	594	17.4	1038
	Secondary or higher	11.6	1530	15.1	2039
Reading newspaper at least once a week					
	Less than once a week	12.1	1510	16.4	2085
	At least once a week	10.5	609	15.0	994
Listening to radio at least once a week					
	Less than once a week	12.8*	1012	16.8	1102

At least once a week	10.5	1110	15.5	1976
Watching television at least once a week				
Less than once a week	12.5*	1216	15.6	1670
At least once a week	10.4	908	16.3	1408
Drinks alcohol				
No	10.9**	1951	15.6	2427
Yes	19.1	173	17.3	654
Total	11.6	2124	15.9	3081

*** Significant at $P < 0.01$; ** Significant at $P < 0.05$

3.3 Condom use among never married

Overall, about 28.9% of females and 36.8% of males reported using a condom during last sex. Female respondents aged 20-24 (30.9%) and males (42.6%) were more likely to report using a condom at last sex compared to the age group 15-19 (females 27.5%, males 31.6%). Respondents from rural residences (females 31.8%, males 38.8%) were more likely to report having used a condom at last sex as compared to those from urban residences (females 25%, males 34%). The wealth index shows that respondents from rich backgrounds (females 32.7% males 41%) were more likely to report having used a condom at last sex as compared to those from poor backgrounds (females 21.7% and males 32%). On work status, working respondents (females (31.3%) and males (38.8%)) were more likely to report using a condom at last sex as compared to respondents who were not working (females 28% and males 34%).

As regards to respondents education level, respondents who had secondary education (females 30.8%, males 40.1%) were more likely than those who had primary education (females 24%, males 30.2%) to have used a condom at last sex. Respondents who read newspapers at least once a week (females 32.7% and males 41.2%) were more likely to report having used a condom at last sex as compared to those who read the newspaper less than once a week (females 27.3% and 34.6% males). On listening to the radio, respondents who listened to the radio at least once a week (females 30.5% and males 38%) were more likely to report having used a condom at last sex compared to those who listened to the radio less than once a week (female 27% and male 34.5%). Those who watched television at least once a week (females 33.3% males 40.1%) were more likely to report having used a condom at last sex as compared to those who watched television less than once a week (female 25.6% and 34% males). With regard to drinking alcohol, those who drank alcohol (females 53.6% and 48.3% males) were more likely to report having used a condom at last sex as compared to those who did not drink (females 26.7% males 33.6%).

253 Table 4. Never married sexually experienced youths who reported having using condom during
 254 last sex with their partners
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Characteristics		% of females who had used condom during last sex		% of males who had used condom during last sex	
		%	N	%	N
Age					
	15-19	27.5*	1251	31.6**	1617
	20-24	30.9	871	42.6	1406
Religion					
	Catholic	30.1	408	38.3	671
	Protestant	28.7	1710	36.4	2341
Place of residence					
	Rural	31.8**	1190	38.8**	1520
	Urban	25.1	932	34.7	1503
Wealth Index					
	Poor	21.7**	548	32.3**	871
	Middle	28.6	490	33.6	692
	Rich	32.7	1084	41.0	1460
Work status					
	Not-working	28.0*	1491	34.5**	1406
	Working	31.3	619	38.8	1612
Educational level					
	Primary	24.0**	592	30.2**	1017
	Secondary or higher	30.8	1529	40.1	2002
Reading newspaper at least once a week					
	Less than once a week	27.3**	1507	34.6**	2041
	At least once a week	32.7	609	41.2	980
Listening to radio at least once a week					
	Less than once a week	27.0*	1013	34.5*	1082
	At least once a week	30.5	1106	38.0	1938
Watching television at least once a week					
	Less than once a week	25.6**	1214	34.0**	1635
	At least once a week	33.3	907	40.1	1385
Drinks alcohol					
	No	26.7**	1948	33.6**	2385
	Yes	53.8	173	48.3	638
Total		28.9	2122	36.8	3023

*** Significant at $P < 0.01$; ** Significant at $P < 0.05$

3.4 Factors affecting condom use

The present study used linear logistic regression to identify factors influencing condom use. The results showed that age, wealth status, education level, and drinking alcohol emerged as salient predictors of condom use at last sex among female youths. Female youths aged 20-24 showed a strong likelihood of having used a condom at last sex with their partner. Age group 20-

24 was 1.9 times more likely to report using a condom at last sex as compared to age group 15-19. The wealth index also revealed that youths from a middle class background were 1.4 times more likely to use a condom at last sex as compared to those from a rich or poor background. Moreover, female youths who had secondary education or higher were 1.4 times more likely to report using condoms in comparison to those that had only acquired primary education. Lastly, drinking alcohol was significantly associated with a strong likelihood of female youths using a condom at last sex with their partners. Those who drink alcohol were 3.8 times more likely to report using a condom during last sex with their partners as compared to those who did not drink.

For adolescent males, the results showed that age, work status, place of residence, educational level and drinking alcohol emerged as salient predictors of condom use at last sex among never married male youths. Male youths aged 20-24 showed a strong likelihood of having used a condom at last sex. Age range 20-24 was 2.2 times more likely to report using a condom at last sex as compared to age group 15-19. Working males showed a strong likelihood of having used a condom at last sex. Working males were 1.5 times more likely to report having used a condom at last sex compared to those who did not work. Other than that, respondents from urban residence were found to be 1.2 times more likely to report having used a condom at last sex as compared to those from rural residences. Logistic regression further found that male youths who had secondary education or higher were 1.4 times more likely to report using condoms in comparison to those that had only acquired primary education. Lastly, drinking alcohol was significantly associated with a strong likelihood of male youths using a condom at last sex with their partners. Those who drink alcohol were 2.2 times more likely to report using a condom during last sex as compared to those who did not drink.

Table 5. Logistic Regression Analysis data of socio-economic and demographic variables on never married male and females who reported having using condom during last sex

Variables	Females		Males	
	Exp (β)	Significant level (P)	Exp (β)	Significant level (P)
Age	15-19			
	20-24	1.9086	2.1767	0.0000
Religion	Catholic			
	Protestant	1.0092	0.5067	0.9453
Place of residence	Rural			
	Urban	0.9569	1.2132	0.0406
Wealth Index				

	Poor				
	Middle	1.3828	0.0276	1.1283	0.2575
	Rich	1.1071	0.5572	1.0432	0.7269
Work status					
	Not-working				
	Working	1.5483	0.000	1.4904	0.000
Educational level					
	Primary				
	Secondary or higher	1.3519	0.0114	1.4109	0.0001
Reading newspaper at least once a week					
	Less than once a week				
	At least once a week	0.9411	0.5526	0.1074	0.2092
Listening to radio at least once a week					
	Less than once a week				
	At least once a week	0.9579	0.6572	1.0689	0.4055
Watching television at least once a week					
	Less than once a week				
	At least once a week	0.9135	0.4680	0.9678	0.7244
Drinks alcohol					
	No				
	Yes	3.7581	0.000	2.1931	0.000

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293 3. Discussion

294 The main aim of this study was to examine the determinants of condom use among never
 295 married male and female youths. To begin with, overall, bivariate analysis showed that across all
 296 variables, men were more likely to use condoms at first premarital sex as compared to women.
 297 Condom use among women was generally low. The data identified five strong predictors of
 298 condom use among never married youths during first sex. These factors included age, working
 299 status, educational level, reading newspapers at least once a week and watching television.

300

301 The study found that older unmarried males and females who were aged 20-24 were more
 302 likely to use condoms during their first sexual encounter as compared to the younger males.
 303 These findings are consistent with Oyediran, Feyisetan and Akpan (2011) who found that the
 304 proportions of the respondents who reported condom-use at first sexual intercourse increased
 305 with age. Another study by Long et al, (2012) found similar results as the study identified age as
 306 a strong predictor of condom use on a Chinese sample. The age at which people become sexually
 307 active seems to be closely associated with their likelihood of condoms use among men.
 308 However, in this study the case was not the same for unmarried females as age was not a
 309 significant predictor of condom use at first sex.

This study found that the higher the education level of the respondents the less likely they were to be sexually active at a younger age and also more likely to have used a condom during their first sex. The delayed sexual debut can be attributed to more time spent doing school work and more likelihood of getting access to sex education during school time. For the females, education level was more of a significant factor towards condom use as compared to the males. Consistent with findings from a study on a Nigerian university students sample found that a high level of education was a strong determinant of condom use among male youths (Kalu et al. 2013).

Secondary or higher educational levels among never married female and male youths also emerged as a strong predictor of condom use. Youths who had attained secondary school or higher were more likely to use a condom at first sex as compared to those who had only attained primary education. Lagarde et al. (2001) examined the relationship between condom use and education attainment in four cities in the the Sub Saharan region. According to the study,, education was also found to be a key determinant of condom use in all the four cities. This suggests that educational level increases response to condom promotion and highlights the need for special efforts to target young men and women with low educational attainment (Lagarde et.al., 2001) with more appropriate and socially sensitive messages on condom use.

The study also examined the relationship between socioeconomic status and condom use. Social economic status measured by wealth index presented an interesting factor that influenced condom use among young men and women. The data revealed that youths (both males and females) from rich social economic backgrounds were significantly more likely to have used a condom at first sex as compared to their colleagues from middle and poor backgrounds. MacPhail and Campbell (2001) conducted a study in South Africa that aimed at investigating social factors that hinder condom use amongst youths. The study found that the economic context of adolescent sexuality was among the six factors that determined condom use.

Multivariate results also showed that the economic context factor mostly affected females as compared to males. This however maybe attributed to the vulnerable nature of women in the poor category as they try to impress their sexual partners who do not like to use condoms. These findings are also in line with Walusaga, Kyohangirwe and Wagner (2012) in a Ugandan study which examined gender differences in determinants of condom use among youths. These similar findings highlighted the importance of empowering women economically as part of HIV interventions as they will be able to participate fully in sexual decision making.

Exposure to the media through reading newspapers and watching television at least once a week increased the likelihood of never married males using condoms during their first sexual encounter as compared to those that did not read newspapers and watch television, respectively. These findings also suggest that access to information on sexual and reproductive health can determine condom usage among youths. Through television and newspapers, youths are more likely to come across information that encourages condom use and discourages sexually risky behaviour. A similar study conducted in Zambia also demonstrated that compared to nonviewers, campaign viewers were 2.38 times more likely to have ever used a condom. The odds ratio of condom use during the last sex was 2.1 for respondents who recalled at least 3 television spot advertisements compared with other respondents (Underwood C. et al. 2006). These findings are in line with a study conducted in China by Long (2012) who suggested that sex education and sensitization were necessary intervention strategies when reducing the rate of HIV among youths. Furthermore, sex education was helpful in eliminating misconceptions and negative beliefs about condom use. Similarly, a study on Nigerian students found that mass-media exposure was positively associated with the use of a condom by the respondents during their first sexual encounter (Oyediran, Feyisetan and Akpan, 2011). This implies that exposure to mass media has a huge and significant influence on respondent's likelihood of using condoms.

Lastly, the study brought out alcohol consumption as yet another significant determinant of condom use among never married youths in Zambia. This finding was only significant among males but not among females as the study found that more males who consumed alcohol engaged in risky sexual behaviour as compared to females. A possible explanation to this result is that men are more likely to engage in risky sexual behaviour when they take alcohol hence do not see the need to protect themselves.

This study therefore justifies that, to a larger extent, socio-economic and demographic factors are cardinal determinants of condom use among never married youths in Zambia. Most of these findings showed consistency with other studies done within Sub-Saharan Africa and elsewhere on the determinants of condom use among never married youths. As a result, factors like age, socioeconomic and educational status, alcohol usage and utilization of the media are significant factors in the use of condoms among youths. Nonetheless, gender differentials were also apparent in the study as males stood out in most factors as compared to females. For instance, the percentage of alcohol consumption was more significant in male youths as compared to female youths. This further highlighted males' vulnerability to engage in risky sexual behavior. On the

other hand, most female youths were found incapable of engaging their sexual partners into using condoms during sex as compared to male youths. This was attributed to their lack of economic empowerment thus fearing that such a stance would anger their partners who would withdraw their financial support.

Despite having high percentages of those that do not use condoms and their reasons, studies also found reasons why youths used condoms and what determined them to do so. For instance, the number of partners an individual had determined his or her use of condoms. Adebisi and Asuzu (2009) found that those with one sexual partner (40.8% of 38.9% of condom users) used condoms as compared to those with multiple partners (31.5% of 38.9%). Also, it was found that those in cohabiting relationships used condoms as compared to those in non-cohabiting relationships and with casual status' (37.6%, 34.2% and 33.3% respectively). On the other hand, Meekers, Silva and Klein (2005) found that the number of partners did not determine youth's condom use as condom use with regular partners on both male and female was relatively low with the irregular use of condoms being the most prominent. Likewise, condom use with casual partners on both male and female regardless of the level of consistency was low with irregularity being higher than consistent use.

Recognizing the challenges being faced by adolescents and young people, the Government of Zambia and its partners have been working towards an integrated approach of addressing adolescent and young people's HIV and SRHR. Several efforts have been made, at both national and sector levels to protect adolescents and young adults by preventing HIV and improving their health status in the country. However, Zambia still faces major challenge with reducing risk behaviours and HIV infections among sexually active adolescents and young adults, especially adolescent girls and young women. Unlike the previous national HIV strategic frameworks, (NASFs), the current Fast-Track NASF 2017-2021 has recognized adolescents girls and boys aged 15-19 and young women and men aged 20-24, as distinct vulnerable populations, who need a mix of targeted but differentiated programmes including heightened condom promotion and availability (NAC 2017).

This study recommends interventions that seek to fight STI and unwanted pregnancies through encouragement of condom use. Such interventions should not only tackle the barriers to condom use such as stigma and discrimination, gender inequalities, social norms and cultural practices and long distances. Many districts in the country persistently experience shortages of condoms. Further work is needed to educate and persuade people to use condoms with all sexual partners, especially if they are in multiple concurrent partnerships or change partners regularly.

The interventions should also take into account, gender differentials, age, media exposure, and socioeconomic status of the target population as integral aspects to guarantee effectiveness. This can be done by Non-Governmental organizations, Community Based Organisations and other stakeholders by engaging the youths. Interactive and transformative peer to peer training and women empowerment skills building activities centered on sexual and reproductive health are necessary. In-school and community quizzes, games, youth friendly insaka's and peer to peer health talks. Lastly, enhance information exposure on media related to condom usage. These would enhance the usage of condoms among never married youths in Zambia.

CONSENT AND ETHICAL CONSIDERATIONS

The survey procedure and instruments for the 2013 Zambia Demographic Health Survey was ethically approved by the Zambia Biomedical Research Ethics Committee. A written consent was taken from all of the respondents prior to starting the interview and all aspects of the ZDHS were strictly confidential. Since this study is based on analysis of secondary data, the ethical approval was not necessary; however, permission to use this data was sort and granted by Central Statistics Office and Macro Inc.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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