



## Gender Differentials in Premarital Sexual Behavior among Never Married Young People in Zambia

Thankian Kusanthan<sup>1\*</sup> and Christopher Mapoma<sup>2</sup>

<sup>1</sup>Department of Gender Studies, School Humanities and Social Sciences, University of Zambia, Lusaka, Zambia.

<sup>2</sup>Department of Population Studies, School of Humanities and Social, Sciences, University of Zambia, Zambia.

### Authors' contributions

*This work was carried out in collaboration between both authors. Author TK designed the study, performed the statistical analysis, wrote the protocol and wrote the first draft of the manuscript. Author CM managed the literature searches and edited the article. Both authors read and approved the final manuscript.*

### Article Information

DOI: 10.9734/ISRR/2018/41095

#### Editor(s):

(1) Anjana Verma, Assistant Professor, Department of Community Medicine, Geetanjali Medical College, Geetanjali Medcity, India.

#### Reviewers:

(1) Ayodele, Kolawole, Babcock University Ilishan, Nigeria.  
(2) Masoud Mohammadnezhad, Fiji.

Complete Peer review History: <http://www.sciencedomain.org/review-history/24218>

**Original Research Article**

**Received 4<sup>th</sup> February 2018**  
**Accepted 16<sup>th</sup> April 2018**  
**Published 19<sup>th</sup> April 2018**

### ABSTRACT

This article explores gender differentials in factors affecting pre-marital sexual behaviour among adolescents in Zambia. Data used in this article was derived from the 2013 Zambia Demographic Health Survey. Logistic regression analysis was used to identify gender differentials in sexual initiation in relation to other socio-economic variables. Results show that 52 percent of females and 28.1 percent of males have had sex with one partner; 29percent and 21.8 percent of females and males respectively have had sex with two partners while 12 percent and 16 percent of females and males respectively reported having had sex with three or more partners twelve months prior to the survey. Age, wealth status, educational level, reading newspapers, watching television and drinking alcohol were strong predictors of engaging in premarital sex among the female youth. Working females were 1.8 times more likely to report having had premarital sex compared to those not working. Similarly, the female youth who drank alcohol were 3 times more likely to report having had premarital sex compared to those who did not. On the other hand, the male youth who drank alcohol were 3 times more likely to report having had premarital sex compared to those who did not. Based

\*Corresponding author: E-mail: [kusanth@yahoo.com](mailto:kusanth@yahoo.com);

on these findings, it is imperative to state that gender plays an influencing role in determining sexual behaviour between males and females. Findings shows that females initiated sex earlier than males while certain variables only affected one gender comparatively. Results here point to the fact that factors such as wealth status, education level, and alcohol intake are significant contributors affecting sexual initiation among adolescents in Zambia. In view of this finding, future interventions with the aim of contributing to delaying sexual initiation should also take into account socio-economic and demographic factors as well as gender specific influences as core to influencing sexual debut among adolescents in Zambia.

*Keywords: Gender differentials; pre-marital sex; adolescents; Zambia.*

## 1. INTRODUCTION

The adolescent stage is the most important period of human life because it is easily influenced by habits and behaviours that have lifelong effects and outcomes, which can be positive or negative. It is an emotive and sexual experimentation state, and due to this fact, adolescent sexuality and reproductive health is particularly a global concern. In recent times, studies have found an unprecedented increase in rates of sexual activity, early pregnancies and Sexually Transmitted Infections (STIs) including Human Immunodeficiency Virus (HIV) among adolescents [1]. The World over, an estimated 11.8 million young people aged between 15 to 24 years old are infected with HIV, most (77%) of whom live in sub-Saharan Africa [2]. In the same way, of the 34 million people living with HIV worldwide, almost 68 per cent in sub-Saharan Africa; and here more than elsewhere, young people between the ages of 15 and 24 years old remain the most threatened, accounting for 62 per cent of people living with HIV overall, and young girls being at greater risk of being infected compared to boys [3,4]. Most of these statistical outcomes are attributable to the fact that many adolescents (globally) are sexually active, and with many sexual contacts, practising mostly unprotected sex and thereby heightening the risk of contracting STIs including HIV, and other outcomes such as unwanted pregnancies and unsafe abortions.

Due to its location (sub-Saharan Africa) Zambia is also one of the nine African countries hardest hit by the HIV epidemic, where the prevalence rate among the 15 to 49-year-olds exceeds 21 per cent [3,4]. For instance, the Central Statistical Office reported that 56 per cent of females aged between 15 and 24 years old in Zambia had sex before the age of 18 years, with only 24 per cent of them reporting having used a condom at the first sexual encounter [5]. In the same way, 51 per cent of males between 15 and

24 years old had sex before the age of 18 years, where only 22 per cent used a condom at first sex.

The HIV pandemic has been driven by several fronts and one among such is multiple sexual concurrence. While females do report having multiple partners, evidence suggests that males are more likely to engage in this behaviour compared to females. The literature available on sexual behaviours in sub-Saharan Africa indicates that young men and women often exhibit different patterns of sexual behaviours. These young men and women have different interests, motivations and strategies for engaging in pre-marital sexual relationships [6]. For instance, young women indulge themselves in sexual relationships for various reasons including enhancing their marriage prospects, to prove their fertility to their future husband, for financial purposes, and for satisfaction and pleasure. Men, on the other hand, are more likely to engage in sexual relationships before marriage for sexual experience and sexual satisfaction. Because of these differences, adolescents respond differently to sexual behaviours. Hence, they are exposed to different reproductive health risks. In sub-Saharan African countries, social demographic and economic factors have been identified as having the potential to influence pre-marital sexual behaviour between male and female youth. For example, 61 per cent of people living with HIV in Cameroon are women and the prevalence among women of reproductive age is 6.8 per cent [7]. To further support these facts, a study conducted by Nyambi found that HIV prevalence in villages in rural Cameroon were high (6.3%) amongst girls [8].

The identification of determinants of adolescents condom use as regards sexual activity is important in developing effective HIV preventive interventions. Despite findings from studies in developed countries indicating associations between psychosocial factors, adolescent risk

and problem behaviours; and condom use, there have been few studies in Africa that have examined these relationships. The few studies in Africa, mainly address HIV and AIDS knowledge and condom access. Other studies have demonstrated that HIV and AIDS knowledge is associated with condom use [9]. Low levels of knowledge about HIV transmission and prevention among adolescents emerged as a predictor of non-use of condoms. However, many studies have indicated that despite the increasing levels of AIDS knowledge, adolescents do not use condoms consistently.

Researchers have also identified several perceptions pertinent to condom use among adolescents. These include perceived susceptibility to HIV, perceived benefits of condom use, perceived self-efficacy to use or have a partner use a condom, and perceived social support for condom use. Perceived susceptibility to HIV has been found to be significantly related to the intention to use condoms among adolescents. In addition, some studies have demonstrated that the belief by adolescents that condoms effectively prevent HIV transmission was a predictive of consistent condom use [10]. Other studies have shown that barriers to condom use (barriers that reflect physical, emotional, or accessibility concerns with condom use) were strongly predictive of lack of condom use. Studies in Zimbabwe, South Africa, Kenya, and Nigeria reported that main reasons for not using condoms included difficulty in obtaining them, lack of sexual pleasure, and prohibitive prices. Other studies found

associations between condom use among male adolescents and alcohol consumption, substance use and exposure to disposable income [11]. In view of these facts and aspects, this study endeavoured to investigate gender differentials in pre-marital sexual behaviour among adolescents in Zambia.

## 2. METHODOLOGY

The present study utilised data from the 2013 Zambia Demographic Health Survey (ZDHS). The ZDHS sample is designed to provide estimates of population and health indicators at provincial and national levels as well as in rural-urban residence. The ZDHS used a two-stage stratified cluster sampling design where in the first instance, at the first stage, 722 Enumeration Areas (EA) were selected using systematic random sampling with probability proportional to size (PPS). At the second stage, 25 households per EA were selected again using systematic random sampling. Methods and data collection procedures have been published elsewhere [12].

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. In this study, the analysis was restricted to never married adolescents aged between 15-24 in order to specifically look at the premarital sexual behavior.

**Table 1. Description and measurement of independent variables**

Variables	Description
Age	Age of the respondent is categorised 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	The wealth index variable 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 3 outcomes namely no-education, 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 television at least once a week and less than once a week.
Drinks alcohol	It is grouped into two those drinking and not drinking alcohol

## 2.1 Data Analysis

Analysis for this paper was conducted in two stages. Firstly, descriptive statistics were produced by cross tabulating independent (socio-economic and demographic variables) and dependent (sexual behaviour) variables. The chi-square test for significance at  $p < 0.01$  and  $p < 0.05$  level were conducted. Secondly, linear logistic regression was used to identify factors influencing sexual behaviour by factoring in socio-economic and demographic variables. Results of the logistic regression models were converted to odds ratios.

## 3. RESULTS

### 3.1 Background Characteristics

Background characteristics of the sample are indicated in Table 2. Results in this table show that 72.5 percent and 65.4 percent of females and males, respectively were aged between 15-19 while 27.5 percent women and 34.6 percent

of males were aged between 20-24. Majority of respondents were Protestants (males 78% and females 80%) and about half of all respondents (females 42.5% and males 44.9%) were from urban areas.

Distribution of respondents by wealth quintile indicated that 24 percent of females and 28 percent males were ranked poor, while over half of all respondents (56.3% of females and 51% of males) were ranked rich. For working status, majority of respondents were not working (78% of females and 55% of males respectively). In terms of education and reading newspapers, results show that over half of respondents (70% of females and 64.2% of males) had secondary education 46% of the females and 37% of the males) reported listening to a radio less than once a week. Less than half of respondents (48.3% of females and 48% of males) reported watching television at least once a week; and lastly, about 5 percent of females and 15 percent of males reported taking alcohol.

**Table 2. Sample distribution of never married males and females in Zambia (15-24)**

Characteristics	Female	N	Male	N
<b>Age</b>				
15-19	72.5	3058	65.4	3304
20-24	27.5	1161	34.6	1750
<b>Religion</b>				
Catholic	19.7	839	21.7	1093
Protestant	80.3	3380	78.3	3961
<b>Place of residence</b>				
Rural	57.5	2428	51.2	2590
Urban	42.5	1791	48.8	2464
<b>Wealth index</b>				
Poor	24.0	1013	27.9	1410
Middle	19.7	831	21.3	1077
Rich	56.3	2375	50.8	2567
<b>Work status</b>				
Notworking	77.9	3272	54.9	2767
Working	22.1	947	45.1	2287
<b>Educational level</b>				
Primary	30.0	1266	35.8	1808
Secondary+	70.0	2953	64.2	3246
<b>Reading newspaper at least once a week</b>				
Less than once a week	68.1	2878	67.8	3425
At least once a week	31.9	1341	32.2	1629
<b>Listening to radio at least once a week</b>				
Less than once a week	45.8	1927	37.0	1868
At least once a week	54.2	2292	63.0	3186
<b>Watching television at least once a week</b>				
Less than once a week	51.7	2183	52.4	2643
At least once a week	48.3	2036	47.6	2411
<b>Drinks alcohol</b>				
No	94.6	3991	84.9	4292
Yes	5.4	226	15.1	762

### **3.2 Pre-Marital Sexual Behaviour**

Overall, about 52.4 percent of the female and 28 percent of male youths reported having had sex with one partner before marriage (Table 2). More females (60%) and males (33.1%) aged between 15-19 were likely to report having had sex with one partner compared to those aged between 20-24 (females 42% and males 22.4%). Males from Catholic denomination (30.6%) were more likely to have had sex with one sexual partner compared to males from Protestant denominations (27.4%). Male youth from rural backgrounds (32.2%) were more likely to report having one sexual partner compared to males from urban residences (23.9%). In relation to the wealth index, results show that female (56%) and male (32%) respondents from rich backgrounds were more likely to have had sex with one partner as compared to those from poor backgrounds. Similarly, female (55%) and male (33.5%) youth who were not working were more likely to have had sex with one partner compared to those who were working (female 46%; males 23.4%). In addition, respondents who read newspapers at least once a week (females 59%, males 32.5%) were more likely to report having had sex with one partner compared to those who read newspapers less than once a week (females 50%, males 26%). Those who listened to the radio at least once a week (females 56%, males 29.8%) were more likely to report having had sex with one partner compared to those who listened to the radio less than once a week (females 49%, males 25%). Females who watched television at least once a week (females 56.3%, males 31%) were more likely to report having had sex with one partner compared to those who reported watching television less than once a week (females 49.4% and males 25.3%) and females (55%) and males (30.7%) who did not drink alcohol were more likely to report having had sex with one partner compared to those who drank alcohol (females 27.2%, males 18.3%).

#### **3.2.1 Two or more sexual partners**

Overall, 29 percent of the female youths and 21.8 percent of male youth reported having had sex with two partners before marriage. Females aged between 20-24 (32.3%) were more likely to report having had sex with two partners as compared to those aged 15-19 (27%). Among males, the opposite was the case those aged between 15-19 (23.1%) were more likely than those aged 20-24 (20.5%) to have had two sexual partners. Males from urban residences

(23.1%) were more likely to report having two sexual partners compared to those from the rural residence (20.6%). The wealth index showed that respondents from poor backgrounds (females 33%) were more likely to report having had sex with two partners compared to those from rich backgrounds (females; 48%). However, wealth status was not significantly associated with having two sexual partners among males. Female respondents who read newspapers less than once a week (31%) were more likely to report having had sex with two partners as compared to those who read newspapers at least once a week (25%) while those who listened to the radio less than once a week (31.6%) were more likely to report having had sex with two partners as compared to those who listened to the radio less than once a week (26.3%). On the other hand, exposure to both newspaper and television did not have influence on a male's likelihood of having two sexual partners. Lastly, drinking alcohol was significant among male respondents but not females.

As for three or more sexual partners, results show that about 11.6 percent of the female youths and 15.9 percent of male youths reported having had sex with three or more partners before marriage. Females (15.2%) and males (17.2%) aged 20-24 were more likely to report having had sex with three or more partners compared to those aged between 15-19 (females 9.1%; males 14.9%). Youths from Protestants (females 12.1%; males 16.7%) were more likely to report having had sex with three or more partners than respondents from Catholics (female 9.6%; males 13.7%). The influence of the wealth index was only significant among females but not males. Female respondents from poor backgrounds (14%) were more likely to report having had sex with three or more partners compared to those from rich backgrounds (9.8%). Females who were working (17%) were more likely to report having had sex with three or more partners compared to those who were not working (10%). In terms of education respondents with primary education (17.4%) were more likely to report having three or more sexual partners compared to those who had secondary education (15.1%). Furthermore, females who listened to the radio less than once a week (13%) were more likely to report having had sex with three or more partners compared to those who listened to the radio less than once a week (10.5%). Respondents who watched television less than once a week (12.5%) were more likely to report having sex with three or

more partners compared to those who reported watching television at least once a week (10.4%). Females who drank alcohol (19.1%) were more likely to report having had sex with three or more partners compared to those who did not drink alcohol (11%).

### **3.3 Premarital Sexual Behaviour and Socio-economic and Demographic Characteristics**

The present study used linear logistic regression to identify factors influencing sexual behaviour by considering socio-economic and demographic variables. Results show that age, wealth status, educational level, reading newspapers, watching television and drinking alcohol had significant influence on female youth and engagement in pre-marital sex. Females aged between 20-24 were 4.2 times more likely to report having had pre-marital sex compared to the female youths aged between 15-19 ( $P<0.000$ ). With regard to wealth status, respondents from rich backgrounds were less likely to report having had premarital sex compared to those from poor backgrounds ( $P<0.001$ ). Females who were working were 1.8 times more likely to report having had pre-marital sex compared to those who were not working ( $P<0.000$ ). Apart from what has been highlighted, results show that the odds of engaging in pre-marital sex seemed to increase with educational level. Females with secondary education or higher were 1.4 times more likely to report having had premarital sex compared to those who had primary education ( $P<0.000$ ). Reading newspapers at least once a week was negatively associated with the likelihood of pre-marital sexual engagement ( $P<0.000$ ). Similarly, watching television at least once a week was also negatively associated with the respondent's likelihood of having had pre-marital sex ( $P<0.000$ ). Moreover, those who drank alcohol were 3 times more likely to report having had pre-marital sex compared to respondents who did not drink alcohol ( $P<0.000$ ).

For adolescent males, results show that age, wealth status, work status, educational level, listening to the radio, watching television and drinking alcohol had a strong influence on engaging in pre-marital sex (Table 4). Male youth aged between 20-24 were 4 times more likely to report having had premarital sex compared to those male youths aged between 15-19 ( $P<0.000$ ). With regard to wealth status, respondents from rich backgrounds were less likely to report having had premarital sex

compared to those from poor backgrounds ( $P<0.000$ ). Those male youths who reported working were 1.9 times more likely to report having had pre-marital sex compared to those who were not working ( $P<0.000$ ).

Like females, the odds of engaging in pre-marital sex for males increased with an individual's educational level. Males with secondary education or higher were 1.3 times more likely to have had pre-marital sex compared to those who had primary education ( $P<0.001$ ). Those who listened to the radio at least once a week were 1.1 times more likely to report having had pre-marital sex compared to those who did so less than once a week. However, watching television at least once a week was negatively associated with the respondent's likelihood of having had pre-marital sex. Lastly, those who drank alcohol were 3.3 times more likely to have reported having had pre-marital sex as compared to respondents who did not drink ( $P<0.000$ ).

## **4. DISCUSSION**

Examining sexual behaviours is an important avenue for understanding sexual risk taking among adolescents. Several studies in sub-Saharan Africa have also documented high and increasing pre-marital sexual activities among this very important group of people [13]. However, understanding factors associated with risk taking behaviours is one of the first steps needed to develop interventions that seek to reduce new cases of unwanted pregnancies, STIs, including HIV/AIDS. The current study aimed at examining the influence of socio-demographic and economic factors on sexual behaviour across gender, among the never married youth in Zambia. Sexual behavior was graduated using the number of sexual partners the respondents had.

The overall prevalence of pre-marital sexual practice in the study population was high. The proportion of male adolescents who were involved in pre-marital sex was greater than the proportion of the female youth. Generally, females were more likely to have two sexual partners as compared to the males, while males were conversely more likely to have three or more sexual partners. Men were more prone to engage in high sexual risk behaviours than females. These findings are also in line with Adeoye and Boss who argued that gender was one common determinant of pre-marital sexual activities among the youth and adolescents [14,15].

Table 3. Percentage of adolescents who reported number of partners having had sex with before marriage

Characteristics	Had sex with one partner		Had sex with two partners		Had sex with three or more partners		N	
	Female	Male	Female	Male	Female	Male	Female	Male
<b>Age</b>								
15-19	59.9**	33.1**	26.8**	23.1*	9.1**	14.9*	3054	1635
20-24	41.6	22.4	32.3	20.5	15.2	17.2	1160	1446
<b>Religion</b>								
Catholic	54.9	30.6*	29.7	21.8	9.6*	13.7*	830	687
Protestant	51.8	27.4	28.9	21.8	12.1	16.7	3375	2383
<b>Place of residence</b>								
Rural	51.9	32.2**	28.4	20.6*	11.1	15.4	2425	1542
Urban	53.0	23.9	29.9	23.1	12.2	16.4	1789	1539
<b>Wealth Index</b>								
Poor	47.5**	21.1**	33.1*	23.0	13.8*	17.1	1011	888
Middle	50.4	27.4	29.4	21.8	13.1	15.0	831	708
Rich	55.8	32.6	26.8	21.2	9.8	15.7	2372	1485
<b>Work status</b>								
Not-working	55.1**	33.5**	29.2	22.6	9.5**	15.1	3270	1420
Working	45.5	23.4	28.6	21.2	16.7	16.7	923	1656
<b>Educational level</b>								
Primary	51.9	24.4**	29.3	22.1	11.6	17.4*	1262	1038
Secondary or higher	52.6	30.0	28.9	21.7	11.6	15.1	2950	2039
<b>Reading newspaper at least once a week</b>								
Less than once a week	49.7**	26.0**	30.8**	21.8	12.1	16.4	2859	2085
At least once a week	58.8	32.5	24.8	21.7	10.5	15.0	1339	994
<b>Listening to radio at least once a week</b>								
Less than once a week	48.9**	25.1**	31.6**	21.6	12.8*	16.8	1927	1102
At least once a week	55.6	29.8	26.6	21.9	10.5	15.5	2279	1976
<b>Watching television at least once a week</b>								
Less than once a week	49.4**	25.3**	31.1	22.5	12.5*	15.6	2177	1670
At least once a week	56.3	31.3	26.3	21.1	10.4	16.3	2033	1408
<b>Drinks alcohol</b>								
No	54.6**	30.7**	29.1	23.4**	10.9**	15.6	3986	2427
Yes	27.2	18.3	28.9	16.2	19.1	17.3	226	654
N	52.4	28.1	29.0	21.8	11.6	15.9	4120	5054

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

**Table 4. Logistic Regression Analysis data of socio-economic and demographic variables who reported having had pre-marital sex**

Variables	Females		Males	
	Exp ( $\beta$ )	P-value	Exp ( $\beta$ )	P-value
<b>Age</b>				
15-19				
20-24	4.22	0.00	3.90	0.00
<b>Religion</b>				
Catholic				
Protestant	1.12	0.17	0.96	0.60
<b>Place of residence</b>				
Rural				
Urban	0.89	0.17	1.06	0.47
<b>Wealth Index</b>				
Poor				
Middle	1.14	0.21	1.14	0.17
Rich	0.67	0.00	0.68	0.00
<b>Work status</b>				
Not-working				
Working	1.76	0.00	1.84	0.00
<b>Educational level</b>				
Primary				
Secondary or higher	1.43	0.00	1.27	0.00
<b>Reading newspaper at least once a week</b>				
Less than once a week				
At least once a week	0.72	0.00	0.95	0.49
<b>Listening to radio at least once a week</b>				
Less than once a week				
At least once a week	0.91	0.22	1.15	0.06
<b>Watching television at least once a week</b>				
Less than once a week				
At least once a week	0.68	0.00	0.87	0.10
<b>Drinks alcohol</b>				
No				
Yes	2.89	0.00	3.27	0.00

In other words, at any given adolescent age, risky sexual behaviour is more likely among males than among females [16]. Furthermore, in the current study, logistic regression shows that youths above the age of nineteen were more likely to report having had pre-marital sex compared to younger ones. These results were strongly significant across both genders. In the same vein, bivariate analysis shows that not only did age have an influence on sexual encounters but also had an effect on the number of sexual partners the youth were likely to have. Younger adolescents were more likely to have multiple sexual partners compared to the older one. This is consistent with other African scholars who equally found that age was a significant determinant of pre-marital sexual activities among the youth [17].

In sub-Saharan Africa, studies conducted in urban poor communities of Kenya and Ghana have reported early ages at first sex, multiple

sexual partnerships, teenage pregnancies, and youth resolving some of their unintended pregnancies with induced abortions [18,19]. Similarly, the current study also found that wealth status had significant influence on pre-marital sexual behaviour among the youth in Zambia. Rich wealth status was negatively associated with the likelihood of the youth reporting having had pre-marital sex. Firstly, respondents from rich backgrounds were less likely to report having had pre-marital sex compared to those from poor backgrounds. Across both gender, having more than one sexual partner was positively associated with poor wealth status. Those from rich backgrounds were more associated with having one sexual partner among the sexually active respondents.

The odds of engaging in pre-marital sex seemed to increase with educational level. Females with secondary education or higher were more likely to have had pre-marital sex compared to those

who had primary education. The study found that those with secondary education were less likely to have more than one sexual partner compared to those who had primary education. Similarly, Taye found that educational attainment was associated with elevated likelihood of being exposed to sexual relation [20].

Educational level was only a significant determinant among males but not so among females. On the other hand, working males were more likely to report having had pre-marital sex compared to those who were not working. These findings were more pronounced amongst males but not a many females. The possible reason could be that men who were working had better economic standing, and were able to buy sex where possible. These findings are however at variance with Mehemet who found that a mother's education, age, ethnicity and employment status were among the most important predictors of attitudes of women towards pre-marital sexual activity [21].

Furthermore, in this study, place of residence had significant influence on pre-marital sexual behavior among males but not female youth. The male youth from urban residences were more likely to report having had sex with two or more partners compared to those from rural areas. These results are in agreement with the findings of Taye and Asmare who revealed that school adolescents who were from rural areas were more sexually active than those from urban areas in Ethiopia [20]. Findings in Zambia maybe attributed to poor family control and cultural traditional initiations.

The study also found that exposure to the media had influence in determining sexual behaviour among the youth in Zambia. For both gender, exposure to media such as reading newspapers, watching television and listening radio at least once a week was negatively associated with the likelihood of having had pre-marital sex in their life time. Ideally, the mass media has been a channel of learning among the youth including sex education [15]. However, in Zambia, while the youth watch TV, read newspapers and listen to the radio, their sexual behaviour is not really influenced by these attributes.

In the final analysis, the study confirms what other studies have elaborated before concerning the role alcohol plays in determining sexual behaviour and more also pre-marital risky sexual behaviour. Those who drank alcohol were three

times more likely to have reported having had pre-marital sex compared to respondents who did not drink. Females who drank alcohol were more likely to have two or three sexual partners while those who did not drink were likely to have only one sexual partner. Similarly, results on males showed that those who drank alcohol were more likely to have two sexual partners. Substance use and pre-marital sexual behaviour has consistently shown a positive correlation. In Kenya, the single most predictor of sexual activity among female adolescents was alcohol and drugs or tobacco [22,23].

It is a well-known fact that the adolescent stage is a critical period of human life because any individual can easily be influenced by habits and behaviours emanating from parents, siblings or peers which may turn to influence substance abuse as well as pre-marital sex. The current study found that adolescents engaged in pre-marital sex; their sexual behavior in this respect was gender related since males were found to engage more in sexual activities compared to females. Even if one controls other factors, such as educational status, socio-economic status, place of residence, influence from the media, taking alcohol, the youth's engagement in pre-marital sex was highly determined by their gender. As a result, any form of interventions on or around factors that have been significant in including pre-marital sexual behaviour among the youth requires to have a strong consideration for the role gender plays in this behaviour.

Limitation of the study is that only secondary data was used for this analysis. It would however be important to conduct a study where all other factors are included the study.

## **5. CONCLUSION**

In view of the results of this study, it can therefore be concluded that there are gender related similarities and also in differences in which socio-economic and demographic factors affect the sexual behaviour of the youth in Zambia. Females are not really affected by factors such as residence, religion and educational level; while males were significantly affected by most of the examined factors. Based on this, interventions that seek to prevent risky sexual behavior, STIs including HIV/AIDS among adolescents would need to account for socio-demographic and economic variables, especially gender related differences which are important influencers of these factors.

## 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 sought and granted by Central Statistics Office and Macro Inc.

## COMPETING INTERESTS

Authors have declared that no competing interests exist.

## REFERENCES

1. Shivaram K, Nandini C, Malleshappa K. Knowledge and attitude about reproductive health among rural adolescent girls in Kuppam Mandal: An intervention study. *Biomed Res.* 2011;14(3):305–310.
2. UNICEF. Africa's orphaned and vulnerable generations: Children affected by AIDS. Unicef; 2006.
3. UNAIDS. Epidemic update. Geneva; 2002.
4. UNAIDS U, World Health Organization. Global HIV/AIDS response: Epidemic update and health sector progress towards universal access: Progress report; 2011.
5. Central Statistics Office (CSO). Zambia Demographic and Health Survey 2006–2007; 2007.
6. Calvès AE. Marginalization of African single mothers in the marriage market: Evidence from Cameroon. *Population Studies.* 1999;53(3):291-301.
7. Nussbaum L. National AIDS housing coalition. Housing for people living with HIV/AIDS, Cameroon; 2010.
8. Nyambi P, Zekeng L, Kenfack H, Tongo M, Nanfack A, Nkombe I, Agyingi L. HIV infection in rural villages of Cameroon. *Journal of Acquired Immune Deficiency Syndromes.* 1999;31(5):506-513.
9. Meekers D, Klein M, Foyet L. Patterns of HIV risk behavior and condom use among youth in Yaoundé and Douala, Cameroon. *AIDS and Behavior.* 2003;7(4):413-420.
10. Holmes KK, Levine R, Weaver M. Effectiveness of condoms in preventing sexually transmitted infections. *Bulletin of the World Health Organization.* 2004;82: 454-461.
11. Yadav J, Bharati K, Singh KJ. Pattern of substance abuse, sexual behavior and its determinants among unmarried youth in India. *Global Journal of Human-Social Science Research;* 2015.
12. Zambia Demographic Health Survey (CSO) [Zambia] MoH. Zambia demographic and health survey 2013–14. Rockville, Maryland, USA: Central Statistical Office, Ministry of Health, and ICF International; 2014.
13. World Health Organization. Global HIV/AIDS response: Epidemic update and health sector progress towards universal access: Progress report; 2001.
14. Ayodele O, Omolayo, Aliu B. Prevalence of premarital sex and factors influencing it among students in a private tertiary institution in Nigeria. *International Journal of Psychology and Counselling.* 2012;4(1): 6-9.
15. Alo OA, Akinde IS. Premarital sexual activities in an urban society of Southwest-Nigeria. *Journal of Medical Humanities and Social Studies of Science and Technology.* 2010;2(116):0970-0218.
16. Teva I, Bermúdez MP, Buéla-Casal G. Characteristics of sexual behavior in Spanish adolescents. *The Spanish Journal of Psychology.* 2009;12(2):471-484.
17. Egbochuku EO, Ekanem IB. Attitude of Nigerian secondary school adolescents toward sexual practices: Implications for counselling practices. *European Journal of Scientific Research.* 2008;22(2):177-183.
18. Zulu EM, Dodoo FNA, Chika-Ezeh A. Sexual risk-taking in the slums of Nairobi, Kenya, 1993-98. *Population Studies.* 2002;56(3):311-323.
19. Dodoo FNA, Zulu EM, Ezeh AC. Urban–rural differences in the socioeconomic deprivation–Sexual behavior link in Kenya. *Social Science & Medicine.* 2007;64(5): 1019-1031.
20. Taye A, Asmare. Prevalence of premarital sexual practice and associated factors among adolescents of Jimma Preparatory School Oromia Region, South West Ethiopia. *Journal of Nursing and Care.* 2016;5(2):353.

21. Mehmet AE. Social determinants of attitudes towards women premarital sexuality among female Turkish university students. Turkey: Towson University; 2006.
22. Kiragu K, Zabin LS. The correlates of premarital sexual activity among school-age adolescents in Kenya. *International Family Planning Perspectives*. 1993;92-109.
23. John I. Pattern of risky sexual behaviour and associated factors among under graduate students of the University of Port Harcourt. *Pan African Medical Journal*. 2012;15:101-121.

© 2018 Kusanthan and Mapoma; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

*Peer-review history:*

*The peer review history for this paper can be accessed here:  
<http://www.sciencedomain.org/review-history/24218>*