



## Factors Influencing Risky Sexual Behaviours among Youths and Adults Men in Malawi

Beston B. Maonga<sup>1</sup>, Tapiwa Sphiwe Gondwe<sup>2</sup> and Kennedy Machira<sup>3</sup>

<sup>1,3</sup>Lilongwe University of Agriculture and Natural Resources,  
Faculty of Development Studies, P.O. Box 219, Lilongwe, Malawi

<sup>2</sup>Lilongwe University of Agriculture and Natural Resources,  
Faculty of Food and Human Sciences, P.O. Box 219, Lilongwe, Malawi  
E-mail: <sup>3</sup><kmachila30@gmail.com>

**KEYWORDS** Condom Use. High Risk Practices. Male. Multiple Sexual Partner. Religion. Youth

**ABSTRACT** In Malawi, men continue to be vulnerable to high risk sexual behaviours owing to multiple sexual partnerships and inconsistent condom use during sexual encounters. This paper presents findings of a study that examined risky sexual behavioural factors among male youths and adults in Malawi. Drawing 7478 men from a 2015/16 Demographic Health Survey, negative binomial and logistic regression estimators were used to analyze the study objectives. The study found that religious beliefs and education attainment were major factors that influence men to have multiple sexual partners in Malawi. This study therefore, proposes to redesign and implement extensive men centred reproductive and sexual health education initiatives followed by informal social campaigns targeting religious settings in order to reduce men's vulnerability to risky sexual behavioural practices.

### INTRODUCTION

In sub-Saharan African countries, condom use among men is not consistently a common practice during sexual intercourse, and this poses serious health challenges among men and results in dire consequences which negatively affect socio-economic development of the region (UNAIDS 2016). Variations in the beliefs, customs and cultural practices attribute to the risky sexual behavioural practices and these hamper efforts targeted at comprehensively tackling the reproductive health challenges. For instance, UNAIDS (2017) report echoed that risky behaviour common among the youths is the root of increased HIV and AIDS epidemic resulting in youth and adult mortality as they reach economic active group of 15-60 years.

According to the 2015-16 DHS report, in Malawi the issue of men having multiple sexual partners and indulging in risky sexual practices are prevalent (National Statistical Office [NSO] and ICF 2017). In view of such risky behaviours, the government of Malawi rolled out different initiatives to improve the health wellbeing of the people. For instance, the scaling up of the 90, 90, 90 initiative which aims at ensuring that about ninety percent people are aware of their HIV/AIDS status, that ninety percent of those infected are on Anti-Retroviral Treatment (ART) and that ninety percent of those on ART have viral loads su-

pressed to the level of not endangering their health wellbeing (UNAIDS 2016). In addition to this, supported by Malawi Reproductive Health Policy, the Government of Malawi implemented other advocacies which targeted at improving access of condoms to reduce new HIV infection and re-infection.

Despite the adorable initiatives and policies, non-use of condom among men with partners other than their spouses as well as the practice of having multiple sexual partners still prevails among male youths and adults in Malawi (NSO and ICF Macro 2016). It is important to note that despite continued numerous academic debates on the subject matter, there have been scanty studies that examined determinants of risky sexual behaviour among the youths in Malawi *vis-à-vis* indulgent in multiple sexual partners and/or inconsistent condom use during sexual encounters with partners other than spouses. Chavula (2016) examined factors influencing sexual behavioural among men. However, his study was limited in scope, hence the findings could not be generalised for appropriate policy direction. Regionally, other studies reported to have adequate scope, however, their unit of analyses were women-centric relative to men-centric (Odimegwu and Somefun 2017; Osorio et al. 2017). In Botswana, a nationally designed study examined sexual risky behaviours affecting the youths (Letamo and Mokgathe 2013); however, this study scanty

explored men's indulgency in multiple sexual partnerships and the inconsistent condom use behaviour.

It is therefore, clear that despite existence of sexual and reproductive health policies coupled with related studies, there have been dearth studies that researched on factors affecting men (youths and adults) to indulge in such risky sexual practices with partners other than spouses. As such, using the 2015-16 Demographic and Health Survey data this study comes handy in trying to explain the unresolved issue raised in this paper.

## METHODOLOGY

### Data Sources

The study employed data from 2015-16 Malawi Demographic and Health Survey (MDHS) to examine determinants of risky sexual behaviour among male youths in Malawi. The MDHS survey collected information about women using a nationally sample survey on family planning, HIV and AIDS and sexually transmitted infections, among others. The 2015-16 MDHS gathered reproductive health data of women between 15-49 years and the male counterparts between 15-54 years. This current study used a male recode which comprised 7478 men (youths and adults) who re-

ported to have sex in the last 12 months preceding the survey as a sample to examine and address the outlined objective.

### Variables, Definitions and Measures

Table 1 presents and defines the variables used to estimate the determinants of men's (youth and adults) behaviour of having multiple sexual partners and inconsistent condom use with partners other than spouses. The study defines the "youths" as young men up to 24 years of age, and "adults" as men aged between 25 and 54 years.

### Analytical Procedure

Initially, the study conducted a descriptive statistic in which percentages and frequencies of the respondents were used to explain the attributes of the respondents at individual, household and community levels. Furthermore, bivariate regression analysis was conducted in which a dependent variable (number of multiple sexual partners), a count variable, mean number of multiple sexual partners across each explanatory variable were computed using one-way analysis of variance. A negative binomial regression was used to estimate factors influencing men's behaviour to indulge in multiple sexual partnerships.

**Table 1: Variables, definitions and measures**

<i>Variables</i>	<i>Definitions</i>	<i>Measures</i>
<i>Dependent Variables</i>		
Multiple sexual partners	Number of sexual partners excluding spouse in last 12 months	Count variable from 0, 1, 2, 3...
Condom use	Condom use during sexual intercourse with extra-marital partner	1 = "Yes, used"; 0 = "No, not used"
<i>Explanatory Variables</i>		
Education	Education attainment of the respondent	0=No education, 1=Incomplete primary, 2=Complete primary, 3=Incomplete secondary, 4/max=Complete secondary or higher
Religion	Religious belief of the respondent	1= Catholics, 2 = Protestants (other Christians), 3 = Muslims and Others (no religion, cults and traditionalists)
Living number children	Number of children ever born to a woman (15 - 49 years)	0= "0"; 1 = "1"; 3= "2-3"; 4= "4+" 0= "Male"; 1= "Female"
Household head sex	Gender of the household head	
Wealth	Wealth status of the household	1= "Poor"; 2 = "Middle"; 3 = "Rich"
Exposure to media	Access to family planning information on media	0= "Neither on Radio nor TV"; 1= "Either on Radio or TV"; 2= "Both on Radio and TV"
Place of residence	Place where the respondents reside	1= "rural" 2=" urban"

Finally, binary logistic regression was employed to examine determinants of condom use among youths in Malawi. Stata 15.0 software (Stata over-Corp 2017) was used for data analysis.

Furthermore, pairwise Pearson Correlation coefficient was used to measure the degree of association between the variables, in which, coefficients of less than seventy-five percent were considered for further analysis. In the multivariate analysis, where the count variable “multiple sexual partners” had over-dispersed 0, a test of goodness of fit was fitted after estimating the Poisson model to estimate its predictors. The rationale was to use Pearson’s chi-square to test significance which implies an existence of the over-dispersion of zeros which in this case applied. As such, the model’s significant p-values implied that after the goodness of fit, the use of negative binomial regression model estimator qualified for each *not married* and *married* model for the youths and adults. On the same note, the study used a weighted, strata, and cluster survey set approach in order to adjust for the

complexity in the MDHS survey design and data sets. The models were run at ninety-five percent confidence interval.

## RESULTS AND DISCUSSION

### Background Attributes of Respondents

In this section, the study presents background characteristics of youth and adult males who had multiple sexual partners other than spouses during the past 12 months preceding the survey by their marital status in Malawi. As indicated in Table 2, a total of 5743 men had sexual encounter during this period preceding the survey and were reported to have multiple sexual partners. Of these, about 29.97 percent (1721) represented the youths and 70.03 percent (4022) their adults’ counterparts. Of the total youths, the married were 31.14 percent and 68.86 percent were their unmarried counterparts. Furthermore, about 8.13 percent of the adult men were single whereas, the majority, 91.87 percent were married.

**Table 2: Background attributes of male youths and adults by marital status who had sexual encounter in the last 12 months preceding the survey**

Variables	Youths		Adults	
	Married (%)	Not married (%)	Married (%)	Not married (%)
<i>Education Attainment</i>				
No education	4.45	1.83	8.95	6.24
Incomplete primary	55.69	54.46	45.16	33.18
Complete primary	11.54	5.13	12.16	6.15
Incomplete secondary	17.12	23.89	15.68	20.55
Complete secondary and higher	11.20	14.70	18.04	33.88
<i>Religion</i>				
Catholic	20.25	21.55	18.36	16.06
Protestants	65.80	62.92	67.14	67.82
Muslim and others	13.95	15.54	14.50	16.12
<i>Number of Living Children</i>				
0	26.88	94.35	3.39	53.96
1 – 3	72.15	5.65	45.93	33.49
4+	0.96	-	50.68	12.56
<i>Media Exposure to FP Information</i>				
Neither on radio nor TV	35.65	36.79	29.50	31.21
Either on radio or TV	57.53	53.98	57.07	50.93
Both on radio and TV	6.82	9.23	13.44	17.86
<i>Wealth</i>				
Poor	57.46	28.27	36.09	23.75
Middle	17.77	22.38	20.54	10.72
Rich	24.77	49.35	43.38	65.52
<i>Household Head Sex</i>				
Male	90.97	69.92	96.30	77.15
Female	9.03	30.08	3.70	22.85
<i>Place of Residence</i>				
Urban	9.92	17.61	17.24	38.09
Rural	90.08	82.39	82.76	61.91
Observations	536	1185	3695	327

By education attainment, both the youth who were either married or not married were the majority and were represented by 55.69 percent and 54.46 percent, respectively. On the same note, about 45.16 percent and 33.18 percent comprised adults who were married and not married, respectively. In terms of completion of secondary education and higher, 11.2 percent of the unmarried youth were reported to have attained secondary education and higher relative to 18.04 percent of their adults' counterparts. Furthermore, it was found that the youth that were not married represented 15.54 percent and about 33.88 percent adults were not married. In terms of the religious affiliations, Protestants with married and unmarried youth represented about 65.80 percent and 62.92 percent, respectively. Additionally, about 67.14 percent and 67.82 percent were both married and not married adults' men among the Protestants.

At household level, a majority of the married youth were from the households which had 1 to 3 living children (72.15%) with only 0.96 percent of the married youth from households with 4 and higher living number of children. Among the adults, it was found that the married adults from the household with 4 and higher number of living children represented about 50.68 percent. This was contrary to the "not married" adults where 53.96 percent were from the households which reported to have no children. Likewise, in terms of media exposure, regardless of marital status, the median proportion of both the youth and adults accessed family planning information on either the Television or the Radio within their households with a minimum access proportion of 50.93 percent. However, the current study observed that very few men were privileged to access information about family planning on media such as Television and Radio. This was reflected by a range of as low as 6.82 percent among the married youth to about 17.86 percent of their not married adult counterparts.

In as far as wealth status was concerned, the youth that were married represented 57.46 percent whereas those that were married and had middle wealth status represented 17.77 percent. On the contrary, among the adult, it was observed that the married adults were relatively numerous, at about 43.38 percent and those with middle wealth status were the least with a proportion of 22.38 percent. It is worth noting that both the youths and adults who were not married had the larger proportion of about 49.35 percent and 65.52

percent from the rich households, respectively. Similarly, it is also noteworthy that most youths and adults come from the households with middle income levels represented by 22.38 percent and as low as 10.72 percent, respectively.

All in all, by gender of the household head, 30.08 percent of the "not married" youths and 22.85 percent of their "not married" adult counterparts were under female headed households. On residential variable, the study found that 90.08 percent of the "married" youths and 82.76 percent of the "married" adults were predominantly rural residents. Further to this, it was observed that among the men who were not married, 82.39 percent youths and 61.91 percent adults were resident in rural areas (Table 2). This shows that Malawi's population is predominantly rural based.

#### **Attributes of the Youths and Adults by Distribution of Condom Use Status with Non-cohabiting Spouses by Marital Status**

Table 3 presents youths and adults distributed based on condom use by marital status which in this case was defined as married and not married to reflect men who were married and were living with their partners and not married, otherwise.

Based on the distribution, a total of 1991 (100%) men were found to have sexual intercourse with non-cohabiting partners and were associated with condom use during their sexual debut. Of these men, about 93.27 percent (1178) were the youth who were not married and only 6.73 percent (85) were married. Among the adults, it was found that 40.11 percent (292) were not married and 58.89 percent (436) were married. All in all, these represented a proportion of 63.44 percent (1263) youths and 36.56 percent (728) adult men. Table 3 illustrates the distribution, by percentage, of male youths and adults who utilized condom while having sexual activities with partners other than the spouse 12 months prior to the MDHS survey.

#### **Bivariate Analysis Results**

##### ***Association between Multiple Sexual Partnerships and Condom Use among the Youths and Adults with partners other than their spouses***

Table 4 presents unadjusted model results estimating determinants of multiple sexual part-

**Table 3: Distribution of youths and adults by status of marital in relation to condom use with a partner other than the spouses 12 months before the survey**

Variables	Variables Distribution (%) of male youths and adults using condom during sexual intercourse with non-cohabiting partners within 12 months			
	Married (%)	Not married (%)	Married (%)	Not married (%)
<i>Education Attainment</i>				
No education <sup>®</sup>	1.2	3.7	6.1	6.6
Incomplete primary	54.6	54.7	28.3	43.0
Complete primary	5.2	9.1	5.9	13.3
Incomplete secondary	24.1	20.8	22.9	16.7
Secondary and higher	14.6	11.6	36.7	20.5
<i>Religion</i>				
Catholic <sup>®</sup>	21.4	23.2	15.0	15.4
Protestant	63.3	54.0	68.4	65.9
Muslims and others	15.3	22.8	16.6	18.7
<i>Number of Living Children</i>				
0	94.8	19.8	61.2	5.3
1 to 3	5.2	78.1	29.8	53.8
4 and higher		2.1	9.0	41.0
<i>Exposure to Media</i>				
neither TV nor Radio	36.7	31.1	29.4	26.5
Either TV or Radio	53.9	64.8	51.8	61.3
Both TV and Radio	9.4	4.1	18.8	12.2
<i>Wealth Status</i>				
Poorest <sup>®</sup>	12.1	22.2	11.0	12.2
Poor	16.2	28.4	10.5	15.7
Medium	22.3	18.7	9.9	20.3
Rich	22.4	16.7	17.6	24.8
Richest	27.0	14.0	50.9	27.0
<i>Household Head Sex</i>				
Male <sup>®</sup>	69.9	87.4	76.7	96.3
Female	30.1	12.6	23.3	3.7
<i>Place of Residence</i>				
Urban <sup>®</sup>	17.5	13.3	42.2	19.9
Rural	82.5	86.7	57.8	80.1
Observations	1178	85	292	436

nerships other than spouse among male youths and adults by status of marriages in Malawi. The study found that among the youths, major significant predictors that increased the risk of men in having multiple sexual partners include education, religion, exposure to media, living number of children, household head sex and place of residence. These determinants were common for both married and unmarried youth groups.

On condom use (Table 5) among men with non-cohabiting partners, the study found that in the “not married” models for both youths and adults, significant predictors that increased incidence risk of men in using condom during sexual intercourse, existed. However, among the married men, most of the determinants of condom use were found to decrease the incidence risk of using condoms with non-cohabiting partners.

## Multivariable Analysis Results

### *Factors Attributing to Multiple Sexual Partnerships among Youths and Adults*

The study examined determinants influencing the youths and adults to have multiple sexual partners in Malawi. As illustrated in Table 6, negative binomial results denoting two models, namely, “not married” and “married” for both male youths and adults, respectively, on their indulgence of multiple sexual partnerships in Malawi, are presented.

A quick look into the “not married” model results shows that sex of household head, religion and number of living children were major predictors affecting men’s indulgence of having multiple sexual partnerships in Malawi. The results show that male youths under female head-

**Table 4: Unadjusted model results estimating determinants of multiple sexual partnerships other than spouse among youths and adults by marital status in Malawi**

Variables	Incidence risk to indulge with multiple sexual partners			
	Youths		Adults	
	Not married (IRR)	Married (IRR)	Not married (IRR)	Married (IRR)
<i>Education Attainment</i>				
No education	1.00	1.00	1.00	1.00
Incomplete primary	1.42**	0.19***	1.02	0.13***
Complete primary	1.20***	0.15***	0.86	0.13***
Incomplete secondary	1.55**	0.26***	1.37**	0.14***
Secondary and higher	1.17***	0.18***	1.09	0.16***
<i>Religious Affiliation</i>				
Catholic	1.00	1.00	1.00	1.00
Protestant	1.23***	0.15***	1.06	0.13***
Muslims and others	2.43***	0.37***	1.13	0.21***
<i>Media Exposure</i>				
Neither TV nor Radio	1.00	1.00	1.00	1.00
Either TV or Radio	1.32***	0.23***	1.12	0.15***
Both TV and Radio	1.47**	0.12**	1.13	0.17***
<i>Wealth Status</i>				
Poorest	1.00	1.00	1.00	1.00
Poor	1.17***	0.18***	1.10	0.11***
Middle	1.23***	0.21***	1.16	0.12***
Rich	1.34***	0.26***	1.17	0.18***
Richest	1.82***	0.23***	1.14*	0.17***
<i>Number of Living Children</i>				
0	1.00	1.00	1.00	1.00
1 to 3	1.42*	0.21***	1.01	0.17***
4 and higher		0.36	0.85	0.10***
<i>Sex of Household Head</i>				
Male	1.00	1.00	1.00	1.00
Female	1.77**	0.26***	1.16	0.13***
<i>Place of Residence</i>				
Urban	1.00	1.00	1.00	1.00
Rural	1.27***	0.19***	1.0	0.14***

Note: \*\*\*p<0.001; \*\*p<0.01; \*p<0.05

ed households had a relatively higher incidence risk to indulge in multiple sexual partnerships than their counterparts living under male headed households (IRR=1.24; p<0.05). On “religious affiliation”, the study has shown that Muslim youths, who were not married, and those affiliated to “other religious beliefs” increased their incidence risk of indulging and having multiple sexual partners compared to their Roman Catholics counterparts (IRR=2.26; p<0.001). On the other hand, married Muslim male youths and those from other religions had increased incidence risk to indulge in multiple sexual partnerships relative to their Catholics counterparts (IRR=2.08; p<0.05). Considering the living number of children, the current study noted that the “not married” youths from households with 1 to 3 children reported a

high significant incidence risk to indulge with multiple sexual partners compared to their counterparts with no living children at their household (IRR=2.16; p<0.001).

In the adult category, the current study noted that the “not married” adult males, education and household wealth remained major significant factors that significantly influence them to have multiple sexual partners. Furthermore, “incomplete primary” education status increased the incident risk of adult men in having multiple sexual partners compared to those with no education (IRR=1.5; p<0.05). On the same note, “incomplete secondary” educational attainment was associated with a significant yet increasing an incidence relative risk of adults’ men to having multiple sexual partners (IRR=1.92; p<0.01). In terms of the



**Table 5: Unadjusted model results estimating determinants of condom use among the youths and adults with non-cohabiting partners in Malawi**

Variables	Incidence risk of condom use			
	Youths		Adults	
	Not married (IRR)	Married (IRR)	Not married (IRR)	Married (IRR)
<i>Education Attainment</i>				
No education	1.00	1.00	1.00	1.00
Incomplete primary	2.14**	4.81***	1.02	0.13***
Complete primary	8.81***	2.64	0.86	0.13***
Incomplete secondary	5.52**	2.55	1.37**	0.14***
Secondary and higher	5.33***	3.29	1.09	0.16***
<i>Religious Affiliation</i>				
Catholic	1.00	1.00	1.00	1.00
Protestant	3.31***	2.11***	1.06	0.13***
Muslims and others	2.12***	5.38**	1.13	0.21***
<i>Media Exposure</i>				
Neither TV nor Radio	1.00	1.00	1.00	1.00
Either TV or Radio	1.32***	***	3.33***	5.49***
Both TV and Radio	1.47**	0.12**	5.76***	1.98
<i>Wealth Status</i>				
Poorest	1.00	1.00	1.00	1.00
Poor	1.17***	0.18***	1.10	5.86***
Middle	1.23***	0.21***	2.54***	3.11
Rich	1.34***	0.26***	2.8***	11.03**
Richest	1.82***	0.23***	5.11***	1.53
<i>Number of Living Children</i>				
0	1.00	1.00	1.00	1.00
1 to 3	3.12***	4.35***	1.01	0.17***
4 and higher		-	0.85	0.10***
<i>Sex of Household Head</i>				
Male	1.00	1.00	1.00	1.00
Female	1.77**	0.26***	1.16	0.13***
<i>Place of Residence</i>				
Urban	1.00	1.00	1.00	1.00
Rural	3.74***	2.48	2.77***	4.51***

Note: \*\*\*p<0.001; \*\*p<0.01; \*p<0.05

household wealth, it was found that, adult men in the rich and richest households significantly increased the incidence risk of having multiple sexual partners compared to those from the poorest households (IRR=1.61; p<0.01 and IRR=1.62; p<0.01).

Among the “married” adult men the study found that being a “Protestant” and “Muslim and others” were respectively, associated with increasing incidence risk to indulge with multiple sexual partners significantly (IRR=1.43; p<0.05 and IRR=2.46; p<0.01). Compared with the poorest group, adult men from the “rich” (IRR=1.67; p<0.01) and the “richest” (IRR=1.84; p<0.01) households had an increased incidence risk of having multiple sexual partners. On the contrary, the study found that “married” adult men from households with 4 and higher number of living

children had decreased incidence risk to indulge with multiple sexual partners relative to their counterparts with no living children (IRR=0.33; p<0.01).

#### ***Determinants of Condom Use with Non-cohabiting Partners among Male Youths and Adults in Malawi***

Table 7 presents logistic regression results on the analysis of determinants of condom use during sexual intercourse with non-cohabiting partners among men (youths and adults) in Malawi 12 months preceding the DHS study distributed by marital status.

This current study alleges that of the four models, there were varying factors associated with influencing use of condom among men with part-

**Table 6: Negative binomial regression results estimating factors influencing multiple sexual partnerships among the youths and adults by their marital status**

Variables	Variables Incidence risk to indulge with multiple sexual partners			
	Youths		Adults	
	Not married (IRR)	Married (IRR)	Not married (IRR)	Married (IRR)
<i>Education Attainment</i>				
No education <sup>®</sup>	1.00	1.00	1.00	1.00
Incomplete primary	1.02	1.45	1.50*	0.91
Complete primary	1.19	1.13	1.01	0.97
Incomplete secondary	1.04	1.70	1.92**	0.83
Secondary and higher	1.14	1.18	1.29	0.76
<i>Sex of the Household Head</i>				
Male <sup>®</sup>	1.00	1.00	1.00	1.00
Female	1.24*	1.40	1.07	0.85
<i>Religious Affiliation</i>				
Catholic <sup>®</sup>	1.00	1.00	1.00	1.00
Protestant	0.96	0.76	0.83	1.43**
Muslims and others	2.26***	2.08*	1.42	2.46***
<i>Family Planning Exposure TV and Radio</i>				
Neither TV nor Radio <sup>®</sup>	1.00	1.00	1.00	1.00
Either TV or Radio	1.09	1.41	1.19	1.27
Both TV and Radio	1.05	0.65	0.98	1.22
<i>Wealth Status</i>				
Poorest <sup>®</sup>				
Poor	1.06	1.10	1.42	1.06
Middle	1.17	1.28	1.19	1.22
Rich	1.15	1.87	1.61**	1.67**
Richest	1.25	1.59	1.62**	1.84**
<i>Number of Living Children</i>				
0 <sup>®</sup>	1.00	1.00	1.00	1.00
1 to 3	2.16***	1.55	0.88	0.57
4 and higher	-	2.63	0.87	0.33**
<i>Place of Residence</i>				
Urban <sup>®</sup>	1.00	1.00	1.00	1.00
Rural	0.85	1.01	0.79	1.12
Observations	2/685	541	509	3.743

Note: \*\*\*p<0.01; \*\*p<0.01; \*p<0.05; IRR= Incident Risk Ratio; ® = Reference Category

ners other than their spouses for both the youths and adults in Malawi. For instance, the results show that despite having attained high level of education, youths who attained and completed primary school education, in their unmarried status, and higher were more likely to have protected sex with partners other than spouses. The “not married” youths who completed primary school education (OR=6.55; p<0.01) and those with “incomplete secondary” education (OR=3.66; p<0.01), respectively were found to increase their odds of using condom during sexual intercourse with partners other than their spouses. Those “not married” male youths who had attained secondary or higher education had also increased and significant odds to use condom (OR=3.22; p<0.05) compared to the unmarried youths who

had no education. Among the “married” male youths, the study found that those who completed “primary” school education had an increased and significant odds to use condom during sexual intercourse with partners other than the spouses relative to their counterparts with no education (OR=26.98; p<0.05). However, considering religious affiliation, it was found that the married youths who were Protestants had decreased odds of having protected sex with partner other than their spouses relative to the Catholic who were the reference category (OR=0.53; p<0.01).

In the adult category, the study has shown that significantly influential factors on use of condom were dominant among the married men. The dominant factors include; education, household wealth, media exposure, living number of children



**Table 7: Logistic regression results estimating factors influencing condom use among youths and adults distributed by marital status**

Variables	Youths		Adults	
	Not married Odds ratio	Married Odds ratio	Not married Odds ratio	Married Odds ratio
<i>Education Attainment</i>				
No education <sup>®</sup>	1.00	1.00	1.00	1.00
Incomplete primary	1.66	5.86	3.49	2.19
Complete primary	6.55**	26.98*	1.18	2.67
Incomplete secondary	3.66**	4.72	4.71	1.77
Secondary and higher	3.22*	2.72	4.17	11.72***
<i>Sex of Household Head</i>				
Male <sup>®</sup>	1.00	1.00	1.00	1.00
Female	1.40*	0.26	1.60	1.79
<i>Religion Affiliation</i>				
Catholic <sup>®</sup>	1.00	1.00	1.00	1.00
Protestant	1.03	0.05**	1.44	0.86
Muslims and others	0.74	0.20	0.54	0.77
<i>Exposure to Media</i>				
neither TV nor Radio	1.00	1.00	1.00	1.00
Either TV or Radio	1.13	2.49	0.97	2.08**
Both TV and Radio	1.38	0.50	0.88	0.73
<i>Wealth status</i>				
Poorest <sup>®</sup>	1.00	1.00	1.00	1.00
Poor	0.72	1.33	1.21	1.74
Medium	0.80	0.96	2.66	2.09*
Rich	0.77	16.77	2.17	2.01
Richest	1.09	1.58	2.30	1.32
<i>Number of Living Children</i>				
0	1.00	1.00	1.00	1.00
1 to 3	0.96	2.67	0.76	3.51**
4 and higher	-	-	0.38	2.14
<i>Place of Residence</i>				
Urban <sup>®</sup>	1.00	1.00	1.00	1.00
Rural	0.85	4.84	0.78	0.47*
Observations	1,178	85	292	436

Note: \*\*\*p<0.001, \*\*p<0.01, \*p<0.05; OR= Odds Ratio; <sup>®</sup> = Reference category

and place of residence. On education, men who were married and completed their secondary education or higher had increased and significant odds of using condoms during sexual intercourse with partners other than their spouses relative to their counterparts with no education (OR=11.72; p<0.001). Furthermore, the study noted that adults who were committed in marriage had the ability of accessing family planning information either on TV or Radio and therefore had increased odds to use condoms during sexual encounters with partners other than their spouses (OR=2.08; p<0.01). Furthermore, married adult men from households belonging to the “medium” wealth bracket were found to have 2.09 times increased odds to use condoms with partners other than the spouses during sexual practices relative to their counterparts from the “poorest” households (OR=2.09; p<0.05).

Finally, the results show that married adult males from the households with 1 to 3 living number of children were more likely and significantly to have protected sex with partners other than their spouses compared to their counterparts with no living number of children (OR=3.5; p<0.01). Likewise, by place of residence, the adult married men were less likely and weakly significant to have protected sex with partners other than their spouses (OR=0.47; p<0.05).

## DISCUSSION

In terms of factors influencing the risky sexual behaviour among the youth and adults, the current study found that the youths who were not married and were from female headed households had increased incidence risks to have multiple sexual partners compared with their coun-

terparts who were from male headed households. This finding concurs with a study by Zulu et al. (2002) who found that the youths living under female headed households received less control over their sexual behaviours and therefore became more vulnerable to sexual and reproductive challenges such as having multiple sexual partners compared to those from male headed households. This could be because most of the female heads of household find it relatively harder than their male counterparts to have direct control over boys than girls due to traditionally perceived low negotiation power that women exert over men (Ulin 1992); this factor leads to a diversity of households behaviours (Tenkorang et al. 2011; Bearinger et al. 2007), a scenario which further complicates the tasks that a woman heading the household faces.

On religious affiliation, it was noted that Muslim youths and the ones who were categorised to affiliate with “other religions”, were more prone to have multiple sexual partnerships relative to the Catholics and the Protestant youths. On the contrary, related studies have argued that Muslim youths’ tend to be reserved on sexual matters compared with Christian youths (Coleman and Testa 2008). It is important to note that such variations in sexual behavioural attributes are partly due to diversity in cultural norms which define belief systems and human behaviours as well as people’s sexual and reproductive behavioural choices (Tenkorang et al. 2011; Coleman and Testa 2008). In the adult category, the study found that compared with Catholics, both “Protestants” and “Muslims and others” who were “married” were vulnerable to having multiple sexual partners. This suggests that male infidelity in marriage cuts across the religious divide. As such, based on this position, it is difficult to postulate that one’s religious affiliation is the principal factor that could influence indulgency in risky sexual behaviour in Malawi. Nevertheless, the fact that among the male youths, both unmarried and married Muslims and “other smaller religious groupings” have been found to exhibit increased relative risk to indulge in multiple sexual partnerships implies that something must be done to counter the behaviour among the Muslim youths relative to those affiliated with Christian religious beliefs. Indeed, the unique behaviour of people with different religious beliefs towards sexual activities could be attributed to the differential belief systems and frameworks at household and

community levels that culminate from varying religious affiliations (Mahoney 2010) and sexual experiences (Exavery et al. 2011; Takyi 2003).

Furthermore, the study found that among the male youths, those “not married” but living in households with 1 to 3 living children were significantly at risk of indulging in multiple sexual partnerships compared with their counterparts from households with no children. The results support the argument by Adu-Mireku (2003), who pointed out that a family is fundamental institution and primary agent that guides an individual’s path of socialization. This implies that the family has a direct effect on one’s sexual behavioural practices especially, among the unmarried youths. This is because whatever is communicated within the household settings has a higher propensity of catalysing the social intercourse among the youths vis-à-vis indulgence in risky sexual reproductive practices such as having multiple sexual partners (Kumi-Kyereme et al. 2007; Ma et al. 2009; Chimbi 2007).

In the adult sub-group, the study found that adult men who were not married and did not have an opportunity to complete primary and secondary school education were significantly prone to indulging in multiple sexual partnerships. Based on these findings it can be argued that failure to complete one’s prescribed education level could potentially have significant contribution to one’s sexual behaviour among the unmarried men in Malawi. Thus, as a life journey, education needed to be pursued to one’s satisfaction, mindful that sometimes people display compensatory behavioural patterns based on failure in other spheres of social life (Glanz and Bishop 2010).

On household wealth, the study found that male adults (both married and not married) who were generally rich had a significantly increased risk of having multiple sexual partners compared to their poorest counterparts. The Malawi experience presented in this study is however, contrary to the findings of a cross national study that was conducted concurrently in Ghana and Kenya which found men’s richness status to have no discernible relationship to influence their behaviour on multiple sexual partnerships (Awusabo-Asare and Annim 2008). On the same note, the study findings also contradict an observation which reiterates an existence of inconsistent association between wealth status among men in relation to numbers of sexual partners they opt (Madise et al. 2007). Nevertheless, it is worth not-

ing that where sexual imorality exists rich men would easily buy sex and therefore engage themselves in multiple sexual partnerships than their poor counterparts. Experience has shown that such risky sexual behavioural practices tend to be on the higher side among rich men in Malawi than the poor folks.

On the number of living children, it was noted that male adults who were married and had 4 or more children significantly decreased incidence risk to have multiple sexual partners. This could be explained by the fact that the higher the number of children the higher the child care related social and economic burdens and obligations in the household which eventually influences behavioural change in men towards family care with one sexual partner (Miller et al. 2001).

The study's findings on determinants of condom use have shown that there has been a significant increase in the use of the contraceptive among the male youths who completed primary education and higher. This implies that education plays a crucial role in shaping society to act responsibly on reproductive healthy. It is evident that if one knows how to read and write chances of using condoms with non-cohabiting sexual partners could be improved (Michielsen et al. 2010).

Similarly, despite coming from the female headed households, the current study found that irrespective of marital status, the male youths and adults were more likely and significantly using condoms during sexual encounters with non-cohabiting sexual partners. However, among the married youths, it was observed that the use of condom with non-cohabiting partners was reduced significantly among the Protestants relative to the Catholic counterparts. This implies that the married youthful men lived a serious high risky lifestyle with regards to sexual behaviour. A study by Kumi-Kyereme et al. (2007) argued that differences among people in terms of seeking good health is attributed to variations in cultural practices which affect their choices in seeking and using preventive health products such as condoms.

Turning to the adults, the present study noted that marital status, attainment of secondary education and higher had a propensity of having men practising protected sex with partners other than spouses. This implies that educated married men tend to behave and act more responsibly compared to the unmarried and less educated men. In this case, it is tempting to label higher

men's education attained as a factor that might have improved their health education knowledge and understanding of the significance of attaining acceptable sexual and reproductive health status. Facilitated within school settings, higher education also enhances people's exposure to various modes of information about sex and sexual behaviours which in the long term have a significant impact on improving use of condoms among men (Garofalo et al. 1998). In a similar study, it was observed that men who are well informed educationally have a better understanding of health matters and minimise their risk of behaving irrationally at the expense of their health (Michielsen et al. 2010). Additionally, the current study found that when adult males are access sexual and reproductive health information through television (TV) or radio, their level of understanding on health messages and communication improves and this result in improved behaviour of practising protected sex during extra marital conjugal encounters. This indicates that if well-articulated, multi-media reproductive health campaigns could have a significant impact on curbing some irrational sexual behaviour among people (Bessinger et al. 2004). However, it is noteworthy that exposure to media becomes more effective if targeted programmes are consistently scheduled to inform society about the consequences of risky sexual practices toward one's health (Shapiro et al. 2003).

In terms of wealth status, this study found that married male adults in the "medium" income bracket were significantly associated with positive odds to use condoms during sexual intercourse with a partner other than their spouse. While it is difficult to attribute such positive sexual behavioural practices to household wealth alone, one explanation could relate to the significance of financial resources in the acquisition of knowledge and information through various media channels. Generally, wealthy households tend to have members with high levels of education and therefore knowledge in various aspects affecting social and economic fabric of the society. With high knowledge and information men from wealth households tend to have increased likelihood to display positive behavioural change for improved health status.

On number of children relative to condom use, the study found that married adult men having between 1 and 3 children had significant and positive odds to use condoms whenever indulging

in multiple sexual partnerships. As already stated, some married men would be mindful of the expanded roles and responsibilities that arise with increased number of children in the household. Such men would be eager to use condoms during sexual encounters with partners other than their spouse to avoid either contracting sexually transmitted infections or getting implicated in unwanted pregnancies which may eventually blot out financial burdens for child support.

On residential variable, it has been pointed out that adult men who were married and living in rural areas exhibited a high risky sexual behaviour since they were found to decrease their likelihood of using condoms in sexual encounters with partners other than spouse relative to the urban dwellers. Several explanations could be advanced on this finding; one reasoning borders around socio-economic disparities between the rural and urban areas. Different studies indicate that most men from rural areas do not like to use condoms during sexual encounter (Pettifor et al. 2010; Preston et al. 2004) due to negative and unmatched perceptions about condom use and sexual pleasure. On sexual pleasure, it is pointed out that the use of condoms serves as an intruder among couples in the pursuit of satisfaction in their sexual encounters (Chimbiri 2007). In some instances, reduced or complete non-use of condom is blamed on inadequate health seeking behaviour among men in protecting themselves (Preston et al. 2004) while in several contexts it is the inconsistent use of the condoms among men which aggregates to its reduced use (Adetunji and Meekers 2001).

### CONCLUSION

Using the 2015-16 Malawi Demographic and Health Survey data this paper has presented results and a discussion of the findings of a study whose objective was to determine factors that influence male youths and adults to indulge in risky sexual behaviour practices in Malawi. Key analytical procedures to explore the objective involved the use of negative binomial regression and logistic regression models. The study found that despite numerous initiatives aimed at promoting good sexual and reproductive health behaviour, there remains high level of multiple sexual partnerships among male youths and adults in Malawi. The study found that education, religion, media exposure, number of living children, sex of

the household head and place of residence stand out as the major factors influencing the practice of men in having multiple sexual partners in Malawi. In terms of condom use, education was positively influencing men (youths and adults) to use condoms during sexual encounters with non-cohabiting multiple sexual partners. Furthermore, it has been established that access to family planning information on either television (TV) or radio could exert potential positive influence on men to minimize indulgence in risky sexual behaviour and practices – reducing multiple sexual partnerships with non-cohabiting partners and increasing condom use during sexual encounters with such partners.

### RECOMMENDATIONS

The study recommends that enforcement of deliberate pro-men sexual and reproductive health educational campaigns at the community level is fundamental if efforts to attain health care dividends among all men in Malawi is to be achieved in the medium to long term. Such efforts would likely contribute to reduced men's vulnerability to sexually transmitted infections in the country.

### REFERENCES

- Adetunji J, Meekers D 2001. Consistency in condom use in the context of HIV/AIDS in Zimbabwe. *Journal of Biosocial Science*, 33(1): 121-138.
- Adu-Mireku S 2003. Family communication about HIV/AIDS and sexual behaviour among senior secondary school students in Accra, Ghana. *African Health Sciences*, 3(1): 7-14.
- Awusabo-Asare K, Annim SK 2008. Wealth status and risky sexual behaviour in Ghana and Kenya. *Applied Health Economics and Health Policy*, 6(1): 27-39.
- Bearinger LH, Sieving RE, Ferguson J, Sharma V 2007. Global perspectives on the sexual and reproductive health of adolescents: Patterns, prevention, and potential. *The Lancet*, 369(9568): 1220-1231.
- Bessinger R, Katende C, Gupta N 2004. Multi-media campaign exposure effects on knowledge and use of condoms for STI and HIV/AIDS prevention in Uganda. *Evaluation and Program Planning*, 27(4): 397-407.
- Chavula G 2016. *A Critical Examination of Sexuality Education in Malawi: A Case Study of Blantyre District*. Master's Thesis, Unpublished. Harare: University of Zimbabwe.
- Chimbiri AM 2007. The condom is an 'intruder' in marriage: Evidence from rural Malawi. *Social Science and Medicine*, 64(5): 1102-1115.
- Coleman LM, Testa A 2008. Sexual health knowledge, attitudes and behaviours: Variations among a religiously diverse sample of young people in London, UK. *Ethnicity and Health*, 13(1): 55-72.

- Exavery A, Lutambi AM, Mubyazi GM, Kweka K, Mbaruku G, Masanja H 2011. Multiple sexual partners and condom use among 10-19-year-olds in four districts in Tanzania: What do we learn? *BMC Public Health*, 11(1): 490.
- Garofalo R, Wolf RC, Kessel S, Palfrey J, DuRant RH 1998. The association between health risk behaviors and sexual orientation among a school-based sample of adolescents. *Pediatrics*, 101(5): 895-902.
- Glanz K, Bishop DB 2010. The role of behavioral science theory in development and implementation of public health interventions. *Annual Review of Public Health*, 31: 399-418.
- Kumi-Kyereme A, Awusabo-Asare K, Tanle A, Biddlecom A 2007. Influence of social connectedness, communication and monitoring on adolescent sexual activity in Ghana. *African Journal of Reproductive Health*, 11(3): 133-147.
- Letamo G, Mokgathe LL 2013. Predictors of risky sexual behaviour among young people in the era of HIV/AIDS: Evidence from the 2008 Botswana AIDS Impact Survey III. *African Journal of Reproductive Health*, 17(3): 169-181.
- Ma Q, Ono-Kihara M, Cong L, Xu G, Pan X, Zamani S 2009. Early initiation of sexual activity: A risk factor for sexually transmitted diseases, HIV infection, and unwanted pregnancy among university students in China. *BMC Public Health*, 9(1): 111.
- Madise N, Zulu E, Ciera J 2007. Is poverty a driver for risky sexual behaviour? Evidence from national surveys of adolescents in four African countries. *African Journal of Reproductive Health*, 11(3): 83-98.
- Mahoney A 2010. Religion in families, 1999-2009: A relational spirituality framework. *Journal of Marriage and Family*, 72(4): 805-827.
- Michielsen K, Chersich MF, Luchters S, De Koker P, Van Rossem R, Temmerman M 2010. Effectiveness of HIV prevention for youth in sub-Saharan Africa: Systematic review and meta-analysis of randomized and nonrandomized trials. *AIDS*, 24(8): 1193-1202.
- Miller BC, Benso B, Galbraith KA 2001. Family relationships and adolescent pregnancy risk: A research synthesis. *Developmental Review*, 21(1): 1-38.
- National Statistical Office (NSO), ICF 2017. *Malawi Demographic and Health Survey 2015-16*. Zomba, Malawi, Rockville, Maryland, USA: NSO, ICF.
- Odimegwu C, Somefun O 2017. Ethnicity, gender and risky sexual behavior among Nigeria youth: An alternative explanation. *Reproductive Health*, 14(1): 16.
- Osorio A, López-del Burgo C, Ruiz-Canela M, Carlos S, de Irala J 2015. Safe-sex belief and sexual risk behaviours among adolescents from three developing countries: A cross-sectional study. *BMJ Open*, 5(4): pe007826.
- Pettifor AE, Rees HV, Kleinschmidt I, Steffenson AE, MacPhail C, Hlongwa-Plummer ML, Wight D, Wamoyi J, Mshana G, Hayes RJ, Ross DA 2006. Farming with your hoe in a sack: Condom attitudes, access, and use in rural Tanzania. *Studies in Family Planning*, 37(1): 29-40.
- Preston DB, D'Augelli AR, Kassab CD, Cain RE, Schulze FW, Starks MT 2004. The influence of stigma on the sexual risk behavior of rural men who have sex with men. *AIDS Education and Prevention*, 16(4): 291-303.
- Shapiro D, Meekers D, Tamashe B 2003. Exposure to the 'SIDA dans la cité' AIDS prevention television series in Côte d'Ivoire, sexual risk behaviour and condom use. *AIDS Care*, 15(3): 303-314.
- Takyi BK 2003. Religion and women's health in Ghana: Insights into HIV/AIDS preventive and protective behavior. *Social Science and Medicine*, 56(6): 1221-1234.
- Tenkorang EY, Maticka-Tyndale E, Rajulton F 2011. A multi-level analysis of risk perception, poverty and sexual risk-taking among young people in Cape Town, South Africa. *Health and Place*, 17(2): 525-535.
- Ulin PR 1992. African women and AIDS: Negotiating behavioral change. *Social Science and Medicine*, 34(1): 63-73.
- UNAIDS 2016. *90-90-90: Ambitious Treatment Target to Help End the AIDS Epidemic*. Geneva, Switzerland: UNAIDS.
- UNAIDS 2017. *Global AIDS Monitoring 2018. Indicators for Monitoring the 2016 United Nations Political Declarations on Ending AIDS*. Geneva, Switzerland: UNAIDS.
- Zulu EM, Dodoo F, Chika-Ezeh A 2002. Sexual risk-taking in the slums of Nairobi, Kenya, 1993-98. *Population Studies*, 56(3): 311-323.

---

**Paper received for publication on August 2018**  
**Paper accepted for publication on January 2019**