Factors facilitating risky sexual behaviour among youths in Mufakose, Harare, Zimbabwe

Ronald Musizvingoza & Naomi N. Wekwete

Centre for Population Studies, University of Zimbabwe
Harare, Zimbabwe
ronaldmusi@gmail.com

Abstract

Background: Risky sexual behaviours among the youth are a global challenge since they expose young people to reproductive health challenges that include sexually transmitted infections including HIV, unwanted pregnancies and unsafe abortions. The objective of this study was to identify the factors facilitating youth's risky sexual behaviour.

Methods: A survey and focus group discussions were conducted to collect data on risky sexual behaviour among the youth aged 15-24 years in Mufakose, Harare. Multivariate logistic regression analysis was used to investigate the factors associated with risky sexual behaviour.

Results: The mean age at first sexual intercourse was 17.5. The study findings show that 27% of the youth had multiple sexual partners while 26% did not use condoms consistently. Age, religiosity, schooling status, attending parties/clubs, alcohol consumption, smoking/drug use, living and sleeping arrangement, orphan hood status and parents' education were significantly associated with risky sexual behaviour.

Conclusion: Strengthening of youth policies and programmes to support the role of youths, families and religious organisations in behaviour change is recommended

Keywords: Youths, risky sexual behaviour, HIV/AIDS, Mufakose, Harare

Introduction

Sexual behaviour among the youth has been a focus of reproductive health programmes in sub-Saharan Africa in recent years, especially on sexual risk behaviours' impact on poor sexual health outcomes (Murwira, 2017; Morris and Rushwan, 2015). Risky sexual behaviours of major concern among the youth include the increasing early sexual activity, multiple sexual partners and transactional sex (Pascoe et al., 2017; UNFPA, 2015; Remez et al., 2014). The high risk behaviours pose serious health challenges, such as sexually transmitted infections (STIs) including HIV, early and unintended pregnancy and unsafe abortions (WHO, 2017; UNICEF, 2016; UNFPA, 2015; Morris and Rushwan, 2015; Chae, 2013; and UNAIDS and WHO, 2009). Also, alcohol and drug abuse, which have been reported to be rampant among the youth, worsens the situation. Sub-Saharan Africa continues to record the highest HIV prevalence rates, especially amongst the youth who represent one of the fastestgrowing risk groups of sexually-transmitted diseases including HIV and AIDS (UNICEF, 2018, UNAIDS, 2017).

Zimbabwe is one of the five countries hardest hit by HIV and AIDS globally, with a prevalence rate of 14.6% in 2016 (Ministry of Health and Child Care (MOHCC), 2017). In Zimbabwe, ninety-two percent of the new HIV infections occur through 3903

heterosexual contact (MOHCC, 2017). prevalence rate is higher among young women (6.7%) than men (2.9%) aged 15-24 years (Zimbabwe National Statistics Agency (ZIMSTAT) and ICF International, 2016). Many studies have shown that, not only do young people in Zimbabwe lack adequate knowledge about HIV and AIDS, but they also engage in early and unprotected sex (MOHCC, 2017; ZIMSTAT and ICF International, 2016; MOHCC, 2016; ZIMSTAT, 2015; Remez at al., 2014, Wyrod et al., 2011; Gouws, 2010; Sambisa et al., 2008). In Zimbabwe, 40.2% of women and 28.5% of men aged 18-24 years had their first sexual encounter before the age of 18 years (ZIMSTAT and ICF International, 2016). Unprotected sex among the youth is of concern as 39% of the sexually unmarried women aged 15-19 years were currently using contraceptives (ZIMSTAT and ICF International, 2016). Adolescent fertility rate still remains high as 22% of women aged 15-19 years had started childbearing (ZIMSTAT and ICF International, 2016). Probably the most tragic fact is that these behaviours expose young people to serious reproductive health challenges.

While several studies have been carried out on reproductive health issues among youths in Zimbabwe, it should be noted that they tend to be

similar in nature. Past studies have specifically concentrated on the identification of the risk behaviours, patterns and consequences of the behaviour. The youth from the historic black high density residential areas face a number of the SRH challenges. The media continue to report on high prevalence of alcohol and drug abuse among the youth, and this facilitates risky sexual behaviour. It is against this backdrop of risky sexual behaviours amongst Zimbabwean youth and concerns about the health outcomes of such behaviours that we undertake the present study. This study was conducted to investigate the factors facilitating risky sexual behaviours among youths, both in and out of school, in a poorly resourced and low-income high density residential area of Mufakose District. Specifically, the study examines the effects of factors such as educational level, age, religion, family structure, living arrangements, household income, social activities, alcohol and drug use. The study aims to contribute to the body of literature on risky sexual behaviour among the youth from low income households. The study was conducted with the view of influencing youth's policies and programmes in the dynamic urban settings of Zimbabwe.

Previous studies

Several studies have reported on risky sexual behaviour among young people that include early and unprotected sexual activity, transactional sex and multiple sexual partners (Mutasingwa Mbirigenda, 2017; Odimegwu and Somefun, 2017; Pascoe et al., 2017; Pufall et al., 2017; Amoateng et al., 2014; Stafstrom and Agardh, 2012; Baliunas, 2010; Rudatsikira, 2009). The demographic and health surveys of selected countries show that the percentage of women aged 18-24 years who had their first sexual encounter before the age of 18 years ranged from 40% in Ethiopia to 59% in Malawi (Central Statistical Agency (CSA) [Ethiopia] and ICF, 2016; National Statistical Office (NSO) [Malawi] and ICF; 2017). For the young men aged 18-24 years, the lowest percentage was in Ethiopia (12%) and highest in Lesotho (67%) (CSA [Ethiopia] and ICF, 2016; Ministry of Health [Lesotho] and ICF International, 2016). Gender differences have also been observed on risky sexual behaviours in relation to early sexual debut among youths in a sub-Saharan African setting (Mturi and Gaearwe, 2014; Amoateng et al., 2014; Agardh, 2011). Some studies concluded that males were less likely to indulge in risky sexual activities compared to females (Nagaddya et al., 2017; Mturi and Gaearwe, 2014), while others reported the opposite (Menon et al., 2016; Amoateng et al., 2014).

At individual level, there are also factors that are associated with risky sexual behaviour. Several

studies have shown that alcohol and drug use facilitate risky sexual behaviours through transactional sex, sexual coercion and none use of condoms (Amoateng et al., 2014; Stafstrom and Agardh, 2012; Baliunas, 2010; Rudatsikira, 2009). For example, in a study among orphaned adolescents in Eastern Zimbabwe, substance use was positively associated with early sexual debut, number of sexual partners, and engaging in transactional sex (Pufall et al., 2017). Marital status of young people has an impact on risk sexual behaviour through attitudes towards contraception. Young married females are less likely to use condoms compared to unmarried young women (Ringheim and Gribble, 2010). In Zimbabwe, the widowed, divorced and separated men were more likely to be involved in paid sex (ZIMSTAT and ICF International, 2012). Orphanhood is associated with risky sexual behaviours, such as early sexual debut and engaging in multiple sexual partners, and with negative health outcomes including higher incidences of HIV, STI and teenage pregnancy (Cluver et al., 2011; Palermo and Peterman, 2009; Birdthistle et al., 2009).

Schooling status of the youth has been found to impact on their sexual behaviour (Sambisa, 2010). Using DHS data from Zimbabwe, Sambisa et al. (2010) concluded that school attendance exerted protective effects on sexual abstinence. Similarly, in a study among girls aged 15-19 in Murewa, Zimbabwe, schoolgirls were less likely to be sexually experienced than girls out of school (Wekwete and Madzingira, 2009). Religion and religiosity of the individual youth were also found to be associated with risky sexual behaviour (Odimegwu and Somefun, Amoateng et al., 2014). A study in South Africa found that adolescents who reported high religiosity were sixty-six percent less likely to engage in early sexual debut (Amoateng et al., 2014). Social activities, including parting, clubbing and attending discos are closely linked to young people's sexual risk behaviour (Hittner et al., 2016; Bersamin et al., 2012). Studies among university students found that fraternity or sorority parties, residence-hall parties, bars, clubs and off-campus parties were strongly associated with having alcohol-related casual and unprotected sexual intercourse (Hittner et al., 2016; Bersamin et al., 2012). Wekwete et al. (2016) reported that young women and men were attending parties, referred to as 'vuzu' or 'pool' parties, where alcohol and drug use was the norm. At these parties, the young women and men would take turns in having sex with different sexual partners.

Young people's risky sexual behaviour is also affected at family level (Shoko et al., 2017; Tenkorang and Adjei, 2014; Netsanet and Mamo, 2014). Living arrangement is associated with risky sexual behaviour

among young people (Shoko et al., 2017; Tenkorang and Adjei, 2014; Netsanet and Mamo, 2014). Shoko et al. (2017) reported that absence of biological parents was significantly associated with higher risk of early sexual debut. Sleeping arrangements of young people predisposed adolescents to risky sexual behaviours (Juma et al., 2014; Kalina, 2012). In a qualitative study in Kenya, Juma (2014) reported that the cultural tradition among the Luo that prohibits children who have reached puberty from sleeping in the same room with their parents provided opportunities for the adolescents to sneak out of their homes at night to attend discos and date with their girlfriends and boyfriends.

Studies have shown that socio-economic status and poverty are closely linked to risky sexual behaviours among the youth, especially females (Pascoe et al., 2017; Juma et al., 2013; Madise et al., 2007). A study in rural Zimbabwe showed that lower socio-economic status was associated with higher sexual risk behaviours, such as early sexual debut, multiple sexual partners and transactional sex (Pascoe et al., 2017). Given this background, the study's aim was to examine the risky sexual behaviour among the youth and the factors facilitating such behaviour.

Data and methods

The study was cross sectional and used quantitative and qualitative methods of data collection to examine the risky sexual behaviours among young people aged 15-24 years living in Mufakose district in Harare. Mufakose was selected because it represents a low income and densely populated urban area, with remnants of traditional practices mixed with urban culture.

The survey

Participants of the survey were selected using the 2012 Zimbabwe National Census Sampling Frame and consisted of all young people aged 15-24 years across three wards in the district. A multi-stage probability sampling technique was used, starting with selection of the wards, to enumeration areas, households and lastly the participants (young person aged 15-24 years). All young people aged 15-24 years were eligible for the study. The first stage of the sampling involved selecting all the three wards. The second stage was listing of all the enumeration areas (EAs) in each ward. Simple random sampling, using probability proportional to size (PPS) sampling technique, was used to select the number of EAs in each ward. The next stage was selection of households in an EA, using systematic sampling. The last stage was selecting the participant from the selected household. Only one participant per household was eligible for the interview. If there were more than one eligible participant in a household, a number was assigned to each individual and simple random sampling was used to select one participant.

Probability proportionate to size sampling was used to calculate the number of respondents per age group in each EA. To determine the number of respondents in the survey, the following formula was used:

$$n = (z^2 p^*q)/e^2$$

Where: n = desired sample size; z^2 = the standard normal deviate set at 1.96 which correspond with 95% confidence intervals; p = the proportion in the target population estimated to be aged 15-24; q = the estimated proportion of the target population who are not youths (1-p); e^2 = desired level of precision and in this study is set at 0.05.

Total population of Mufakose N = 55462. Population aged 15-24 years in Mufakose = 12267

$$p=12267/55462=0.24$$
 $q=1-0.2211=0.76$

$$n=(1.96^2\times0.24\times0.76)/(0.05\times0.05)=280.283$$

However, for robust analysis, the sample size was rounded off to 300 respondents.

A self-administered questionnaire, which was translated to Shona, was used to collect data on risky sexual behaviours among the youth and the factors associated with such behaviours. A total of 300 questionnaires were administered.

Measures of variables

The dependent variable was risky sexual behaviour. Three indicators of risky sexual behaviour were considered for this study, as follows:

- a) Early sexual debut: This was measured by asking the question, "How old were you when you first had sex?" Engaging in sexual activity before the age of 17 was considered a risky behaviour. Responses were categorised as 0 = 'Less than 17 years' and 1 = '17 years or more'.
- b) Multiple sexual partners: Having had two or more sexual partners in the 12 months preceding the survey. This was measured by asking respondents to indicate the number of sexual partners they had in the past 12 months. Having had two or more sexual partners in the 12 months preceding the survey was regarded as a risky sexual behaviour. Responses were categorised as 0 = `Less than 2' and 1 = `Two or more'.
- c). Non-use of condom during last sexual encounter: Condom use during sexual intercourse is considered a preventive measure against STIs and unwanted pregnancy. This was measured by

asking respondents to indicate if they used condoms during their last sexual encounter. The responses were categorised as 0 = 'No' and I = 'Yes'.

Independent variables

Alcohol consumption or smoking were measured by asking the question: Do you drink alcohol or smoke? And the responses were a dichotomy of I = Yes' 2= 'No'. Religiosity was measured by asking the question, 'How often do you go to church/mosque or other religious institutions?" The responses were: I = 'more than once a week'; 2 = 'once a week'; 3 = 'once a month' and 4 = 'never attended'. Employment status was measured by asking the respondents if they were currently employed or not. The responses were I = 'Yes' and 2 = 'No'. Sleeping arrangement was measured by asking respondents the question, 'How many people sleep in the same room with you at night when you are at home (beside yourself)?' Living arrangement was measured by asking the respondents the following question, 'Who do you stay with?' The responses were: I = 'Both Parents'; 2 = 'Mother/Father'; 3 = 'Grandparents' and 4 = 'Others'. Schooling status was measured by asking the respondents the question, 'Are you currently attending school, college or university?' The responses were I = 'Yes' and 2 ='No'. Attending parties and clubs was measured by asking, 'Do you ever go to clubs or parties where young people dance?' For purposes of the logistic regression, the responses were dichotomized into 0 = 'Do not attend' and I = 'Attend'. Family income was measured by asking the respondents to estimate their family income. The responses were categorised as: I = `Below \$501'; 2 = `\$501-\$999'; and 3 = `\$501-\$999''Above \$1000'. Educational level was measured by asking the respondents the highest level of education completed. The responses were categorised as follows: 0 = 'No education'; I = 'Primary'; 2 = 'Secondary' and 3 = 'Tertiary'.

Focus group discussions (FGDs)

Six FGDs, two in each ward, were carried out in this study to explore the various factors facilitating the risky sexual behaviours among the youth and their perception of social norms and values underlying the risky sexual behaviours. Separate FGDs were conducted with young males and females, each group consisting of a maximum of 10 participants. Participants were purposively selected from survey participants, using age and sex as selection factors. An FGD guide was used to explore the qualitative data. FGDs were conducted by two researchers, a moderator and a note taker. Verbal consent was sought before the discussion. A tape recorder was

used to capture the discussion verbatim for use of the quotes in the analysis. Consent was sought from the participants to record the discussions.

Data analysis

The quantitative data was entered onto the computer and analysed using SPSS version 22.0. First, descriptive statistics were done, and then logistic regression to determine the association between risky sexual behaviour and the independent variables, using unadjusted and adjusted odds ratios. Qualitative data from the FGDs was analysed by themes, and issues were organised into the different themes for analysis.

Ethical consideration

Ethical clearance to conduct the study was sought from the Centre for Population Studies, University of Zimbabwe. Clearance to conduct the research in the high density area was sought from Mufakose District Office. A formal letter from the Centre for Population Studies and the other from Mufakose District office were used to access the sampled households. Informed consent was sought from the participants who were 18 years and above. Assent was sought from the parents or guardians of participants below 18 years, before getting consent from the minor. The study respected freedom to participation. Anonymity and confidentiality were assured to participants. They were informed about their right to withdraw from the study at any point. The data was stored in a locked cabinet at the Centre to assure confidentiality.

Limitations of the study

The study has its limitations and these should be noted. The research design of the study was cross-sectional and thus cannot be inferred for all youths in the country. The study was conducted in one residential area of Harare and thus is not representative of the youths in Zimbabwe. Thus, generalisation of the findings will be a grossly incorrect and misleading. The data collected is based on self-reporting and may be subject to errors and biases. The study is based on a relatively small sample, which is a limitation. However, the data provides information on risky sexual behaviours among the youth and the factors likely to facilitate risky sexual behaviour, which is useful for interventions.

Results

Descriptive results

Table I shows the descriptive statistics for selected background factors. The mean age of respondents was 20 years, 21 years for males and 20 years for

females. There were more youths aged 20-24 years (59%) than adolescents aged 15-19 years (41%). On educational attainment, 70% had completed secondary education (79% for males and 61% for females), whilst 18% had attained primary education. The majority of the youths were not employed (82%). Most of the respondents were Christians, with the highest proportion being Pentecostals

(43%). A higher proportion of young men (14%) reported no religion compared to their female counterparts (3%). Half of the youths attended church once a week while 9% did not attend any religious services. A third of the respondents shared a sleeping room with one person. Over a third of the youth (34%) stayed with both parents while 27% stayed with other relatives.

Table 1: Distribution of respondents by demographic and socio-economic characteristics and sex

Characteristics of Respondents				
	Male	Female	Total	
Age				
15-19	36.8	44.9	40.8	
20-24	63.2	55.1	59.2	
Mean	20.5	19.7	20.1	
Level of Education				
Primary	10.3	25.4	17.8	
Secondary	79.4	61.2	70.4	
Tertiary	10.3	13.5	11.8	
Employment Status				
Employed	19.1	16.4	17.8	
Not Employed	80.9	83.6	82.2	
Religion				
Pentecostal	35.3	50.7	43.0	
Protestant	14.7	9.0	11.8	
Roman Catholic	20.6	16.4	18.5	
Apostolic Sects	13.2	17.9	15.6	
Muslim	1.5	3.0	2.2	
No religion	14.7	3.0	8.9	
Religiosity				
More than once a week	30.9	38.8	34.8	
Once a week	41.2	58.2	49.7	
Once a month	11.8	0.0	5.9	
Never attended	16.2	3.0	9.6	
Sleeping Arrangements				
Alone	25.0	7.5	16.3	
1	30.9	35.8	33.3	
2	20.6	38.8	29.6	
More than 3	23.5	17.9	20.8	
Living Arrangement				
Both Parents	30.9	37.3	34.1	
Mother/Father	17.6	29.9	23.7	
Grandparents	17.6	13.4	15.6	
Other	33.8	19.4	26.6	
Total (Number)	149	151	300	

Table 2 shows the percentage distribution of youths reporting risky sexual behaviours by sex. The mean age at first sexual intercourse among the youths was 17.5 years (17.5 years for males and 16.7 years for females). When asked about the reasons why they engaged in risky sexual behaviours during focus group discussions, youths highlighted peer pressure, curiosity, influence of the Internet and social media,

the idea that sex is part of growing up, absence of social support and financial favours from sexual partners. Twenty-seven percent of the youths reported having two or more sexual partners in the past 12 months (29.9% of females and 23.9% of males). Evidence of multiple sexual partners also came out during FGDs with youths aged 20-24 years.

Some of the participants made the following statements:

As boys, we compete to have sex with as many girls as we can and sometimes with one girl as a way of fixing her (Male, Age 20-24).

Boys need sugar mommies to buy them nice cell phones, clothes or give me a car to use. On the other hand, girls want money to buy clothes, do their hair etc. (Female, 20-24.)

A quarter of the youths had sex before the age of 17 (25.9%), 28.4% of males and 23.9% of females. All the FGDs highlighted the need for financial and other favours, curiosity and experimenting as the major factors for youths' involvement in early sexual debut.

These views emerged from the group discussions with females:

If you are still a virgin, you are labelled a fool. They will call you 'wakasara' (you are backward) (Female, 15-19 years).

Twenty-six percent of the respondents did not use a condom during their last sexual encounter. During FGDs, youths explained why they do not use condoms consistently. One participants from the female FGD made the following remark regarding the use of condoms:

If I allow my boyfriend to use condoms it means I am a prostitute because prostitutes are the ones who use condoms, I do not want to be used (Female, 18 years).

Table 2: Percentage Distribution of Risky Sexual Behaviour by Sex

Indicator	Male	Female	Total
Mean Age at First Sexual Encounter	17.5	16.7	17.5
Early Sexual Debut	28.4	23.9	25.9
Multiple Sexual Partners	23.9	29.9	26.7
Non-use of Condom	32.5	21.5	25.6
Number	149	150	300

Factors associated with youth sexual risky behaviour

Early sexual debut

Table 3 shows the unadjusted and adjusted odds ratios of risky sexual behaviour (early sexual debut and multiple sexual partners) by the characteristics of the youth in Mufakose. Unadjusted odds ratios show that religiosity, schooling status, going parties/clubs, smoking/alcohol consumption, living and sleeping arrangement, orphanhood status and parents' education were associated with early sexual debut among the youth. Youths who never attended any religious services were six times more likely to engage in early sexual debut than youths who attended services more than once a week (UOR=6.12, CI 3.19-7.98). Similarly, youths who go to parties were twice likely to engage in early sexual debut than those who do not go to parties (UOR=2.11, CI (1.22-4.35). Controlling for other covariates in the adjusted model, religiosity, going to parties/clubs, smoking/alcohol consumption, living and sleeping arrangement, orphan hood status significantly predicted early sexual debut among the youths. Youths who did not attend religious services and those who attended once a month were ten times and six times more likely to engage in early sexual debut, respectively compared to youths who attend services more than once a week (AOR=10.1, CI: (7.85-13.20) and (AOR=6.13, CI: (4.83-7.42). Similarly, attending parties or clubs and alcohol use or smoking increased the odds of early sexual debut by 2 times compared to abstainers (AOR=2.33, CI, (1.90-2.87: AOR=0.23, CI 0.07-0.74). Male participants from the FGDs argued that the environment in Mufakose lead them into engaging in risky sexual activities. The following comments were made in regard to the environment:

There are parties all over the neighbourhood popularly known as 'pasa pasa', you meet girls in the middle of the night and we end up engaging in sex (Male 20-24).

There are brothels and 'shebeens' around here full of commercial sex workers and, because of the frequent power cuts, we go to those places for entertainment and maybe something more (Male 20-24).

Living alone or with other relatives increases the likelihood of engaging in early sexual debut by two-fold compared with living with both parents (AOR=2.23, CI 1.10-4.49). Focus group discussions

also confirmed that young people who stay alone or who have a room of their own were involved in risky sexual behaviours. Discussants from FGDs made the following remarks:

I stay alone, and I have all the freedom to do as I please. Even if I want my girlfriend to sleep over at my place, I do not need to seek any permission from someone (Male 20-24).

We visit each other at homes and end up in our rooms which make it hard to avoid sex unlike when you are sharing rooms with others (Female 15-19).

Having your own room is a jackpot, you can have sex whenever you want. You can also make your room available for your friends. We call this 'import chimoko kubase' (taking my girlfriend home) (Male 20-24).

On the other hand, youths from FGDs highlighted that sharing rooms with older brothers exposed them to high risky sexual behaviours.

We share rooms with older brothers and they watch porn or discuss sex related issues with friends over the phone. This enlightens us, and we become so curious to experiment the things we hear and see (Male 16-19).

Orphanhood was significantly associated with early sexual debut. Youths who lost a mother or father were 1.85 times and 2 times, respectively, more likely to engage in early sexual debut compared to the youth with both parents alive (AOR=1.85, CI: (1.47-2.32) and (AOR=2.01, CI: (1.09-3.71).

Multiple sexual partners

In the unadjusted model, age, religiosity, schooling status, attending parties/clubs, smoking/alcohol consumption, living and sleeping arrangement,

orphanhood status and parents' education were associated with multiple sexual partners. Youths aged 20-24 years were 1.83 times more likely to have multiple sexual partners than those aged 15-19 (UOR=1.83, CI 1.52-2.28)). Youths who lived with both parents were less likely to have multiple sexual partners compared to those who lived with grandparents (UOR=1.83, CI 1.20-2.79) and alone or other relatives (UOR 1.91, CI 1.18-3.09). Young people not attending school were 1.7 times more likely to engage in multiple sexual partners compared to youths in school (UOR=1.72, CI 1.18-2.47). This finding was also highlighted during an FGD with young men. One of the young man said:

After we finish school, we spend much of our time at home doing nothing, this leads us to look for a girlfriend and have sex for fun. This is not the case if you are going to school because you will have homework and other school-related things to be worried about. (Male 15-19)

After adjusting for other factors, age, religiosity, schooling status, attending parties or clubs, drinking or smoking, sleeping and living arrangement and orphanhood status significantly predicted multiple sexual partners. Being older (AOR=1.92, CI (1.61-2.46), out of school (AOR=1.39, CI 1.11-1.89) and paternal orphaned (AOR= 2.24, CI 1.18-4.73) was significantly associated with higher rates of multiple sexual partners among youths. Youths who do not take alcohol or smoke were 64% times less likely to have multiple sexual partners compared to youths who consume alcohol or smoke (AOR=0.36, CI, 0.18-0.73). The influence of smoking and alcohol use was again highlighted by males during FGDs:

Young people, especially boys, take drugs such as bronco, histallix and mbanje (marijuana), they act as confidence boosters and we end up doing whatever we feel. This is mainly due to peer pressure most of the time (Male 20-24).

Table 3: Unadjusted and adjusted odds ratios of early sexual debut and multiple sexual partners

•	Early Sex	Early Sexual Debut		xual Partners
Variable	Unadjusted OR (95% CI)	Adjusted OR (95%CI)	Unadjusted OR (95% CI)	Unadjusted OR (95% CI)
Sex	1.00	1.00	1.00	1.00
Male Female	1.00 0.96 (0.73-1.21)	1.00 0.89 (0.59-1.17)	1.00 0.91 (0.66-1.15)	1.00 0.83 (0.65-1.14)
Age 15-19	1.00	1.00	1.00	1.00
20-24	1.41 (0.81-1.92)	1.23 (0.87-1.48)	1.83* (1.52-2.28)	1.92*(1.61-2.46)

·				
Religion				
Pentecostal	1.00	1.00	1.00	1.00
Protestant	0.88 (0.67-1.19	1.39 (0.83-1.96)	1.26 (0.94 1.79)	1.09 (0.77- 1.55)
Catholic	1.12 (0.81-1.49)	1.73(0.78 3.46)	1.12 (0.53-1.59)	0.96 (0.82- 1.29)
Apostolic Sect	1.27 (0.79-1.69)	1.11(0.69- 1.48)	1.17 (0.89 1.78	1.23 (0.83 1.71)
No Religion	1.21 (0.78- 1.17)	1.07 (0.83- 1.54)	1.98 (0.88-3.53)	0.83 (0.51- 1.26)
140 Kengion	1.21 (0.76- 1.17)	1.07 (0.05- 1.54)	1.70 (0.00-3.33)	0.03 (0.31- 1.20)
Religiosity				
> once a week	1.00	1.00	1.00	1.00
Once a week	4.40**(2.72-7.14)	4.62*** (3.71-5.55)	2.23*(1.10-4.49)	2.53 *** (1.79-3.28)
Once a month	4.12**(2.33-6.39)	6.13*** (4.85-7.42)	2.47 (0.88-6.91)	3.11*** (2.21-4.17)
Never	6.12*(3.19-7.98)	10.1*** (7.85-13.2)	4.49* (1.78-7.93)	5.23*** (3.79-7.38)
110701	0.12 (3.1) (1.90)	10.1 (7.03 13.2)	1.15 (1.76 7.55)	3.23 (3.17 1.30)
Schooling Status				
In School	1.00	1.00	1.00	1.00
Out of School	1.38* (1.23-1.71)	1.46 (0.83-2.02)	1.72** (1.18-2.47)	1.39** (1.11-1.89)
Level of Education				
Primary	1.00	1.00	1.00	1.00
Secondary	1.29 (0.53-3.09)	1.69 (0.65-4.36)	1.53 (0.72-3.89)	1.89 (0.67-8.44)
Tertiary	1.08 (0.45-2.56)	1.65 (0.64-4.24)	1.42 (0.45-5.23)	1.90 (0.22-4.85)
•	1.00 (0.73-2.30)	1.05 (0.07-4.24)	1.72 (0.73-3.23)	1.70 (0.22-4.03)
Employment Status	1.00	1.00	1.00	1.00
Employed	1.00	1.00	1.00	1.00
Unemployed	0.80 (0.31-2.08)	1.05 (0.25-4.44)	0.96 (0.41-2.25)	0.66 (0.30-1.42)
Ever gone to				
clubs/parties				
Yes	1.00	1.00	1.00	1.00
No	2.11**(1.22-4.35)	2.33*** (1.90-2.87)	2.39** (1.47-3.53)	2.91***(1.58-4.83)
Consume Alcohol or	2.11 (1.22 1.33)	2.33 (1.50 2.07)	2.37 (1.17 3.33)	2.51 (1.50 1.05)
Smoke	1.00	1.00	1.00	1.00
Yes	0.38** (0.21-0.80)	0.23***(0.07- 0.74)	0.51**(0.30-0.97)	0.36**(0.18-0.73)
No	0.30 (0.21-0.00)	0.23 (0.07-0.74)	0.51 (0.50-0.57)	0.50 (0.10-0.75)
Living Arrangement				
Both Parents	1.00	1.00	1.00	1.00
Mother/Father	1.21 (0.99–1.47)	1.18*(1.03-1.76)	1.28*(1.11-1.78)	1.35*(1.12-1.99)
Grandparents	1.76*(1.18- 4.28)	1.40 (0.95-2.04)	1.83*(1.20–2.79)	1.82*(1.22-2.70)
Other	2.03 *(1.15-3.61)	2.23**(1.10-4.49)	1.91*(1.18-3.09)	2.28**(1.23-4.23)
	2.03 (1.13-3.01)	2.23 (1.10-4.49)	1.91 (1.10-3.09)	2.20 (1.23-4.23)
Sleeping Arrangement				
Alone	1.00	1.00	1.00	1.00
1	0.59*(0.47-0.74)	0.59*(0.33-0.79)	0.60*(0.39-0.93)	0.58*(0.41-0.82)
2	0.47*(0.22-0.72)	0.49*(0.36-0.87)	0.46*(0.29-0.81)	0.51*(0.26-0.88)
More than 3	0.39* (0.20-0.77)	0.37**(0.28-0.64)	0.34**(0.16-0.74)	0.29**(0.12-0.79)
Household Income				4.00
Below 500	1.00	1.00	1.00	1.00
\$501-\$999	0.90 (0.71-1.15)	0.91 (0.71-1.17)	0.80(0.37-1.74)	0.87 (0.39-1.89)
Above \$1000	0.95 (0.76-1.73)	0.77 (0.47-1.13)	0.79 (0.56-1.12)	0.94 (0.73-1.43)
Mother still Alive	1.00	1.00	1.00	1.00
Alive	1.00	1.00	1.00	1.00
Dead	1.99**(1.54-2.57)	1.85**(1.47-2.32)	1.67*(1.34-2.08)	1.79**(1.51-2.12)
Father still Alive	4.00	4.00	4.00	4.00
Alive	1.00	1.00	1.00	1.00
Dead	2.15*(1.41-4.01)	2.01*(1.09-3.71)	2.31*(1.11-3.88)	2.24**(1.18-4.73)
Mother's Education				
level	1.00	1.00	1.00	1.00
No Education	1.81 (0.52-6.35)	1.30 (0.60-2.81)	1.81 (0.52-6.35)	1.30 (0.60-2.81)
Primary	1.67* (1.58-3.22)	1.37 (0.45-2.50)	1.77*(1.48-3.22)	1.43 (0.55-3.11)
Secondary	1.97*(1.24-3.11)	1.37 (0.45-2.30)	1.56*(1.30-3.29)	1.39 (0.89-3.17)
Tertiary	1.77 (1.2 + -3.11)	1.55 (0.70-2.51)	1.50 (1.50-5.23)	1.37 (0.07-3.11)
Fathers Education				
Level	1.00	1.00	1.00	1.00
No Education	2.05*(1.71-2.44)	0.97 (0.82-1.57)	2.36* (1.88-2.90)	1.11 (0.53-1.67)
Primary	1.81 *(1.31-2.14)	0.63 (0.38-1.38)	2.42*(1.59-3.72)	1.22 (0.83-1.88)
1 11111111 y	1.01 (1.31-2.17)	0.05 (0.50 1.50)	2.12 (1.37.3.14)	1.22 (0.03 1.00)

Secondary	1.27* (0.91-1.76)	1.21 (0.92-1.47)	2.83* (2.01-4.11)	1.19 (0.68-1.91)
Tertiary				

* = p < 0.1, ** = p < 0.05, *** = p < 0.01

Condom use

Table 4 shows the unadjusted and adjusted odds ratios of risky sexual behaviour (non-use of condoms) by the characteristics of youth in Mufakose. Unadjusted odds ratios show that age, religiosity, schooling status, going to parties/clubs, smoking/alcohol consumption, living and sleeping arrangement and orphanhood status were associated with non-use of condoms among the youths. Youths who never attended religious services were 12 times more likely not to use condoms than those attending services more than once a week (UOR12.09, CI 5.72-18.03). Youths out of school were more likely not to use condoms than those in school (UORI.27, CI 1.05-1.57). Unadjusted odds ratios also show that the odds of non-use of condoms were 2.2 times higher for respondents who attended parties or clubs compared to those who did not (OR= 2.23, CI 1.60-4.81). During FGDs, it also emerged that youths do not always use condoms. A male participant made this remark on non-use of condoms:

It takes time to negotiate for sex therefore trying to wear a condom might result in the girl refusing to have sex. At the end, I will end up having sex without the condom 'ndinofa ndanakirwa' (I would rather die after enjoying myself) (Male, 19).

After adjusting for other factors, religiosity, school attendance, attending parties or clubs, smoking/alcohol consumption, sleeping and living

orphanhood arrangements and status were significantly associated with non-use of condoms. Youths who never attended religious services were II times more likely not to use condoms than those attending services more than once a week (AOR=11.01, CI 8.06-14.11). The odds of not using condoms were higher for the out-of-school youth than those still in school (AOR=1.36, CI 1.14-1.61) Youths who attend clubs and parties were 2.9 times more likely to have unprotected sex than those who did not attend (AOR=2.93, CI 1.99-4.01). Youths who do not smoke or consume alcohol were less likely not to use condoms compared to youths who smoked or consumed alcohol ((AOR=0.64 CI 0.33-0.89). The influence of drugs and alcohol was also reported in the FGDs:

Young people, especially boys, take drugs such as bronco, histallix and mbanje, they act as confidence boosters and we end up doing whatever we feel. This is mainly due to peer pressure most of the time (Male, 20-24).

The odds of not using condoms were higher among the youth who were not living with either of their parents or grandparents than those living with both parents (AOR=2.75, CI 1.68-4.49). Youths who lost one parent, either mother or father, were more likely not to use condoms (AOR=1.46, CI 0.89-2.11) and (AOR=1.50, CI 0.75-3.03), respectively.

Table 4: Unadjusted and adjusted odds ratios of condom non-use at last sexual encounter

Non-Use of Condoms			
Unadjusted OR (95% CI)	Adjusted OR (95%CI)		
1.00	1.00		
0.86 (0.61-1.09)	0.93 (0.67-1.21)		
1.00	1.00		
1.64* (1.31-2.02)	1.47 (0.88-2.11)		
1.00	1.00		
0.91 (0.42- 1.94)	0.93 (0.58-1.37)		
· · · · · · · · · · · · · · · · · · ·	1.19 (0.72-1.81)		
` · · · · · · · · · · · · · · · · · · ·	1.58 (0.69- 2.92)		
1.43 (0.90-1.85)	1.23 (0.99-2.13)		
	1.00 0.86 (0.61-1.09) 1.00 1.64* (1.31-2.02) 1.00 0.91 (0.42-1.94) 1.11 (0.86-1.57) 1.19 (0.79-1.77)		

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Religiosity	1.00	1.00
> once a week Once a week	1.00	1.00 3.05**(1.98 4.11)
Once a month	2.19*(1.26-3.82) 8.12*(4.12-15.84)	7.28**(4.26-9.28)
Never	12.09**(5.72-18.03)	11.01**(8.06 -14.11)
	12.09 (3.72-18.03)	11.01 (8.00 -14.11)
Schooling Status In School	1.00	1.00
Out of School	1.27* (1.05-1.57)	1.36***(1.14-1.61)
	1.27 (1.03-1.37)	1.30 (1.14-1.01)
Level of Education Primary	1.00	1.00
Secondary	1.48 (0.99-2.21)	1.07 (0.77-1.49)
Tertiary	1.47 (0.99-2.18)	1.16 (0.83-1.63)
Employment Status	1.47 (0.77- 2.10)	1.10 (0.03-1.03)
Employed Employed	1.00	1.00
Unemployed	0.83 (0.38-1.82)	0.57 (0.26-0.95)
	0.00 (0.00 1.02)	0.20 0.50
Ever gone to clubs/parties	1.00	1.00
Yes No	1.00 2.23***(1.60-4.81)	1.00 2.93*** (1.99-4.01)
	2.23 · · · (1.00-4.81)	2.75 (1.77 1.01)
Consume Alcohol or Smoke		
Yes	1.00	1.00
No	0.57**(0.28-0.99)	0.64**(0.33-0.89)
Living Arrangement		
Both Parents	1.00	1.00
Mother/Father	1.32**(1.09-1.87)	1.13*(1.01-1.66)
Grandparents	1.43* (1.32–1.55)	1.43** (1.32–1.55)
Other	2.22** (1.24-3.99)	2.75** (1.68-4.49)
Sleeping Arrangement		
Alone	1.00	1.00
1	0.55**(0.12-0.87)	0.50*(0.29-0.87)
2	0.42* 0.32-0.56	0.40*(0.11-0.67)
More than 3	0.31**(0.22-0.74)	0.33*(0.17-0.56)
Household Income		
Below 500	1.00	1.00
\$501-\$999	0.86 (0.43-1.73)	0.87 (0.57-1.19)
Above \$1000	0.88 (0.39-1.99)	0.79 (0.62-1.11)
Mother still Alive		
Alive	1.00	1.00
Dead	1.53*(0.82-1.57)	1.46***(0.89-2.11)
Father still Alive		
Alive	1.00	1.00
Dead	1.12*(0.47–2.65)	1.50 **(0.75–3.03)
Mother's Education level		
No Education	1.00	1.00
Primary	1.93 (0.37-5.63)	1.27 (0.53-3.02)
Secondary	1.47 (0.21-2.99)	1.31 (0.22-2.37)
Tertiary	1.68 (0.84-3.09)	1.42 (0.67-2.39)
Fathers Education Level		
No Education	1.00	1.00
Primary	2.07 (0.91-3.37)	1.11 (0.73-2.01)
Secondary	2.78 (0.73-5.17)	1.38 (0.74-2.59)
J	1.98 (0.54-3.01)	1.28 (0.60-2.73)

^{* =} p < 0.1, ** = p < 0.05, *** = p < 0.01

Discussion

The purpose of this study was to examine the factors facilitating risky sexual behaviour among youths aged 15-24 years in Mufakose. The study provides insights into the risky sexual behaviours of youths in a low income urban setting. One of the key findings of the study is that more males than females were engaging in risky sexual behaviours. The mean age at first sexual encounter was 17 years for women and 18 years for men. This is comparable to the 2015 ZDHS which shows that the median age at first sexual intercourse among young people aged 20-24 years was 18.6 years for females and 19.6 years males. The one year difference in the ages is because the mean age was used for this study while the ZDHS used the median age. Young women engage in sexual activity earlier than their male counterparts probably because of the age of their sexual partner, early marriage, sexual cohesion or violence, or economic factors (Pascoe et al., 2017; Juma et al., 2013; Madise et al., 2007). Young women and men were engaging in risky sexual behaviour. One in four youths had early sexual debut, 27% had multiple sexual partners and 26% did not use condoms. We identified several factors that could facilitate risky sexual behaviour among the youths in Mufakose. Religiosity was found to be a significant facilitator of the three measures of risky sexual behaviours, that is, early sexual debut, multiple partners and non-condom use. Attending religious services regularly protected youths from risky sexual behaviours. The odds of engaging in risky sexual behaviours were greatest among the youth who never attended church. This finding is supported by previous studies on risky sexual behaviour (Amoateng et al., 2014; Edwards, 2011). Religiosity tends to shape youths' sexual behaviour as the church teaches moral values to its youth and through attitudes towards pre-marital sex, HIV, condoms perception of risk Edwards (2011). Youths who were in school were less likely to engage in risky sexual behaviours than those out of school. Similar findings were also reported in previous studies (Fuseini, 2015; Sambisa et al., 2010; Wekwete and Madzingira, 2009). School attendance exerts protective effects on sexual abstinence (Sambisa et al., 2010). Social activities, such as smoking, alcohol and drug use, especially among males, were found to facilitate risky sexual behaviour. This is congruent with findings by other studies where attending parties was closely associated with alcohol use, non-use of condoms and casual sex with multiple sexual partners (Hittner et al., 2016; Wekwete et al., 2016; Letamo, 2015; Choudhry et al., 2014; ZYC, 2014; Bersamin et al., 2012). Absence of a parent or orphanhood was found in this study as one of the factors facilitating risky sexual behaviours among the youth. The youth who had lost a parent were more likely to engage in risky behaviours than those who had both parents. Orphanhood is almost a similar situation to living arrangements. Youths who lived with both parents were less likely to engage in risky sexual behaviour, supporting the assertion of absence of parental support. These findings were consistent with earlier studies that reported that parents were viewed as important sources of information for sexual and reproductive health and that lack of parental presence resulted in youths feeling an overall lack of adult support and guidance (Shoko et al., 2017; Tenkorang and Adjei, 2014; Netsanet and Mamo, 2014 Kalina et al., 2013; Harris et al., 2012). Presence of a fatherly figure in a household reinforces discipline and this deters young people from engaging in risky sexual behaviour (Shoko et al., 2017). Sleeping arrangement facilitated risky sexual behaviour among youths, especially males who had their own bedroom. Similar findings were reported in Kenya where it was reported that sleeping arrangements predisposed adolescents to risky sexual behaviours (Juma et al., 2014; Kalina, 2012). Having a personal room allowed to youths to have the privacy to have sex and to offer their rooms to their colleagues who might need it for sexual activities.

Conclusions

The study found that young women and men in Mufakose were engaging in risky sexual behaviour, which is also similar to previous studies. A significant proportion of the youth engaged in first sexual intercourse at an early age, had multiple sexual partners and worse still, engaged in unprotected sex. Unfortunately, if these risky sexual behaviours are not addressed, new HIV infections will continue to be recorded among the youth. This will hamper the efforts to curb the spread of HIV and AIDS in Zimbabwe. Despite the government's and NGOs' efforts in reducing youths' vulnerability to HIV and other negative health outcomes, the community does not fully support these efforts and thus, youths sexual behaviour remains a challenge. The study the following policy recommendations makes targeting the individual, family and community. Programmes and policies should provide effective support and strategies to encourage parents to build strong marriages, to enable children to grow up in stable families with expected social norms and values. Policies including practical, culturally accepted strategies and empowerment skills should be designed to strengthen parents and guardians' ability to speak to youths on issues related to sexual behaviour. Parents should be provided with continuous capacity building on positive parent-child communication so that they acquire the skills to speak openly with their children. The use of new media, especially social media, with its wide reach and popularity, should be taken advantage of for conveying the right information on sexual behaviour. This has the potential to reinforce confidence in both parents and youths to discuss SRH Mainstreaming youths' perspectives in the policies and programmes will enable youth to influence programmes and be part of the change they wish to see. Programmes should also not forget young men because they are equally engaging in risky sexual behaviour, especially on condom use. Communitybased organisations and youth networks should be supported, both financially and through capacity building, to accommodate youth who depend on them for gaining independence. Out of school youths should be given opportunities to become creative, proactive entrepreneurial, and through employment to avoid being forced into risky income generating activities. Law and policies of drug and substance abuse should be developed to curb the exposure of young people, especially young boys, to harmful risky sexual behaviours. Religious institutions play a significant role in guiding parents to be positive role models and disciplinarians for their children. They can encourage them to be actively engaged in their children's lives and inspire them, so the children are less likely to engage in risky sexual behaviours. Faith-based institutions can also be messengers and providers of health information and services.

All authors have contributed sufficiently to the work submitted and the manuscript has never been previously published.

References

- Agardh A, Odberg-Pettersson K and Östergren P.O. (2011) Experience of sexual coercion and risky sexual behavior among Ugandan university students. *BMC Public Health*. 2011; 11:527.
- Amoateng, A Y, IKalule-Sabiti, I and Arkaah, YJ. (2014) The Effect of Socio-Demographic Factors on Risky-Sexual Behaviours of Adolescents in the North West Province of South Africa. *African Population Studies*, Vol. 28, No. I, April 2014
- Baliunas, D., Rehm, J., Irving, H., and Shuper, P. (2010) Alcohol consumption and risk of incident human immunodeficiency virus infection: A meta-analysis. *International Journal of Public Health*, 55(3), 159-166.
- Bersamin, M. M., Paschall, M. J., Saltz, R. F., Zamboanga, B. L. (2012) Young adults and casual sex: The relevance of college drinking settings. *Journal of Sex Research*, 49, 274-281
- Birdthistle I, Floyd S and Nyagadza A (2009) Is education the link between orphanhood and

- HIV/HSV-2 risk among female adolescents in urban Zimbabwe? *Social Science and Medicine*, 68
- Central Statistical Agency (CSA) [Ethiopia] and ICF. (2016) Ethiopia Demographic and Health Survey 2016. Addis Ababa, Ethiopia, and Rockville, Maryland, USA: CSA and ICF.
- Cluver L, Orkin M, Mark Boyes M, Gardner F and Meinck, F (2011) Transactional sex amongst AIDS-orphaned and AIDS-affected adolescents predicted by abuse and extreme poverty. *Journal Acquired Immune Deficiency Syndrome*, 58(3):336-343.
- Chae S. (2013) Timing of Orphanhood, Early Sexual Debut, and Early Marriage in Four Sub-Saharan African Countries. *Studies in Family Planning*, 44(2):123-146.
- Dehne, K. L. and Riedner G. (2005) Sexually transmitted infections among Adolescents: The need for adequate health services. Department of Child and Adolescent Health and Development (CAH). Geneva: Switzerland.
- Dhliwayo, E. (2009) Reproductive Health Issues of Adolescents at Mount Pleasant High School. Unpublished Population Studies MSc Thesis University of Zimbabwe, Harare.
- Dzimiri, C., Chikunda, P., and Ingwani, V. (2017) Causes of Child Marriages in Zimbabwe: A Case of Mashonaland Province in Zimbabwe. IRA-International Journal of Management & Social Sciences (ISSN 2455-2267), 7(1), 73-83.
- Edwards, K. M., Giddy, C. A., and Murphy, M. J. (2011) College women's stay/leave decisions in abusive dating relationships: A prospective analysis of an expanded investment model. *Journal of Interpersonal Violence*, 26, 1446–1462.
- Fuseini, K. (2015) Risky Sexual Behaviour among Sexually Active Never Married Ghanaian Women: A Latent Class Analysis (LCA). *African Population Studies*, 29(2 Suppl):1901-1914.
- Gouws, E. (2010) Trends in HIV prevalence and sexual behaviour among young people aged 15–24 years in countries most affected by HIV. Sex Transm Infect 2010;86
- Harris, A. L., Sutherland, M.A. and Hutchinson, K. (2012) Parental Influences of Sexual Risk Among Urban African American Adolescent Males. Clinical Scholarship.
- Hittner, J.B., Owens, E.C. and Swickert, R.J. (2016) Influence of Social Settings on Risky Sexual Behaviour. SAGE Open
- Juma, M., Askew, I., Alaii, J., Bartholomew, L.K. and Van den Borne, B. (2014) Cultural practices and sexual risk behaviour among adolescent orphans and non-orphans: A Qualitative study on

- perceptions from a community in western Kenya'. *BMC Public Health*, 14:84.
- Juma, M., Alaii, J., Bartholomew L.K., Askew, I. and Borne, B. (2012) Risky sexual behaviour among orphan and non-orphan adolescents in Nyanza Province, Western Kenya. *AIDS and Behaviour*:
- Kalina, O. (2012) Sexual risky behaviour among Slovak adolescents and young adults: Social and Psychological Factors. Groningen: Unpublished Thesis
- Kalina,O, Madarasova A.G, Klein, D, Jarcuska, P, Orosova, O, Van Dijk, J.P and Reijneveld, S.A (2013) Mother's and father's monitoring is more important than parental social support regarding behaviour sexual risk among 15-year-old adolescents. The European **Journal** Contraception & Reproductive Health Care, 18:2, 95-103.
- Letamo, G. (2015) Association between experience of sexual coercion and sexual behaviour: insights from the 2008 Botswana AIDS impact survey III. *African Population Studies*, 29(2):402-418.
- Madise, M., Zulu, N. and 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.
- Menon, A., Mwaba, S.O.C., Thankian, K. and Lwatula, C. (2016) Risky Sexual Behaviour among University Students. *Journal of International STD Research & Reviews* 4(1): 1-7.
- Mmari K, Kalamar A, M, Brahmbhatt, H, Venables, E (2016). The Influence of the Family on Adolescent Sexual Experience: A Comparison between Baltimore and Johannesburg. *Plos One*, 11(11): e0166032.
- Morris JL and Rushwan, H. (2015) Adolescent sexual and reproductive health: The Global Challenges. International Journal of Gynaecol Obstet. 131(Suppl I):40-42.
- Ministry of Health [Lesotho] and ICF International. (2016). Lesotho Demographic and Health Survey 2014. Maseru, Lesotho: Ministry of Health and ICF International.
- Ministry of Health and Child Care (2016). Zimbabwe National Adolescent Fertility Study, Harare: MOHCC Technical Report authored by Dr. Naomi N. Wekwete, Prof. Simbarashe Rusakaniko and Mr. George Zimbizi (Consultants).
- Ministry of Health and Child Care (MOHCC). (2017). Zimbabwe Population-Based HIV Impact Assessment (ZIMPHIA) 2015-16: First Report. Harare, MOHCC. July 2017.
- Mturi, A.J and Gaearwe, L. (2014) 'Gender differences in sexual behaviour amongst university

- students in Mahikeng, South Africa' African Population Studies, 28(1):526-537.
- Murwira M. (2017) Adolescent and Youth Sexual Reproductive Health: Experience from Zimbabwe. Harare: Zimbabwe.
- Mutasingwa, L.V. and Mbirigenda, S.K. (2017) Investigating Risky Sexual Behaviours among Youth in the Context of the HIV Epidemic in Mbeya Region, Tanzania, Working Paper, Measure Evaluation TZ.
- Nagaddya, R, Kiconco, S, Komuhangi, A, Akugizibwe, P and Atuhairwe, C (2017) Assessing the Influence of Social Networking Material on Adolescents' Sexual Behaviour in Kampala. *Journal of Education and Practice*, 18(15):187-193.
- National Statistical Office (NSO) [Malawi] and ICF. (2017). *Malawi Demographic and Health Survey 2015-16*. Zomba: Malawi and Rockville, Maryland, USA. NSO and ICF.
- Netsanet, F and Mamo A. (2014) "Risky Sexual Behaviours and Associated Factors among Male and Female Students in Jimma Zone Preparatory Schools, South West Ethiopia: Comparative Study. *Ethiopian Journal of Health Sciences*, 24.1: 59–68.
- Odimegwu, C. and Somefun, O.D. (2017) Ethnicity, Gender and Risky Sexual Behaviour among Nigeria Youth: An alternative explanation. Reproductive Health, 14:16.
- Palermo, T. and Peterman, A. (2009) 'Are female orphans at risk for early marriage, early sexual debut, and teen pregnancy? Evidence from Sub-Saharan Africa'. *Studies in Family Planning*. 40(2):101-12.
- Pascoe S.J.S, Langhaug, L. F, Mavhu, W, Hargreaves, J, Jaffar, S, Hayes, R, Cowan, F.M (2017) 'Poverty, Food Insufficiency and HIV Infection and Sexual Behaviour among Young Rural Zimbabwean Women' *PLoS One*, 27;10(1)::e0115290.
- Pufall, E. L., Eaton, J. W., Robertson, L., Mushati, P., Nyamukapa, C. and Gregson, S. (2017) Education, substance use, and HIV risk among orphaned adolescents in Eastern Zimbabwe. *Vulnerable Children and Youth Studies*, 12(4), 360-374.
- Remez, L., Woog V. and Mhloyi, M. (2014) Sexual and Reproductive Health Needs of Adolescents in Zimbabwe. In Brief, 2014, No. 3, New York: Guttmacher Institute.
- Ringheim, K. and Gribble, J. (2010) Improving the Reproductive Health of sub-Saharan African Youths: A route to achieve the Millennium Development Goals. *Population Reference Bureau*, Washington, USA.
- Rudatsikira E., Maposa D., Mukandavire Z., Muula A.S., and Siziya, S. (2009) Prevalence and predictors of illicit drug use among school-going

- adolescents in Harare, Zimbabwe. Annals of African Medicine, 8(4): 215-22
- Sambisa, W., Curtis, S., and Stokes, C. (2010) Ethnic differences in sexual behaviour among unmarried adolescents and young adults in Zimbabwe. *Journal of Biosocial Science*, 42(1), 1
- Sambisa W., Chandiwana B., Curtis SL., Munyati S., Mahati S., Mashange S. (2008) Predictors of premarital sexual experience among adolescents in a rural setting in Zimbabwe. Paper for presentation at the 2008 Population Association of America Annual Meeting, April 17-19, 2008, New Orleans, Louisiana.
- Stafstrom M, and Agardh A. (2012) Socio-economic determinants for alcohol consumption and heavy episodic drinking in a Ugandan student population. *International Journal of Alcohol Drug Research* 2012, 1(1):57–67.
- Shoko, M., Ibisomi, L., Levin, J., and Ginsburg, C. (2018) Relationship between orphanhood status, living arrangements and sexual debut: Evidence from females in middle adolescence in Southern Africa'. *Journal of Biosocial Science*, 50(3), 380-396
- Tenkorang. E.Y and Adjei J.K. (2014) Household living arrangements and transition to sexual debut among young people in Ghana', Sex Education, 15:1, 1-18.
- UNFPA (2015) Girlhood, Not Motherhood: Preventing Adolescent Pregnancy. Available at www.unfpa.org.
- UNFPA Zimbabwe (2015) Adolescent Sexual and Reproductive Health; ZDHS Key Findings Available at https://zimbabwe.unfpa.org/sites/default/files/pubp df/ASRH20Factsheet20FINAL2028129.
- UNICEF (2016) Child Protection, Child Marriage and Attitudes towards Violence: Extended Analysis of Zimbabwe Multiple Indicator Cluster Survey (MICS) 2014: Harare: UNICEF

- UNICEF (2018) Turning the tide against AIDS will require more concentrated focus on adolescents and young people. Accessed at https://data.unicef.org/topic/hivaids/adolescents-young-people/#
- UNFPA. (2011) Delivering Results in a World of 7 Billion. Annual Report, New York; 2011.
- UNAIDS and WHO (2009). 2009 AIDS Epidemic Update. Geneva; 2009
- UNAIDS (2017) UNAIDS Data 2017 Accessed at http://www.unaids.org
- Wekwete N.N., Rusakaniko S. and Zimbizi G. (2016) National Adolescent Fertility Study, Harare, Ministry of Health and Child Care.
- Wekwete, N.N. & Madzingira N. (2009) Girls' Vulnerability to HIV and AIDS: The case of Murehwa District, Zimbabwe. *African Population Studies*, 23:27-44.
- World Health Organisation (2017) Prevention of Unsafe abortion Available at http://www.afro.who.int/health-topics/sexual-and-reproductive-health. Accessed 28 May 2018.
- Wyrod, R., Fritz, K., Woelk, G., Jain, S., Kellogg, T., Chirowodza, A., Makumbe, K. and McFarland, W. (2011) Beyond sugar daddies: intergenerational sex and AIDS in urban Zimbabwe. *AIDS and Behaviour*, 15(6):1275–1282.
- Zimbabwe National Statistics Agency (ZIMSTAT) and ICF International. (2016) Zimbabwe Demographic and Health Survey 2015. Rockville, Maryland, USA: ZIMSTAT and ICF International.
- Zimbabwe National Statistics Agency (ZIMSTAT) and ICF International, (2012) Zimbabwe Demographic and Health Survey 2010-11. Calverton, Maryland: ZIMSTAT and ICF International.
- Zimbabwe Youth Council. (2014 Harmful Cultural and Social Practices Affecting Children: Our Collective Responsibility.