Levels, Trends of Sexual Behaviour Indicators and Patterns of Risky Sexual Behaviours in Botswana: Is there any Progress in Improving Sexual Behaviours?

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INTRODUCTION: Risky sexual behavior is emerging as a public health concern globally. It is central to prevention of transmission of Human-Immuno-Deficiency Virus (HIV) and other sexually transmitted infections (STIs). Although there are several modes of transmission of the HIV virus, much of the HIV infections in Botswana are through heterosexual contact. Previous research indicates that unprotected sexual contact is one of the major drivers of the HIV epidemic. The consistent use of condom (both male and female condom) has been recommended as an effective intervention to prevent the transmission of HIV from one person to the next. Other drivers of HIV transmission that have been identified include having multiple sexual partners and having sex under the influence of alcohol or drugs. Botswana remains one of the countries with the highest HIV prevalence rate (Stover et al, 2008; Central Statistics Office (CSO), 2009). HIV/AIDS programmes in Botswana have emphasized the need to abstain, to be faithful and to stick to one sexual partner. This paper aims at documenting the levels and trends of risky sexual behaviours in Botswana. The goal of the paper is to examine if HIV/AIDS programmes are making progress in changing the sexual behaviours of people in Botswana.

DATA AND METHODS

Data Source: This paper uses four data sources to document levels and trends of sexual behaviour indicators. The data sources included the 2001 Botswana AIDS Impact Survey I (2001 BAIS I); 2004 BAIS II, 2008 BAIS III and 2012 BAIS IV. A total of 4383 respondents were successfully interviewed in the 2001 BAIS I, 15071 respondents in the 2004 BAIS II, 14132 respondents in the 2008 BAIS III, and 8332 respondents in the 2012 BAIS IV.

Measurement: To determine the level and trends of sexual behaviors indicators in Botswana, the following variables were analyzed by year of BAIS study: Ever had sex, First sex with consent, Age at first sex, Mean age at first sex, Median age at first sex, Proportion of women whose age at first sex is less than 16 years, Use of condom at first sex, Use of condom on first sexual contact with new partners, Current Condom Use, Consistent Condom Use, Sex whilst drunk or high or whilst partner drunk or high, Sex in exchange for payment or gift, Number of sexual partners, Mean number of current sexual partners, Proportion of men circumcised. Although several sexual behavior indicators were analyzed, patterns in level of risky sexual behaviors focused on five main variables: current condom non-use, inconsistent condom use, multiple sexual partners, sexual activity under influence of alcohol or drugs and engaging in sex in exchange for payment or gift.

Operational definition of risky sexual behavior index

To measure the current level of risky sexual behavior during 2012, a risky sexual behavior index variable was develop from the following five main indicators of risky sexual behavior: Current condom non-use, inconsistent condom use, multiple sexual partners, sex whilst drunk or high, and sex in exchange for payment or gift. For each of the risky sexual behavior indicator, a score of 1 was awarded for each case (respondent) that experienced a risky behavior; otherwise the case was awarded a score of 0. For each of the cases, scores for all the risky behavior indicators were summed and the summation

for all the cases ranged from 0 to 4. The risky sexual behavior index was then categorized into no risk (score 0), medium risk (Scores 1-3) and high risk (scores 4-5).

Data Analysis

All analysis was performed using the SPSS software version 21. Results were presented as frequencies and cross tabulations. In addition, graphs were used to present some of the levels and trends of sexual behavior indicators.

RESULTS

Levels and Trends in Sexual Behavior Indicators in Botswana

The proportion of respondents reporting ever having had sex increased from 65.5% in 2001 to 69.8% in 2004, 72.7% in 2008 and 74.9% in 2012. Age at first sex indicates the timing of the beginning of the exposure to HIV. The mean age at first sex was 18.7 years in 2001, 18.3 years in 2004, 18.6 years in 2008 and then slightly dropped to 17.9 years in 2012. The proportion of women whose first sex was at less than 16 years did not show any significant improvement as it increased form 11.3% in 2001 to 14% in 2004. The proportion reduced to 11.4% in 2008 and now it stands at 10.6%. The use of condom during the first sexual debut has risen since 2004 (no data for 2001). The proportion of respondents who reported using a condom during first sex in 2004 was 51.3. The proportion was similar in 2008 (51.8%) and this increased to 91.7% in 2012.

Data on use of condoms for the first sexual contact with new sexual partners is reported in this paper from 2004 (see table 1). The proportion of respondents who reported using a condom on first sexual contact with new partners increased from 61.3% in 2004 to 76.1% in 2008 and finally to 82.0% in 2012. Current condom use experienced a steady increase from 2001 to 2008. The proportion of current condom users in 2008 stood at 69.9% and it slightly decreased to 69.4% in 2012. A similar pattern was observed in consistent use of condom among respondents indicating non-improvement in condom use during the past four years preceding the survey. There have been improvements in the proportion of respondents who reported ever having sex drunk of high. The proportion was 16.8% in 2001 and this reduced to 12.3% and 12.4% for 2004 and 2008 respectively. In 2012, the proportion has been reduced further to 8%. No significant changes can be reported with regard to being engaged in sex in exchange for payment or gifts (no data for 2001). In 2004, 1.3% of respondents reported being engaged in sex for payment or gifts. This proportion increased to 1.8% and 1.5% in 2008 and 2012 respectively.

There has been no significant changes in the mean number of sexual partners respondents had during the 12 months preceding the surveys between 2004 and 2012 (from 1.22 in 2001 to 1.24 in 2012). However, the proportion of people with multiple sexual partners increased from 11.7% in 2004 to 14.8% in 2008. In 2012, the figure was almost similar to that of 2008 (14.5%).

One of the best performers of sexual behavior indicators is the proportion of men who have been circumcised which has been increasing form 9.4% in 2004, to 12.3% in 2008. Currently, about one in four men report to have been circumcised (See table 1).

Level of Risky Sexual Behaviour in Botswana

• Risky Sexual Behaviours By District

The proportion of respondent with no risky sexual behavior stands at 44% whereas 56% had at least one of the risky sexual behavoiur (current condom non-user, inconsistent condom user, multiple sexual partnerships, sex whilst drunk or high, or sex in exchange for payment or gift). This however, differed significantly by district. The gap between the highest proportion of respondents with no risky sexual behavior at district level and the lowest proportion is 21%.

Risky Sexual Behaviours By Background Characteristics

The proportion of respondents with the no sexual risk behavior is lowest in rural areas. This is followed by cities and urban villages. Towns have the highest proportion of respondents with no risky sexual behavior. No risky sexual behavior is more prevalent among females as compared to their male counterparts. In terms of age, the 10 to 9 years olds have the highest proportion of respondents with no risky sexual behavior. The level of risky sexual behavior among the 20 to 49 is almost similar. The level of risky sexual behavior is highest among those that have no education and reduces with the level of education. However, the proportion of those with no risky behaviour among those with tertiary education is lower than for those with primary education. No risky behavior is more common among the unemployed than the employed. With regard to religion, the proportion of respondents with no risky sexual behavior is highest among the Christian. This is followed by those with no religion, those affiliated to Islam/Hindu/Buddhism and those affiliated to Badimo/Other religion correspondingly.

CONCLUSIONS

The proportion of respondents who reported to have ever had sex has been steadily increasing since 2001. The age at first sex and the proportion of respondents who had their first sexual experience before the age of 16 did not improve since 2001. Generally, risky sexual behavior among people in Botswana has not improved over the past decade. There is no improvement in the proportion of current condom users, consistent condom users and people having multiple sexual partners. However, there are improvements in certain indicators. The proportion of men who have circumcised has gone up over the last decade. About a quarter of men reported to have been circumcised. The proportion of people who engage in sexual activities whilst under the influence of alcohol or high on drugs has decreased. The proportion of respondents who report using a condom during the first sexual intercourse has increased sharply whereas the use of condoms for people during the first sexual contact with new partners has also gone up.

There still exist huge disparities in risky sexual behavior between districts in Botswana. Risky sexual behavior does differ significantly by socioeconomic characteristics. There is need to strengthen HIV/AIDS and sexual and reproductive health interventions to improve the sexual behavior among people in Botswana. Further research is needed to aid in finding the best solution to improve sexual behaviours among people in Botswana.

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APPENDICES

Sexual Behavior Variable		2001 BAIS I		2004 BAIS II		2008 BAIS III		2012 BAIS IV	
		No.	%	No.	%	No.	%	No.	%
Ever Had Sex		4383	65.5	15071	69.8	14132	72.7	8332	74.9
Had Sex With Consent		NA	NA	NA	NA	10198	94.8	1240*	85.2
Age at First Sex	Mean	2670	18.7	9838	18.3	9344	18.6	1240*	17.9
	Median	2670	18.0	9838	18.0	9344	18.0	1240*	18.0
	Less than 16 years	2670	11.3	9838	14.0	9344	11.4	1240*	10.6
Condom Use at First Sex		NA	NA	10320	51.3	10172	51.8	1240*	91.7
Condom Use on First sexual contact (with new partners last 12 months)		2313	1.5 ¹	8870	61.3	7563	76.1	5175	82.0
Current Condom Use		2313	50.3	8882	60.1	7595	69.9	5162	69.4
Consistent Condom Use		2313	55.0	8882	87.1 ²	7583	59.5	5175	57.3
Sex whilst Drunk/High Or Partner Drunk/High		2313	16.8	8858	12.3	7558	12.4	5175	8.0
Sex in exchange for Payment/Gift		NA	NA	8470	1.3	8318	1.8	5154	1.5
Circumcision (MEN)		NA	NA	6837	9.4	6399	12.3	3809	25.1
Number of Sexual Partners	Mean	NA	NA	8455	1.13	10197	1.04	NA	NA
	Last 12 months	NA	NA	8467	1.22	8319	1.26	5175	1.24
Proportion with Multiple partners		NA	NA	8467	11.7	8319	14.8	5175	14.5

NA = Not available

¹ The figure raises question on the quality of data ² Doubtful figure