Introduction

Zambia is one of the countries in Sub-Saharan Africa most affected by the HIV/AIDS epidemic. At the end of 2005, approximately one in six (17%) Zambian adults 15-49 years of age was living with HIV, and approximately 100,000 people died of the disease during the year (UNAIDS, 2006). The consequences of HIV/AIDS in Zambia are devastating. The life expectancy has fallen below 40 years, approximately one in five children have lost at least one parent to AIDS, and it has crippled the healthcare and education systems as well as the economy (UNAIDS, 2006; UNAIDS, 2004; Bollinger & Stover, 1999).

Unprotected heterosexual sex is the primary mode of HIV transmission in Zambia (World Health Organization, 2005). The epidemic disproportionately affects women; 57% of those infected are female, and women 15-19 years of age are six times more likely than their male counterparts to be HIV positive (UNAIDS, 2006). Gender inequality greatly complicates HIV prevention efforts in Zambia (AVERT, 2006). Women are typically less educated and have less exposure to mass media than men. Additionally, women are often expected to be submissive in relationships and consequently lack the knowledge and skills necessary to protect themselves from contracting HIV (Demographic and Health Surveys, 2003; AVERT, 2006).

Identifying important gender differences in HIV/AIDS-related knowledge, attitudes and sexual behaviors is essential to understanding the need for gender-specific HIV interventions in Zambia. This study identifies these differences, providing critical information for developing effective HIV/AIDS prevention strategies in Zambia.

Data and Methodology

Data are from the 2005 baseline Zambia Health Communication Survey, which was conducted in 36 districts in all nine provinces. A two-stage stratified cluster sample design was used. In the first stage, Standard Enumeration Areas, the smallest administrative unit in each district of the country, were selected as the primary sampling unit (PSU); households were randomly selected at the second stage. Finally, one female

and one male 10-59 years of age from each household were randomly selected to be interviewed. Data were collected between July and September of 2005. The total sample included 4,822 females and males. For this study, the sub-sample of sexually active 15-49 year old females and males was selected, resulting in a total sample size of 2,529 individuals.

Stata 9.1 was used to conduct logistic regression analyses, which examined differences in knowledge, attitudes, and sexual behaviors between men and women. All models controlled for sociodemographic variation, including age, marital status, level of education, religion, area of residence, employment status and frequency of reading the newspaper, watching television and listening to the radio. Logistic regression results were converted to adjusted proportions to facilitate interpretation.

Results

Findings indicate that there are important gender differences in attitudes and practices related to HIV prevention, especially pertaining to condom use. Overall, HIV-related knowledge was high among both men and women. Results are shown in Table 1 of the Appendix.

Sexual behavior differed by gender, with condom use at last sex with any partner being more common among men than women (32.1% vs. 22.8%, $p<.001$). Men were more likely than women to report having transactional sex (22.7% vs. 7.2%, $p<.001$) and multiple partners (18.2% vs. 3.9%, $p<.001$) in the past year. Awareness of personal HIV status was more common among women than men (18.7% vs. 9.5%, $p<.001$), perhaps due to routine antenatal testing among pregnant women.

Knowledge of HIV prevention practices, including fidelity, condom use, and abstinence, was not dramatically different between genders, although slightly more women than men cited fidelity to one partner as a means to reduce HIV risk (66.5% vs. 61.1%, $p<.05$). About three-quarters of men and women (no significant difference) cited condom use and abstinence for preventing HIV transmission.

Awareness of where to obtain condoms was nearly universal in this sample (97.4% among men and 93.8% among women, $p<.001$). However, women were much less likely than men to feel self-efficacious about obtaining condoms (63.8% vs. 91.8%, $p<.001$). The perception that women who carry condoms are "easy" was more common among men than women (52.8% vs. 43.2%, $p<.001$), which is a plausible explanation for women's lack of self-efficacy to obtain condoms. Women were more likely than men to agree that "women can suggest condom use just like a man can" (76.1% vs. 61.4%, $p<.001$). Despite this belief, fewer women than men reported that they were likely to ask their partner to use a condom the next time they have sex (32.0% vs. 40.0%, $p<.001$). Finally, nearly three-quarters of both men and women perceived AIDS as a serious problem in their community.

Conclusions

These findings suggest that women lack self-efficacy to obtain condoms, are perceived as "easy" if they possess condoms, and are less likely to propose condom use to their partners. This is evidence of social and cultural norms against women procuring and carrying condoms or proposing use. Although many women agreed that "women can suggest condom use just like a man can," the fact that fewer men agreed may indicate that men are less accepting of the idea of women proposing condom use.

Condom use at last sex was relatively low, conceivably because approximately two-thirds (67.5%) of the sample were married and may perceive less need for condom use due to reduced HIV risk perception within established unions. However, with extra-marital sexual relationships presenting a risk for HIV transmission, condom use is important for both married and unmarried adults.

These findings provide evidence of key gender differences that need to be addressed to effectively combat the HIV/AIDS epidemic in Zambia. To enhance condom promotion among all adults, efforts should be made to increase women's self-efficacy and the acceptance of women proposing condom use.

Appendix

Table 1. Gender differences in HIV-related knowledge, attitudes and sexual behaviors (Preliminary findings, Zambia, 2005).

Indicators	Women (%)	Men (%)	Sig.	N[1] (women, men)
Knowledge				
Knows fidelity to one partner as means to prevent HIV transmission	66.5	61.1	*	1238, 1182
Knows abstinence as means to prevent HIV transmission	77.6	74.5	n.s.	1238, 1182
Knows condom use as means to prevent HIV transmission	78.1	76.0	n.s.	1238, 1182
Knows condom source	93.8	97.4	***	1238, 1182
Attitudes				
Feels able to obtain condoms	63.8	91.8	***	1223, 1174
Women who carry condoms are "easy"	43.2	52.8	***	1228, 1179
Women can suggest condom use just like a man can	76.1	61.4	***	1227, 1176
Likely to ask partner to use condom at next sex act	32.0	40.0	***	1189, 1173
AIDS is serious problem in community	75.2	73.0	n.s.	1220, 1162
Practices				
Used condom at last sex	22.8	32.1	***	1226, 1174
Exchanged sex for gift/money in last 12 months	7.2	22.7	***	1230, 1182
Had 2 or more partners in last 12 months	3.9	18.2	***	1238, 1182
Received HIV test results in last 12 months	18.7	9.5	***	1222, 1159
Knows someone infected with or died from HIV/AIDS	67.4	60.0	***	1208, 1156

*p<0.05, ***p<0.001.
[1] Random missing values from some variables do not exceed 5% of the total sample.

All proportions are adjusted for age, marital status, level of education, area of residence, religion, employment status and frequency of reading the newspaper, watching television and listening to the radio.

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