

AIDSCOM

SOCIODEMOGRAPHIC PREDICTORS OF AIDS RELATED KNOWLEDGE AND PRACTICE IN UGANDA



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INTRODUCTION

The Federation of Uganda Employers (FUE) and the Experiment in International Living (EIL) have implemented AIDS prevention programs in workplaces and community based organizations in Uganda. The programs involve training peer educators to disseminate accurate information about HIV infection, encourage sexual behavior change, and distribute condoms. As part of ongoing project planning and evaluation, two surveys of knowledge, attitudes and practices have been conducted in collaboration with AIDSCOM. The research aims to establish current levels of knowledge and behavior in the target population, identify correlates of risk behavior and risk reduction, and track changes in key indicators. This presentation focuses on associations between knowledge, reported behavior, and several sociodemographic variables, with special attention to measures of social influence.

METHODS

The sample of 1099 is derived from 2 surveys of knowledge, attitudes and practices related to AIDS carried out in Uganda in March and November of 1990. Eight organizations in Kampala and Jinja are represented. In two of the sites, condoms were routinely available free of charge in company clinics.

The data were examined for associations between sociodemographic variables, knowledge, attitudes and reported sexual behavior. Three dependent variables were chosen for multivariate analysis; partner number, risk score and condom use. In the tables, only correlations and regression coefficients that are statistically significant ($p < .05$) are shown.

DEFINITION OF KEY VARIABLES

Number of partners - the number of sexual partners reported in the last two months.

Condom use - any use in the last two months among those with at least one partner.

Risk score - the number of partners minus each partner with whom condoms are always used.

AIDS knowledge score - one point for each correct route of transmission mentioned minus one point for each incorrect route mentioned.

Condom availability - condoms are routinely available in the organization free of charge.

Perceived partners - agree that many of one's friends have had more than one partner in the last couple of months.

Others' partners - the mean number of partners reported by all other persons in the organization at the time of that survey.

Perceived condom use - agree that many of one's friends or workmates are using condoms now.

RESULTS

Basic Findings

Seventy-four percent of those interviewed were men (Table 1). The age range of the sample was from 11 to 80, with a mean of 31. Most (74%) had completed at least a primary school education, meaning that this sample has a much higher educational level than Uganda as a whole.

Seventy-two percent were married, and 22 percent of married persons were in polygamous marriages. Eighty-five percent had at least one partner in the last two months, and 25% had more than one partner over the same time period. Three quarters (76%) had children, with a mean of 3.

Although only 25 percent said they had more than one partner, over half reported that they thought their friends and workmates had more than one partner.

Table 1. CHARACTERISTICS OF THE SAMPLE

SAMPLE SIZE	1099
TIME PERIODS	March and November 1990
PLACE	8 organizations/companies Kampala and Jinja
SEX	
Percent male	74.3
Percent female	25.7
AGE	
Mean	31.2
Range	11 - 80
EDUCATION	
Percent completed primary	74.0
PERCENT MARRIED	71.6
PERCENT MARRIAGES POLYGAMOUS	21.9
PERCENT SEXUALLY ACTIVE	84.7
PERCENT WITH MULTIPLE PARTNERS	24.8
MEAN NUMBER OF PARTNERS	1.2
PERCENT WITH CHILDREN	76.2
MEAN NUMBER OF CHILDREN	3.3
N=1099	

Almost everyone (99.6%) had heard of AIDS, and 67 percent knew someone with AIDS personally. Ninety-one percent knew AIDS could be transmitted by sex. However, only 13 percent knew the incubation period could be more than 5 years. People with higher educational levels had higher AIDS knowledge scores and were more likely to know the length of the incubation period.

Most (78%) had heard of condoms, and 18 percent had used a condom before. Of those who had at least one partner in the last two months, 8 percent had used a condom. Few were using condoms consistently, and only one percent said that they always used condoms.

Risk Behavior: Partner Number and Risk Score

Because few were using condoms consistently, the variables partner number and risk score were strongly correlated and showed similar patterns of correlation with other variables (Table 2).

Partner number and risk score were both correlated with older age and male sex. Both variables were also correlated with the perceived partners variables, indicating an association between reporting more than one partner and believing that one's friends have more than one partner. There was also a correlation with

the others' partners variable, indicating an association between what an individual reports and what other people in the workplace report.

Partner number was not related to the AIDS knowledge score. However, risk score was negatively correlated with the knowledge score. This indicates that those who had higher risk measured in terms of partners without condoms had significantly lower knowledge scores. Since the only thing that distinguishes the two variables is always using condoms with at least one partner, it suggests that condom behavior is associated with the knowledge score. Neither variable was associated with educational level, and the variables did not show significantly different correlations with any of the other variables.

Table 2. COMPARISON OF CORRELATIONS

VARIABLE	# PARTNERS	RISK SCORE
AGE	.19	.22
MALE SEX	.28	.31
EDUCATIONAL LEVEL	NS	NS
AIDS KNOWLEDGE SCORE	NS	-.09 *
PERCEIVED PARTNERS	.08	.08
OTHERS' PARTNERS	.28	.31

N=1099

*Only significant difference between the two variables

When multiple linear regression was used, the same pattern emerges (Table 3). Two equations were constructed, one with partner number as the dependent variable, and the other with risk score as the dependent variable.

Table 3. STANDARDIZED COEFFICIENTS - MULTIPLE LINEAR REGRESSION

VARIABLE	# PARTNERS	RISK SCORE
AGE	.09	.11
MALE SEX	.17	.18
EDUCATIONAL LEVEL	NS	NS
AIDS KNOWLEDGE SCORE	NS	-.07 *
PERCEIVED PARTNERS	.09	.11
OTHERS' PARTNERS	.15	.16
PERCENT OF VARIANCE ACCOUNTED FOR	11.4	14.3

N=1079

Both variables are predicted by older age, male sex, perceived partners and others' partners. Risk score is distinguished from partner number in that it is also predicted by low AIDS knowledge score.

Risk Reduction: Condom Use

Condom use in the last two months was correlated with a number of variables (Table 4). Persons who were younger, reported more partners, and had higher educational levels were more likely to have used a condom. Condom use was also positively correlated with the AIDS knowledge score, knowledge of the incubation period, perceptions of others' condom use, and condom availability in the worksite.

Table 4. CORRELATIONS WITH CONDOM USE

VARIABLE

AGE	-.13
NUMBER OF PARTNERS	.22
EDUCATIONAL LEVEL	.11
AIDS KNOWLEDGE SCORE	.13
KNOWLEDGE OF LONG LATENCY	.17
PERCEIVED CONDOM USE	.19
CONDOM AVAILABILITY	.10

N=931

The results of logistic regression appear in Table 5. In the final equation, all of the variables except educational level continue to be significantly associated with condom use.

Table 5. RESULTS OF LOGISTIC REGRESSION

DEPENDENT VARIABLE: CONDOM USE IN LAST TWO MONTHS

	ODDS RATIO	CONF. INTERVAL
AGE LESS THAN 30	3.4	1.9 - 6.1
PERCEIVED CONDOM USE	3.3	1.8 - 6.2
KNOW INCUB. PERIOD > 5 YEARS	2.7	1.5 - 5.1
NUMBER OF PARTNERS	2.7	2.0 - 3.6
CONDOM AVAILABILITY	2.4	1.4 - 4.4
EDUCATIONAL LEVEL	1.8	NS
AIDS KNOWLEDGE SCORE	1.4	1.1 - 1.8

N=930

SUMMARY

In this sample, the predictors of numbers of partners are older age, male sex, perceptions of the partner behavior of others, and the number of partners actually reported by workmates. Risk score is predicted by the same variables, and also by low AIDS knowledge score.

The significant predictors of condom use include young age, number of partners, perceived condom use and condom availability. Knowledge of AIDS transmission and knowledge of the incubation period are also significantly associated with use even after controlling for other variables.

Risk behavior and risk reduction can both be related to sociodemographic variables. Age, sex and educational level show different patterns according to the choice of dependent variable. Perceptions of others' behavior show associations with both risk taking and risk reduction. It is impossible to determine whether this association reflects social influence or if people are projecting their own behavior when they respond about what they believe others are doing. By using geographic clusters, or discrete organizations as in this case, a variable can be calculated that reflects the behavior that is actually reported by people in one's social environment. This is an alternative method of measuring social influence.

The data suggest three areas for intervention in this population. Perceptions of others' behavior is important for risk taking as well as risk reduction, indicating that interventions designed to change perceived norms may be effective in reducing number of partners and increasing condom use. Attempts to increase condom availability and educate people about the length of the incubation period emerge as potential avenues for increasing condom use.