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RESULTS FROM A SECOND SURVEY OF AIDS RELATED
KNOWLEDGE, ATTITUDES AND PRACTICES
AMONG WORKERS IN UGANDA

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AIDSCOM

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EXECUTIVE SUMMARY

In November 1990 476 interviews on knowledge, attitudes and practices related to AIDS were conducted in seven sites as part of an ongoing evaluation of a program to train peer educators to deliver AIDS education in workplaces and community organizations in Uganda. This survey produced follow up data on three organizations that had been surveyed in March, and added two matched sites in which one had begun the education program, allowing the initial effects of the training program to be examined in four sites. Because the samples for these sites are small and there are some differences in the characteristics of those interviewed, the results should be interpreted cautiously.

The results show considerable variation by site. Indicators of program activity suggest that many individuals have become aware of the program in their organization, and there have been increases in the number who have attended talks about AIDS. There was no evidence of an increase in person to person communication. Program implementation has occurred more in the form of formal attendance at talks than by individual discussions with peer educators. Most report that talks are conducted by someone outside the organization.

Basic knowledge of AIDS transmission remains high and basically unchanged, with the exception of an increase from 9% to 21% in the number who mentioned mother to infant transmission. Fear of catching AIDS by working next to someone and believing someone with AIDS should be fired remain high, and are reported by over one quarter of respondents.

Measures of sexual behavior show minor shifts. Condom use increased among women at one organization, but is declining at sites where the condom promotion program is mature. Among those with multiple partners, there was an association between attending a talk about AIDS at an intervention site and using a condom in the last two months. No association was found for those who talked with a peer educator individually. The frequency of condom use remains too low to appreciably affect transmission. The perception that women are using condoms showed a significant increase.

The rural site shows the lowest levels of basic knowledge about AIDS, awareness and access to condoms. This population is more typical of the majority of Uganda's population, and should be a high priority for targeted interventions. Low educational levels and problems in transportation and communication make implementation of the training program difficult in these areas, and may require alteration of the original training model.

Conclusions about the success of the program cannot be reached on the basis of these data, which were intended to provide preliminary indications of initial effects and suggest areas for future emphasis. Also, program activities thus far have occurred

without the benefit of most of the supporting materials such as the dramatic video and condom brochure. There is considerable variability by site in the way in which the program has been implemented, and none have implemented the program exactly as originally planned. Revisions of the basic model by which peer educators should operate which have occurred in the interim may have contributed to this variability. In most of the sites, individual peer education activities have reached few people, and show no relationship to safer behavior. More have been reached by more formal talks, which shows some association to condom use. Continued follow up is needed to maintain levels of educational activities and assess program impact.

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INTRODUCTION

AIDSCOM is a public health communication support program funded by the Agency for International Development and administered by the Academy for Educational Development to assist in the creation and implementation of HIV prevention programs in developing countries. Since October 1988, AIDSCOM staff and consultants have been providing technical assistance to the Federation of Uganda Employers (FUE) and the Experiment in International Living (EIL) for the development of AIDS in the workplace training programs in Uganda. The project involves training trainers and peer educators in member workplaces (FUE) and community organizations (EIL) to implement AIDS training and prevention activities in their organizations.

In March 1990, 623 interviews were carried out with individuals in five organizations (4 FUE workplaces and one EIL organization) targeted for AIDS training programs. In November 1990 the survey was repeated in all sites except one of the FUE workplaces which had experienced a strike and reorganization during the interim. Three new sites were added to the research project, including an FUE company where training was about to begin and two similar organizations of civil servants, one of which had received training from EIL. The 476 interviews were conducted as part of the midpoint evaluation of the program's effectiveness. These data were collected to provide some indications of what has occurred in the sites which have begun implementation of the program and to augment the sample by establishing baseline data for three new organizations.

In section I, the results from 5 sites are reviewed with respect to measures of program activity and knowledge, attitude and behavior changes. The 5 sites include 3 in which data was collected at two points in time, and 2 that are treated as a matched intervention/control comparison. Section II contains descriptions of each site, the stage of program development, summaries of survey results, and background details. The supporting tables for the site specific results appear in the appendices.

The results detailed in section I provide some indications of trends in program activity, knowledge, attitudes and reported behavior. Interpretation of the results is complicated by a number of factors. Because the organizations are relatively small universes to sample from, sample sizes are small and sample variation is a potential confounder. Combining all of the sites often obscures important variation between sites in trends, and is not always appropriate given that the way in which the intervention has been implemented may vary by site. Combining data is also problematic as one site began the intervention

before the baseline survey, and the second survey contains two sites treated as a matched pair. Thus, findings about "before" and "after" cannot be applied to the results which incorporate these sites. In spite of this, there are a few consistent patterns. When certain findings from the intervention sites are combined to test for statistical significance or summarize overall trends, the data from site B (which had begun the program prior to the first survey in March 1990) are excluded, and data from sites F and G are treated as one case measured before and after program implementation. The reader should look at data from site B in the context of what happens six months after initial implementation. The table below shows the sample sizes and times when program activity began for each site.

Table 1. Summary of sites surveyed and stage of program

	Program Activity	March Survey N	Program Activity	November Survey N	Projected Activity	Fall 91 Final Survey*
Site A1		84	TOT 6/90			
A2				135	TOP 11/90 CPE	(100)
Site B	TOT 7/89 TOP 2/90	101		35	V, CPE	(50)
Site C	TOT 1/90	147	TOT 3/90 TOP 8/90	55	TOP 11/90 V, CPE	(50)
Site D		189	TOT 3/90	- **	?	(100)
Site E		102	TOT 3/90 TOP 7/90	55	V, CPE	(50)
Site F				53	TOP 91 V, CPE	(50)
Site G			TOP 6/90	55	V, CPE	(50)
Site H				91	TOT 11/90 TOP 91 V, CPE	(100)

TOT - Initial training of a small number (2-4) of trainers in the organization.

TOP - Trainers, FUE or EIL conduct a larger (20+) training of peer educators.

V - Showing of dramatic video

CPE - Continued peer education and follow up, distribution of materials.

*Target sample size for site.

**Site D experienced a strike and was under new management in November 1990. Continued participation is uncertain.

1. INDICATORS OF PROGRAM ACTIVITY

One measure of program activity is the number of employees who are aware of a program in their organization. The number who said their organization has an AIDS education program increased in all four sites. It is highest in sites B and C, where almost three quarters of those surveyed said there was a program.

Table 2. Percent who say the organization has an AIDS education program

Site	Pre-Program	During Implementation	After Implementation
B		69.3	74.3
C	43.5	74.5	
E	28.4	41.8	
.....			
	Site F	Site G	
F/G*	18.9	26.9	

*For the purposes of this report, sites F and G are treated as a matched control/intervention pair.

The number of employees who said they had attended talks about AIDS was also higher after implementation (excluding site B¹, 18% to 31%, chi square 10.8, p <.01). Most indicated that talks were given by someone from outside the organization.

¹Site B is excluded from combined statistics because both surveys were after implementation.

Table 3. Percent who attended talks about AIDS

Site	Pre-Program	During Implementation	After Implementation
B		64.4	68.6
Someone from work		17.8	8.6
C	17.0	34.5	
Someone from work	4.1	5.5	
E	22.5	41.8	
Someone from work	0.9	1.8	
.....			
	Site F	Site G	
F/G	9.4	25.9	
Someone from work	1.9	9.6	

There was no evidence of more individual informal encounters or increased activities of peer educators after implementation. The number who mentioned a workplace educator spontaneously in response to the questions "Where have you heard about AIDS?" or "Who do you talk to about AIDS?" showed slight increases, but remained less than 10 percent. In site B, the relatively high levels that existed in March immediately after the program began have declined. The same pattern is found when the unprompted responses are combined with those who answered positively to the question "Has anyone here at work come up to you to talk about AIDS?". The proportion is highest at site B, but is declining.

Table 4. Percent who talked to peer educator about AIDS

Site		Pre-Program	During Implementation	After Implementation
B	unprompted		21.8	8.6
	all		56.4	37.1
C	unprompted	4.1	5.5	
	all	23.1	25.5	
E	unprompted	2.9	3.6	
	all	13.7	5.5	
.....				
		Site F	Site G	
F/G	unprompted	1.9	3.8	
	all	28.3	23.1	

Summary

The data suggest that program implementation has occurred mainly in the form of talks, most of which are not viewed by the employees as being conducted by someone at work. There is no evidence of an increase in individual encounters with peer educators. All of the program activity indicators are highest at site B, which has been involved in the program for the longest time. However, these indicators are showing declines, suggesting that measures will be needed to maintain program activities in all sites as implementation progresses.

2. KNOWLEDGE AND ATTITUDES

There were a few difference in basic knowledge levels, which were already high in these organizations. In all sites, over 90% say AIDS is transmitted by sex. Overall knowledge of AIDS transmission is measured by the knowledge score, which is calculated by adding one point for each correct route (sex, blood, or mother to child) and subtracting one point for each incorrect route (i.e., insects, used clothing and witchcraft). A significant increase in overall score occurred only at site E. More persons at all sites mentioned mother to child transmission without prompting (excluding site B, 8% to 21%, chi square 11.7, $p < .001$).

There has been little change in the high levels of concern about transmission through casual contact or in negative attitudes towards persons with AIDS in the workplace. More than one fourth of those surveyed say they would be afraid of catching AIDS by working next to someone. In sites B, E, and G, more than 30% think someone with AIDS should be dismissed from their job. These two variables are correlated with each other ($r = .28$, $p < .001$).

Table 5. Fear of Casual Contact and Attitudes Towards Workers with AIDS

Site	Pre-Program	During Implementation	After Implementation
B			
Afraid of catching AIDS by working next to someone		28.0	28.6
Workers with AIDS should be fired		47.5	42.9
C			
Afraid of catching AIDS by working next to someone	26.2	30.9	
Workers with AIDS should be fired	15.2	9.1	
E			
Afraid of catching AIDS by working next to someone	40.2	34.5	
Workers with AIDS should be fired	44.1	47.3	
.....			
F/G	Site F	Site G	
Afraid of catching AIDS by working next to someone	32.1	26.9	
Workers with AIDS should be fired	34.0	32.7	

Measures of individual susceptibility do not show any consistent patterns. Overall more than a third say they do not think they can get AIDS. The proportion decreased slightly in sites B, C, and E. Most believe that they can prevent getting AIDS. This measure ranges from a high of 100% at site B to a low of 69% at site E, which shows a decline from 87%.

The most common means of prevention mentioned is staying with one partner. Overall there was a slight increase in this response which reflects a slight decline in the number who use the

campaign phrases "zero grazing" and "love carefully" to indicate this. The number who mentioned condoms as a means of prevention increased at site E (11% to 24%, chi square 4.6, $p < .05$), but decreased at site C (21% to 9%, not significant).

There were no significant changes in overall awareness of condoms, or in knowing where to get condoms. Significantly fewer persons at site C mentioned the workplace as a source of condoms (74% to 35%, chi square 7.2, $p < .01$), which is consistent with other evidence suggesting a decrease in confidence about the effectiveness of condoms (see detailed report on site C).

Summary

A significant increase in knowledge of AIDS transmission occurred at site E. More people at all sites mentioned mother to child transmission. Belief in casual contact remains high at all sites. Site C is the only place where the belief that workers with AIDS should be dismissed is relatively low. Overall, there are few differences in knowledge and attitude measures that could be related to the stage of development of the program.

3. REPORTED BEHAVIOR

The proportions who were married, unmarried with a steady partner, or had no steady partner did not change significantly at any of the sites. The mean number of partners reported in November ranged from a high of 1.5 for site C to a low of 0.8 at site E, where the population is predominantly young females and 55% have no steady partner.

The percent who report more than one partner increased at all sites except B. The increase was significant only at site E (5% to 20%, chi square 8.9, $p < .01$). There was also an increase in the percent who reported that they were in polygamous marriages (excluding site B, 9% to 15%, chi square 4.0, $p < .05$), which contributes to the increase in multiple partner status at all sites except E, which is predominantly female. The shift to polygamy is also significant as a percent of married persons (excluding site B, 15% to 26%, chi square 4.6, $p < .05$).

No site showed a significant change in the number who reported that they were not having sex. The overall risk score (number of partners with whom condoms are not always used) did not change significantly at any site.

Table 6. Selected Indicators of Sexual Behavior by Site

Site	Pre-Program	During Implementation	After Implementation
B			
% not having sex		7.9	0.0
% multiple partners		25.7	22.9
Mean # of partners		1.3	1.3
Mean risk score		1.2	1.3
C			
% not having sex	7.5	5.5	
% multiple partners	32.7	36.4	
Mean # of partners	1.3	1.5	
Mean risk score	1.3	1.4	
E			
% not having sex	49.0	45.5	
% multiple partners	4.9	20.0	
Mean # of partners	0.6	0.8	
Mean risk score	0.6	0.6	
.....			
F/G	Site F	Site G	
% not having sex	15.1	11.5	
% multiple partners	11.3	21.2	
Mean # of partners	1.0	1.1	
Mean risk score	1.0	1.1	

Among all sexually active persons, the percentage who used a condom in the last two months was not significantly higher during implementation (excluding site B, 12% to 16%). At site E, there was a significant increase in last two month condom use (10% to 43%, chi square 12.6, $p < .001$). However, at site C, fewer reported use in the second survey. Reported use also declined at site B.

Table 7. Condom Use in the last two months by site

Site	Pre-Program	During Implementation	After Implementation
B			
Sexually active*		8.6	2.9
Multiple partners**		23.1	0.0
C			
Sexually active	16.9	7.7	
Multiple partners	25.0	10.0	
E			
Sexually active	9.6	43.3	
Multiple partners	0.0	72.7	
.....			
F/G	Site F	Site G	
Sexually active	2.2	8.7	
Multiple partners	0.0	18.2	

*Percent of those who report any partners

**Percent of those who report more than one partner

Of those with two or more partners, the frequency of last two month condom use went from 20% to 29%, which also reflects an increase at site E, higher use in the intervention site G, and a decrease at site C.

The overall frequency of condom use is low. In all sites where implementation has occurred, only 6 of all sexually active persons (4%) and 3 of 50 (6%) persons with multiple partners reported using condoms always. Condom use is more consistent with partners who are not spouses or steady partners. In the second survey, ten of 17 (59%) persons who reported having a 'casual'² partner said they always used condoms with these partners. However, casual partners constitute a small percentage of reported sexual activity (8% of all sexually active persons report a casual partner).

²After responding to questions about spouses and steady partners, the individual is asked "In the last two months, have you had sex with anyone besides a spouse or steady partner?"

It is not surprising to find little evidence of an increase in safer behavior given the relatively low levels of exposure to the program that were reported. An important question at this stage are potential changes among those who have been exposed. When all 5 sites are included in the analysis, there is an association between attending a talk after program implementation and using a condom in the last two months for those with multiple partners. This positive association is accounted for mostly by those who reported attending talks at site B in March and site E in November. In the analysis, there is no association of condom use with talking to a peer educator. The same pattern is evident for both measures of peer educator contact; unprompted (mentions workplace educator in response to "Who do you talk to about AIDS?") and prompted ("Has anyone at work come up to talk to you about AIDS?"). Because of the possibility that the prompted responses will pick up interactions with people who are not peer educators, the unprompted responses are considered separately. However, few mention a workplace educator spontaneously, and there is no association with condom use.

Table 8. Condom use in the last two months by number of partners and exposure to program

	% use condoms	N
One partner		
Attend talks	4.7	85
Did not attend	9.3	269
Talk to peer educator		
Unprompted	0.0	19
Prompted + unprompted	1.6	62
Did not talk to peer	9.6	292
Multiple partners		
Attend talks	34.1*	41
Did not attend	17.0	94
Talk to peer educator		
Unprompted	22.2	9
Prompted + unprompted	25.8	31
Did not talk to peer	21.2	104

*significant against did not attend, chi square 4.8, p <.05.

It is also worthwhile to examine perceptions of others behavior. Overall, there was a slight increase in the number of persons who said they believed their peers had more than one partner. The increase was significant for perceptions of friends' behavior. The levels are near 50% for all categories (friends, men at work, and women at work) which is double the number who report multiple partner behavior for themselves.

Table 9. Percent who believe that others have more than one partner

	Pre-program	During Implementation
Agree that friends have more than one partner	52.0	61.7*
Agree that men at work have more than one partner	42.0	48.4
Agree that women at work have more than one partner	45.7	49.4

Data are from Sites C, E, F and G

*Significant, chi square 4.0, $p < .05$

With respect to the perception that others were using condoms, there was considerably more variability by site and by reference group. All sites showed an increase in the percent who believed that women at work were using condoms, which was the lowest of all groups before the intervention began. The increase was significant for the combined sites excluding B (24% to 37%, chi square 8.8, $p < .01$). The perception that men at work were using condoms did not change significantly overall (44% to 45%), but decreased significantly at site C. The perception that friends were using condoms also decreased at B and C.

Table 10. Percent who believe that others are using condoms by site

Site	Pre-Program	During Implementation	After Implementation
B			
Friends		42.0	34.3
Men at work		34.0	37.1
Women at work		19.8	40.0 *(+)
C			
Friends	46.9	30.9 *(-)	
Men at work	51.4	25.5 *(-)	
Women at work	15.2	25.5	
E			
Friends	59.8	60.0	
Men at work	32.9	51.9 *(+)	
Women at work	38.2	47.3	
.....			
F/G	Site F	Site G	
Friends	54.7	75.0 *(+)	
Men at work	41.5	57.7	
Women at work	20.8	38.5 *(+)	

*(+) Significant increase by chi square, $p < .05$

*(-) Significant decrease by chi square, $p < .05$

The decline in the perception that friends are using condoms at sites B and C and that men at work are using condoms at site C correspond to the declines in reported condom use at those sites. At the same time, the perception that women are using condoms increased at all sites. Anecdotal reports of "women carrying condoms" were received during the November survey, suggesting that there may be a community-wide trend reflected in these data.

Summary

When all sites are combined there is little overall change in reported behavior. The proportion of persons who have multiple partners increased slightly and there was a significant increase in the percent who were in polygamous marriages. The perception that others had more than one partner also increased slightly. All sites showed an increase in the perception that women were using condoms.

With respect to condom use, there is considerable variation in the findings by site. Site E showed a significant increase in condom use. In addition, more used condoms in the intervention site G than the control site F. However, decreases were noted at sites B and C. Both of these sites were exposed to condom promotion before the initial survey, suggesting that an initial period of trial is being followed by a period of decline. Other data from site C suggests one reason for this is a growing lack of confidence in the effectiveness of condoms.

The relationship between condom use and exposure to the program shows inconsistent patterns. A positive association between last two month use and attending a talk after implementation can be demonstrated for those with multiple partners. However, no association is evident for contact with a peer educator.

4. RECOMMENDATIONS

The preliminary results from sites which have begun the program show uneven implementation. Awareness of the program is high, and there have been increases in attendance at talks. Individual contacts with peer educators are difficult to measure, but none of the indicators show any increases in this form of communication. Among the subset of individuals who have been exposed to the program, there is more evidence for an influence of talks on reported behavior than there is for peer educators. In two sites, condom use appears to be declining. In the site where an active family planning program existed prior to implementation, decreasing confidence in condoms is associated with this decline. The findings are complex, and call for both general and site-specific recommendations.

General:

1. Measures should be taken to stimulate and maintain program activities. Increasing the number of talks is a major objective.
2. Trainers should follow up with peer educators to assess their efforts, determine major obstacles to their activities, and provide support.
3. Supporting materials should be made available. The dramatic video, which has now been completed, should be shown as widely as possible, and used in conjunction with trainings and peer education sessions.
4. Concerns about transmission through casual contact and negative attitudes toward workers with AIDS remain high in almost every site, and may need increased attention in future program activities.

Site-specific:

1. Site A presents unique problems for implementation because of language differences, low literacy, and problems in transportation. FUE should continue direct training of peer educators in the three camps visited in the November survey as part of a pilot intervention for this type of organization. The results are especially important, as this site is more typical of the majority of Uganda's population, and has implications for the planned expansion of the training program. Maintaining a supply of condoms is especially important, as there are no other sources in the area.
2. At site C, special attention to concerns about condom safety and effectiveness should be made an important part of the program activities.

3. At site E, lack of transmission by casual contact and decreasing the belief that workers with AIDS should be fired should be emphasized by the trainers/peer educators. Efforts to maintain and increase the consistency of condom use will be needed.

4. At site H, casual contact fears and negative attitudes toward people with AIDS in the workplace are priorities in addition to overall behavior change strategies. Condom availability is especially important in this organization.

SECTION II

1. SITE A

Background

Site A is a large company engaged in agricultural production in a rural area. Over 5,000 employees and their families live on the site, which is a self-contained community. In March 1990 interviews were conducted in the factory area and in 3 residential work camps. FUE conducted a training in the factory area in June 1990. Follow up in October indicated that no training activity occurred outside of this area. The employees who received training in June find it difficult to implement training outside of the factory area because of limited transportation.

In November 1990 interviews were conducted in 3 residential camps in a new region of the plantation, remote from where interviews had occurred in March. These data established a second baseline, in line with the original design of a control company which would have measurements at baseline and midpoint and no intervention in the interim. A training of peer educators was conducted in conjunction with the interviews in November. The peer educators were selected from those who lived in the camps in an attempt to solve the problems of limited transportation for the company trainers.

Individual Characteristics

The second survey showed a significantly lower educational level than the first, partially due to the fact that only camps were included. The percentage who had completed primary school dropped from 50% to 22%, with corresponding drops in the number who could read English (64% to 33%). The mean age did not change significantly (31 to 32), but the percentage of female respondents declined slightly (29% to 17%). There is some variation among the camps in individual characteristics, indicating that it will be necessary to maintain a before/after research design for the final survey.

Knowledge and Attitudes about AIDS

The following description refers to results from the camps in the November survey. Knowledge levels are lower at this site than any other, and 26% say they do not know how AIDS is transmitted. Only 60% agreed that AIDS could be spread by healthy looking people. Belief in casual contact is very high, with 52% agreeing that AIDS might be transmitted by used clothing. More than half (60%) think workers with AIDS should be dismissed.

The majority say that they cannot get AIDS (39%) or don't know (22%). Knowledge of ways to prevent AIDS is low, with just over half mentioning staying with one partner, and less than 5% mentioning condoms as a means of prevention. Twenty-seven percent say they don't know of any ways to prevent AIDS.

Few recognized the condom (29%), and almost half had never heard of condoms (41%). Only 20% knew of places to get condoms, and 21% said their reason for not using condoms was that they couldn't get them.

Reported Behavior and Perceptions of Others Behavior

The mean number of partners reported was 1.2, and 24% had more than one partner (15% to 24%). The number of sexually active persons who say they have used a condom in the last two months is low (1.5%).

Almost half say they believe their friends and the people at work have more than one partner. However few think others are using condoms (friends - 11%, men at work - 6%, women at work - 2%).

Summary

Knowledge about AIDS and its prevention is relatively low at site A, especially among workers living in the remote camps which make up the majority of the company's population. The population is rural in nature, and increasing basic knowledge and insuring condom availability are more important here than in most of the urban organizations.

2. SITE B

Background

Site B is a manufacturing facility in Jinja with a total employee population of approximately 500. In November 1990, when the midpoint data were collected, a large percentage of the employees were on leave due to reduced production. As a result only 35 employees were interviewed, and the results from the second survey should be interpreted with caution.

Site B has been involved in the FUE AIDS program since July 1989, when the first training of trainers occurred. Beginning in January 1990, these trainers conducted a series of talks for the employees. The initial data collection occurred in March 1990, after the program had begun. Thus the two rounds of data represent time periods that are best interpreted as "during" and "after" the intervention.

Indicators of Program Activity

Awareness of the program remains high, with 74 percent saying the company has an AIDS education program. Reports of attending a talk at work remained high (64% to 69%), although the percentage who said the talks were conducted by someone at work declined (18% to 9%). The number who reported talking to a workplace educator about AIDS also declined (56% to 37%, chi square 3.9, $p < .05$). Although responses indicating program activity have declined, the majority of employees (71%) reported attending a talk or talking to a workplace educator (down from 80%).

Changes in Knowledge and Attitudes

Basic knowledge levels continue to be high. Only a few knowledge items show changes. Unprompted mention of mother to child transmission increased from 10% to 29% (chi square 7.2, $p < .01$). The number who mention condoms as a way to prevent AIDS continues to be less than 10 percent.

The percent who believed that AIDS might be spread by used clothing remains high (33% to 37%), as did the percent who were afraid of catching AIDS by working next to someone (28% to 29%) and the percent who believe workers with AIDS should be dismissed (48% to 43%).

Beliefs about personal susceptibility to AIDS have not changed significantly, and more than a third (37%) still say they do not think they can get AIDS (down from 45%).

Perceptions of the behavior of friends and of men in the workplace show minor changes. One perception showed a significant change, which was an increase in the percent who

believed that women at work were using condoms (20% to 40%, chi square = 5.7, $p < .02$).

Changes in Reported Behavior and Condom Use

None of the indicators of reported behavior changed significantly.

There were no differences in the reported number of sexual partners (mean 1.3). There were no significant changes in the percent who reported more than one partner (26% to 23%) or the percent of sexually active persons who used a condom in the last two months (8% to 3%). The proportion who said the reason they didn't use condoms because they were unfamiliar increased significantly (23% to 52%, chi square 9.1, $p < .01$), as did the percentage who said it would be difficult to ask a partner to use a condom (41% to 77%, chi square 9.8, $p < .01$).

Although there was a significant association between condom use and attending a talk or talking to workplace educator in the March survey, condom use declined slightly in November, and there was no association between exposure to the AIDS program and condom use in the second survey.

Summary

Indicators of program activity were high in March immediately after the program had been implemented. At that time there was an association between exposure to the program and using a condom in the last two months, suggesting some effect of the initial program on behavior. However, many of the indicators of program activity are showing decreases, suggesting that the program begins to lose momentum a few months after implementation.

At present major obstacles to protective behavior are unfamiliarity with condom use and difficulty in talking with partners. A focus on condom skills and negotiation with sexual partners should be emphasized in future program activities.

3. SITE C

Background

Site C is a manufacturing facility in Kampala with a total employee population of approximately 500. Site C has been involved in the FUE AIDS program since January 1990, when the first training of trainers occurred. Additional workers were trained in March 1990, and an on-site training was conducted in August 1990. Prior to beginning the FUE AIDS program, the company had an active family planning program with several employees who were trained as motivators and distributed condoms. The baseline survey from March occurred before implementation of the FUE AIDS program, but after the existence of an active family planning and condom distribution program. The November survey occurred while the FUE program was being implemented and prior to a second training of peer educators.

Caution is needed in comparing the results from the two surveys. In November, the average educational level was significantly lower.

Indicators of Program Activity

The number of employees who said the company had an AIDS education program increased significantly (44% to 75%, chi square 15.4, $p < .001$). Reports of attending a talk at work about AIDS also increased significantly (17% to 35%, chi square 7.2, $p < .01$). The percentage who said they attended a talk conducted by someone at work was low (6%), reflecting the fact that the trainings were conducted as workshops with outside speakers. The number who reported talking to a workplace educator about AIDS did not change significantly (23% to 26%), which suggests that the family planning workers may have talked about AIDS before implementation of the FUE program.

Changes in Knowledge and Attitudes

There were few changes in basic knowledge levels, which are high. One notable change was a decrease in mentioning condoms as a way to prevent AIDS (20% to 10%). The percent who believed that AIDS might be spread by used clothing did not change significantly (27% to 22%), nor did the percent who were afraid of catching AIDS by working next to someone (26% to 31%). The percent who believe workers with AIDS should be dismissed showed the lowest level of all sites at both points in time (15% to 9%).

Beliefs about personal susceptibility to AIDS have changed, with an increase from 10% to 38% in those who think it is very likely they will get AIDS (chi square 23.0, $p < .001$). Thirty-three percent still say they do not think they will get AIDS.

Perceptions of the behavior of friends and of men in the workplace show two significant changes. The perception that friends were using condoms decreased (47% to 31%, chi square 4.2, $p < .05$), as did the perception men at work were using condoms (51% to 26%, chi square 10.9, $p < .01$). In contrast, the number who believed that women at work were using condoms increased from 15 to 26 percent, a trend apparent in several sites.

Changes in Reported Behavior and Condom Use

The mean number of sexual partners reported did not change significantly (1.3 to 1.5), nor did the overall percent who reported more than one partner (33% to 36%). Measures of condom use were high at baseline but dropped, including use in the last two months (17% to 8%), and use in the last two months among those with multiple partners (25% to 10%).

The major shift in reasons for not using condoms was an increase in those who said condoms were not safe (1% to 22%). Slightly more people said they didn't like condoms (21% to 27%), but fewer said the reason was that they trusted their partners (58% to 41%). Saying that condoms are unfamiliar remains relatively low (18% to 14%). The interview data is consistent with anecdotal reports that many of the employees had lost confidence in condoms as a way to prevent sexually transmitted diseases. Company records indicate that condom distribution peaked in January 1990, before the AIDS training began. After that there was a steady decline until July, after which distribution returned to 1989 levels.

Summary

The results show some program activity in the form of attendance at talks and awareness of the program among employees. There is little evidence of changes in person to person communication by peer educators.

There is no evidence of an increase in safer behavior, and condom use has declined from the high levels that existed prior to the AIDS training and during the family planning effort. A variety of measures suggest that lack of confidence in condom effectiveness is a major factor. Addressing this issue should be a high priority for the newly trained peer educators.

At present the major obstacles to protective behavior are unfamiliarity with condom use and difficulty in talking with partners. A focus on condom skills and negotiation with sexual partners should be emphasized in future program activities.

4. SITE E

Background

Site E is a community-based organization that conducts a variety of training programs for young women. The first training of trainers was conducted by EIL in March 1990, and a training of peer educators occurred in July.

Indicators of Program Activity

There were moderate increases in the number who said the organization had an AIDS education program (28% to 42%) and in those who attended a talk about AIDS (23% to 33%). Few said the talks were conducted by someone in the organization (1% to 2%). The number who reported talking to a peer educator remains low (14% to 6%).

Changes in Knowledge and Attitudes

There was a significant increase in overall knowledge score (a measure of correct knowledge about transmission routes). The increase in mean score (2.1 to 2.8) is mainly a function of the fact that more mentioned blood transfusions and mother to child transmission. There was an increase in the number who mentioned condoms as a way to prevent AIDS (11% to 24%, chi square 4.6, $p < .05$).

The belief that AIDS can be spread by used clothing was low at baseline and decreased (12% to 6%). The proportion who said they were afraid of catching AIDS by working next to someone remains high (40% to 35%) as does the percent who believe workers with AIDS should be dismissed from their jobs (44% to 47%).

Beliefs about personal susceptibility to AIDS show a shift from saying one is not susceptible to AIDS (46% to 31%) to saying that they don't know (16% to 33%).

Perceptions of the behavior of others of men in the workplace show minor changes. Sixty percent continue to report the belief that their friends use condoms. There was a significant increase in the perception that men in the organization used condoms (33% to 52%, chi square = 4.6, $p < .05$) as well as an increase in the perception that women in the organization were using condoms (38% to 47%, not significant).

Changes in Reported Behavior and Condom Use

There was a slight increase in the mean number of reported partners (0.6 to 0.8) and the percent who reported multiple partners increased significantly (5% to 20%, chi square 8.9,

$p < .01$). The number who said they were not sexually active remained high (49% to 46%).

Among those who were sexually active, there was a significant increase in the number who reported using a condom in the last two months (10% to 43%, chi square 12.6, $p < .001$). Sixteen percent of those with one partner and 27% of those with more than one partner say that they always use a condom. In addition, there was a decrease in the percent who said it would be difficult to ask a partner to use a condom (64% to 45%, chi square 3.9, $p < .05$).

Condom use was higher in those who said they attended a talk about AIDS, but it also showed an increase among those who did not attend, and was high among sexually active women who had just joined the organization in October (4 out of 7, 57%).

Summary

Measures of program activity indicate a slight increase in the number who have attended talks about AIDS. Few report talking to a peer educator.

Although there is minimal evidence of program activity, there has been a significant increase in knowledge about AIDS, and in condom use among sexually active women. It is possible that part of the change in condom use reflects a trend among young urban women. Because this is the only site with a significant number of women, this hypothesis cannot be tested definitively.

In any case, the peer education program can stimulate and reinforce any such trend. Efforts here should focus on maintaining protective behavior and increasing consistency of condom use. Fears about casual contact and the belief that those with AIDS should be dismissed from their jobs remain high priorities in this site.

5. SITES F AND G

Background

Sites F and G are civil service organizations in the Kampala area with employee populations of 200 and 500 respectively. Site G has been involved in the EIL AIDS program since June 1990. Site F had not yet received any training from the EIL trainers, but was scheduled to begin the program after the survey in November. Interviews were carried out at both sites in November 1990. In this analysis, the two sites are compared, with site G designated an intervention site, and site F considered a control site with no intervention. These results should be interpreted with caution, as there are slight differences in basic demographics. The sample in the control site was younger (mean age 26 versus 28 years) and had a larger percentage of females (17% versus 6%). Educational level was similar in the two sites.

Indicators of Program Activity

The percentage who had attended a talk about AIDS was significantly higher in the intervention site (9% versus 25%, chi square 4.5, $p < .05$). More in the intervention site said that there was an AIDS education program (19% versus 27%) although the difference was not statistically significant. There was also not a significant difference in the number who said there was someone in the organization who talked to workers about AIDS (28% versus 23%).

Changes in Knowledge and Attitudes

There were no significant differences in knowledge about AIDS. The number who mentioned condoms as a way to prevent AIDS was lower in the intervention site (13% versus 10%). The belief that AIDS can be spread by used clothing was low at both sites (10% versus 12%). The proportion who said they were afraid of catching AIDS by working next to someone was similar (32% versus 27%) as was the percentage who thought someone with AIDS should be dismissed from their job (34% versus 33%). Beliefs about personal susceptibility to AIDS were also similar, with over 40% in both sites saying they didn't think they could get AIDS.

Perceptions of the behavior of others do show some differences. The number who thought their friends were using condoms was significantly higher in the intervention site (55% versus 75%, chi square 4.7, $p < .03$), although the number who said their friends had more than one partner was the same (77%). Similarly, more in the intervention site said the men at work used condoms (42% versus 58%) and that the women at work used condoms (21% versus 39%). The findings were statistically significant for believing women at work used condoms (chi square = 4.0, $p < .05$).

Changes in Reported Behavior and Condom Use

There was no difference in the mean number of sexual partners reported (1.0 versus 1.1). The percent who reported more than one partner was slightly higher in the intervention site (11% versus 21%).

Although not statistically significant, the number who reported using a condom in the last two months was higher at the intervention site (2% versus 9%). More at the intervention site knew of places to get condoms (57% versus 75%). There was no difference in saying it would be difficult to ask a partner to use a condom (50%). The most common reason for not using a condom was trusting one's partner in both sites (67% versus 70%).

Condom use was higher in those who said they attended a talk about AIDS at both sites, indicating little difference between talks at the control and intervention sites. With regard to peer education, there was no association between using a condom and talking to someone about AIDS in the workplace at the intervention site (8% of those who talked to someone, 9% of those who did not talk).

Summary

In spite of slight differences in age and sex between the two site, they are remarkably similar in a variety of measures of AIDS knowledge and attitudes.

The measures of program activity suggest that few in the intervention site have been reached by peer educators, although slightly more have attended a talk. The results suggest that in the absence of the EIL initiated training, some form of AIDS prevention initiative was taken independently at site F.

At the intervention site, slightly more report using condoms, and significantly more think their friends are using condoms.

6. SITE H

Background

Site H is a large company in Jinja with an employee population of approximately 2,600. The data collected in November are the baseline for this site. Training was scheduled to begin after the survey.

Individual Characteristics

The majority of employees surveyed were male (82%) and had completed a primary school education (86%). The mean age was 33. Ninety-five percent were married or had a steady partner.

Knowledge and Attitudes about AIDS

Overall knowledge of AIDS is high, with 98% mentioning sex as a means of transmission. However, 30% are afraid of catching AIDS by working next to someone, and 42% think someone with AIDS should be dismissed from their job.

Most (58%) think it is possible they could get AIDS. Twenty-six percent say they do not think they will get AIDS, and 15% say they don't know. Almost everyone (97%) believes they can prevent getting AIDS. The most common means of prevention were staying with one partner or being faithful (75%) and using clean needles (52%). Thirteen percent mentioned condoms as a means of prevention.

Reported Behavior and Perceptions of Others Behavior

Nineteen percent reported having more than one partner, although more than half said that their friends and the people at work had more than one partner.

Twenty percent had used a condom in the past, but only 6% had used one in the last two months. Condom use was higher in those who had more than one partner (17%). Almost half (42%) said they thought their friends were using condoms.

The percentage who say it would be difficult to ask a partner to use a condom was high (71%). The most common reason given for not using a condom was that they trusted their partner (44%). Being unfamiliar with condoms was the next most common response (41%). Less than half (44%) knew of places to get condoms, and 6% said their reason for not using condoms was that they couldn't get them.

Summary

Knowledge about AIDS is high at site H. Areas for intervention include fears about casual contact and negative attitudes toward workers with AIDS. Special attention should be given to condom availability.

Appendix A. Individual characteristics and exposure to program
Sites A, D and H

Site	A		D	H
	Time 1	Time 2		
Sample size	84	135	189	91
Male %	71.4	83.0	89.4	82.4
Female %	28.6	17.0	10.6	17.6
Mean age	31.3	31.5	34.5	32.8
Married %	67.9	61.5	89.9	80.2
Steady partner %	11.9	17.8	5.8	14.3
No partner %	20.2	20.7	4.3	5.5
Education % Completed primary or higher	50.0	22.2	76.2	85.7
Read %				
English	63.9	32.6	72.5	90.1
Other language	73.8	55.6	93.7	94.5
Media exposure % at least 1x weekly				
Newspaper	58.3	28.1	87.2	87.9
Radio	74.7	70.4	97.9	89.0
TV	11.1	5.2	30.1	28.6
Says company has AIDS education program	15.5	5.9	5.8	5.5
Attended talk	19.0	4.4	3.2	4.4
Someone from work	6.0	0.7	2.6	2.2
From outside	13.1	1.5	0.5	2.2
Talked to peer educator				
Unprompted	4.8	0.7	0.5	1.1
Prompted	10.7	1.5	6.9	15.4

Appendix B. Knowledge and attitudes related to AIDS
Sites A, D and H

Site	A		D	H
	Time 1	Time 2	Time 1	Time 2
Aware of AIDS	84.5	78.5	94.2	96.7
aware only of slim	11.9	21.5	5.8	3.3
How can someone get AIDS?				
Sex	73.8	74.1	96.8	97.8
Blood transfusion	26.2	14.1	25.9	61.5
Needles	38.1	28.9	45.0	80.2
Mother to child	3.6	7.4	2.6	20.9
Insect bites	2.4	3.7	3.2	4.4
Used clothing	0.0	0.0	1.1	2.2
Witchcraft	1.2	0.0	0.5	1.1
Don't know	21.4	25.9	2.1	2.2
Can AIDS be spread by:				
Healthy looking people	79.0	60.0	86.0	95.6
A mother to child				
during pregnancy	84.3	68.9	88.8	95.6
Used clothing	50.6	52.2	32.6	22.0
Can AIDS be cured by:				
Doctors	3.7	1.5	2.1	3.3
Medicine	1.2	0.7	2.1	3.3
How can someone prevent AIDS?				
One partner	54.8	50.4	83.1	74.7
Zero grazing	10.7	5.9	28.0	12.1
Love carefully	8.3	9.6	11.6	12.1
Abstain from sex	3.6	10.4	6.3	14.3
Condoms	4.8	3.7	2.1	13.2
Clean needles	28.6	12.6	21.7	51.6
Care with blood	9.5	8.9	6.9	27.5
Test before marriage	1.2	1.5	2.1	9.9
Don't know	18.5	27.4	1.1	5.6
Believes can prevent AIDS	71.8	68.7	94.1	96.7
What could you do to prevent AIDS? (asked of those who said they could prevent getting AIDS)				
One partner	51.2	43.0	82.5	70.3
Zero grazing	2.4	1.5	5.3	5.5
Love carefully	1.2	5.2	2.6	3.3
Abstain from sex	9.5	19.3	2.6	15.4
Condoms	7.1	2.2	2.1	12.1
Clean needles	17.9	15.6	7.4	31.9
Care with blood	7.1	5.9	2.1	15.4

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Appendix B. continued

Site	A Time 1	Time 2	D Time 1	H Time 2
Perceptions of others				
Friends				
More than one partner	52.4	48.5	52.1	58.2
Use condoms	12.2	10.6	23.4	41.8
Men at work				
More than one partner	46.9	42.7	43.6	59.3
Use condoms	9.9	5.6	17.7	33.0
Women at work				
More than one partner	50.0	48.5	35.8	56.0
Use condoms	8.8	1.6	7.5	25.3
Susceptibility				
No	41.7	38.5	44.4	26.4
Don't know	13.1	22.2	16.9	15.4
Yes, not likely	25.0	23.0	27.5	42.9
Very likely	20.2	16.3	11.1	15.4
Believe workers with AIDS should be dismissed				
	57.3	60.4	32.6	41.8
Afraid of catching AIDS by working next to someone				
	48.8	54.5	33.0	29.7
Mean knowledge score	1.3	1.1	1.5	2.4
Recognize condom	47.4	29.1	76.9	75.8
Unaware of condoms	27.4	40.7	7.4	4.4
Knows places to get condoms	25.0	20.0	52.9	44.0
Mentions worksite as a source of condoms	0.0	0.7	8.5	2.2

Appendix C. Reported behavior and condom use - Sites A, D and H

Site	A		D		H	
	Time 1	Time 2	Time 1	Time 2	Time 1	Time 2
Mean number of partners	1.0	1.2	1.5		1.3	
Percent with multiple partners	15.5	24.4	39.2		19.0	
Mean risk score	1.0	1.2	1.4		1.2	
Ever used a condom	9.6	5.3	17.6		19.8	
Use in last two months						
% all sexually active	2.9	1.8	2.2		5.7	
% multiple partners	0.0	3.0	5.4		16.7	
Reasons for not using condoms (% of those aware of condoms)						
Unfamiliar	73.6	41.7	27.0		40.6	
Not sexually active	5.7	12.5	2.8		1.4	
Partner objects	0.0	2.8	2.8		1.4	
Want children	0.0	1.4	0.7		10.1	
Trust partner	17.0	16.7	43.3		43.5	
Can't get	7.5	20.8	1.4		5.8	
Expense	1.9	2.8	0.0		2.9	
Don't like	1.9	4.2	9.2		2.9	
Not safe	5.7	0.0	6.4		2.9	
Dangerous	0.0	1.4	7.8		1.4	
Break	1.9	1.4	1.4		4.3	
Would never want to use (unprompted)	50.0	32.3	57.5		52.3	
Difficult to ask partner	66.7	72.6	62.1		71.1	
Unaware or unfamiliar	73.8	63.0	27.5		35.2	

Appendix D. Individual characteristics and exposure to program
Sites B and C

Site	B		C	
	Time 1	Time 2	Time 1	Time 2
Sample size	101	35	147	55
Male %	89.1	80.0	91.8	90.9
Female %	10.9	20.0	8.2	9.1
Mean age	33.8	34.6	33.8	35.2
Married %	91.1	91.4	86.4	89.1
Steady partner %	4.0	8.6	8.2	5.5
No partner %	4.9	0.0	5.4	5.5
Education % Completed primary or higher	69.9	71.4	92.5	80.0
Read %				
English	77.0	71.4	91.8	87.3
Other language	86.9	88.6	92.5	96.4
Media exposure % at least 1x weekly				
Newspaper	81.8	71.4	89.1	87.3
Radio	91.9	94.3	95.2	98.2
TV	29.3	14.3	40.8	58.2
Says company has AIDS education program	69.3	74.3	43.5	74.5
Attended talk	64.4	68.6	17.0	34.5
Someone from work	17.8	8.6	4.1	5.5
From outside	47.5	60.0	12.9	29.1
Talked to peer educator				
Unprompted	21.8	8.6	4.1	5.5
Prompted	56.4	37.1	23.1	25.5
Attend talks about condoms or negotiation	8.9	5.7	1.4	0.0
Peer educator talk about condoms/negot.	0.9	2.9	3.4	1.8

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Appendix E. Knowledge and attitudes related to AIDS
Sites B and C

Site	B		C	
	Time 1	Time 2	Time 1	Time 2
Aware of AIDS	97.0	88.6	97.3	100.0
aware only of slim	3.0	11.4	2.0	0.0
How can someone get AIDS?				
Sex	86.1	91.4	95.9	90.9
Blood transfusion	41.6	31.4	42.9	32.7
Needles	70.3	71.4	65.3	70.9
Mother to child	9.9	28.6	6.8	9.1
Insect bites	3.0	8.6	2.7	0.0
Used clothing	1.0	2.9	1.4	3.6
Witchcraft	0.0	2.9	0.0	0.0
Don't know	7.9	8.6	3.4	9.1
Can AIDS be spread by:				
Healthy looking people	94.9	88.6	87.7	85.5
A mother to child during pregnancy	75.2	85.7	84.8	89.1
Used clothing	33.3	37.1	26.7	21.8
Can AIDS be cured by:				
Doctors	9.2	2.9	4.1	0.0
Medicine	12.9	5.7	9.0	1.8
How can someone prevent AIDS?				
One partner	74.3	88.6	62.6	76.4
Zero grazing	18.8	14.3	28.6	23.6
Love carefully	5.9	8.6	12.9	3.6
Abstain from sex	6.9	8.6	6.1	12.7
Condoms	7.9	8.6	20.4	9.1
Clean needles	40.6	48.6	40.8	27.3
Care with blood	18.8	28.6	25.9	10.9
Test before marriage	4.0	11.4	4.1	9.1
Don't know	5.0	2.9	2.7	1.8
Believes can prevent AIDS				
prevent AIDS	93.9	100.0	84.9	81.8
What could you do to prevent AIDS? (asked of those who said they could prevent getting AIDS)				
One partner	76.2	77.1	48.3	56.4
Zero grazing	10.9	8.6	21.7	12.7
Love carefully	3.0	14.3	6.1	1.0
Abstain from sex	3.0	5.7	4.1	10.9
Condoms	9.9	8.6	15.0	7.3
Clean needles	35.6	37.1	21.8	12.7
Care with blood	10.9	25.7	12.2	7.3

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Appendix E. continued

Site	B		C	
	Time 1	Time 2	Time 1	Time 2
Perceptions of others				
Friends				
More than one partner	41.4	37.2	43.4	49.1
Use condoms	42.0	34.3	46.9	30.9
Men at work				
More than one partner	34.0	37.1	36.6	38.2
Use condoms	34.0	37.1	51.4	25.5
Women at work				
More than one partner	26.0	34.3	44.8	38.2
Use condoms	19.8	40.0	15.2	25.5
Susceptibility				
No	44.6	37.1	35.4	32.7
Don't know	10.9	11.4	15.0	3.6
Yes, not likely	31.7	34.3	40.1	25.5
Very likely	12.9	17.1	9.5	38.2
Believes workers with AIDS should be dismissed				
	47.5	42.9	15.2	9.1
Afraid of catching AIDS by working next to someone				
	28.0	28.6	26.2	30.9
Mean knowledge score				
	1.9	2.1	2.0	1.9
Recognize condom				
	82.2	77.1	91.1	92.7
Unaware of condoms				
	11.9	8.6	2.7	3.6
Knows places to get condoms				
	68.3	62.9	83.7	81.8
Mentions worksite as a source of condoms				
	39.6	34.3	74.1	34.5

Appendix F. Reported behavior and condom use - Sites B and C

Site	B		C	
	Time 1	Time 2	Time 1	Time 2
Mean number of partners	1.3	1.3	1.3	1.5
Percent with multiple partners	25.7	22.9	32.7	36.4
Mean risk score	1.2	1.3	1.3	1.4
Ever used a condom	11.1	8.6	38.0	27.8
Use in last two months				
% all sexually active	8.6	2.9	16.9	7.7
% multiple partners	23.1	0.0	25.0	10.0
Condom use last 2 mos. by exposure to program (Among those with at least one partner)				
Attended talk	13.3	0.0	17.4	10.5
Did not attend	0.0	9.1	16.8	6.1
Talked to peer ed.	13.2	0.0	25.8	0.0
Did not talk	2.5	4.6	14.3	10.5
Reasons for not using condoms (% of those aware of condoms)				
Unfamiliar	23.4	51.7	17.6	13.5
Not sexually active	2.6	0.0	0.0	2.7
Partner objects	1.3	0.0	3.5	2.7
Want children	3.9	3.4	3.5	2.7
Trust partner	62.5	48.3	57.6	40.5
Can't get	0.0	0.0	0.0	0.0
Expense	0.0	0.0	0.0	0.0
Don't like	14.3	17.2	21.2	27.3
Not safe	1.3	0.0	1.2	21.6
Dangerous	1.3	0.0	1.2	0.0
Break	0.0	0.0	1.2	2.7
Would never want to use (unprompted)	54.2	65.6	47.7	39.1
Difficult to ask partner	40.9	77.4	56.1	50.0
Unaware or unfamiliar	29.7	51.4	12.9	12.7

Appendix G. Individual characteristics and exposure to program
Sites E, F and G

Site	E		F	G
	Time 1	Time 2	Time 1	Time 2
Sample size	102	55	53	52
Male %	2.9	1.8	83.0	94.2
Female %	97.1	98.2	17.0	5.8
Mean age	22.9	23.2	25.5	28.1
Married %	21.6	20.0	66.0	69.2
Steady partner %	33.3	24.5	17.0	17.3
No partner %	45.1	55.1	17.0	13.5
Education % Completed primary or higher	92.2	83.6	100.0	98.1
Read %				
English	91.2	78.2	100.0	100.0
Other language	86.3	85.5		
Media exposure % at least 1x weekly				
Newspaper	81.2	63.6	98.1	100.0
Radio	92.1	89.1	100.0	100.0
TV	65.3	54.5	60.4	42.3
Says company has AIDS education program	28.4	41.8	18.9	26.9
Attended talk	22.5	32.7	9.4	25.0
Someone from work	0.9	1.8	1.9	9.6
From outside	21.6	30.9	5.7	17.3
Talked to peer educator				
Unprompted	2.9	3.6	1.9	3.8
Prompted	13.7	5.5	28.3	23.1
Attended talks about condoms or negotiation	2.9	3.6	0.0	0.0
Peer educator talk about condoms/negot.	0.0	1.8	0.0	0.0

Appendix H. Knowledge and attitudes related to AIDS
Sites E, F and G

Site	E		F		G	
	Time 1	Time 2	Time 1	Time 2	Time 1	Time 2
Aware of AIDS	100.0	100.0	100.0		100.0	
How can someone get AIDS?						
Sex	97.1	100.0	100.0		100.0	
Blood transfusion	53.9	74.5	71.7		57.7	
Needles	69.6	78.2	69.8		88.5	
Mother to child	10.8	32.7	7.5		15.4	
Insect bites	2.0	0.0	1.9		0.0	
Used clothing	1.0	0.0	0.0		0.0	
Witchcraft	2.0	0.0	3.8		0.0	
Don't know	1.0	0.0	0.0		0.0	
Can AIDS be spread by:						
Healthy looking people	94.1	92.7	90.6		96.2	
A mother to child during pregnancy	95.0	100.0	100.0		96.2	
Used clothing	11.9	5.5	9.4		11.5	
Can AIDS be cured by:						
Doctors	5.0	0.0	1.9		0.0	
Medicine	3.0	0.0	5.7		7.7	
How can someone prevent AIDS?						
One partner	62.7	74.5	75.5		78.8	
Zero grazing	7.8	3.6	26.4		13.5	
Love carefully	6.9	0.0	11.3		13.5	
Abstain from sex	36.3	18.2	5.7		0.0	
Condoms	10.8	23.6	13.2		9.6	
Clean needles	51.0	21.8	39.6		59.6	
Care with blood	29.4	18.2	24.5		40.4	
Test before marriage	9.8	9.1	11.3		11.5	
Don't know	1.0	0.0	0.0		0.0	
Believes can prevent AIDS	87.3	69.1	90.6		90.4	
What could you do to prevent AIDS? (asked of those who said they could prevent getting AIDS)						
One partner	36.3	32.7	69.8		69.2	
Zero grazing	1.0	0.0	1.9		5.8	
Love carefully	4.9	0.0	9.4		3.8	
Abstain from sex	34.3	30.9	7.5		9.6	
Condoms	6.9	12.7	1.9		7.7	
Clean needles	30.4	10.9	13.2		19.2	
Care with blood	16.7	10.9	7.5		9.6	

Appendix H. continued

Site	E		F		G	
	Time 1	Time 2	Time 1	Time 2	Time 1	Time 2
Perceptions of others						
Friends						
More than one partner	51.0	60.0	77.4		76.9	
Use condoms	59.8	60.0	54.7		75.0	
Men at work						
More than one partner	34.2	32.7	67.9		75.0	
Use condoms	32.9	51.9	41.5		57.7	
Women at work						
More than one partner	41.2	43.6	56.6		67.3	
Use condoms	38.2	47.3	20.8		38.5	
Susceptibility						
No	46.1	30.9	43.3		44.2	
Don't know	15.7	32.7	20.8		17.3	
Yes, not very likely	19.6	21.8	26.4		26.9	
Very likely	18.6	14.5	9.4		11.5	
Believe workers with AIDS should be dismissed						
	44.1	47.3	34.0		32.7	
Afraid of catching AIDS by working next to someone						
	40.2	34.5	32.1		26.9	
Mean knowledge score						
	2.1	2.8	2.4		2.6	
Recognize condom						
	68.6	81.8	94.3		96.2	
Unaware of condoms						
	6.9	14.5	0.0		0.0	
Knows places to get condoms						
	44.1	34.5	56.6		75.0	
Mentions worksite as a source of condoms						
	1.0	7.3	0.0		1.9	

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Appendix I. Reported behavior and condom use - Sites E, F and G

Site	E		F		G	
	Time 1	Time 2	Time 1	Time 2	Time 1	Time 2
Mean number of partners	0.6	0.8	1.0		1.1	
Percent with multiple partners	4.9	20.0	11.3		21.2	
Mean risk score	0.6	0.6	1.0		1.1	
Ever used a condom	14.7	26.4	11.8		34.0	
Use in last two months						
% sexually active	9.6	43.3	2.2		8.7	
% multiple partners	0.0	72.7	0.0		18.2	
Condom use last 2 mos. by exposure to program (Among those with at least one partner)						
Attended talk	12.5	60.0	20.0		15.4	
Did not attend	8.3	35.0	0.0		6.1	
Talked to peer ed.	14.3	100.0* (1)	7.7		8.3	
Did not talk	8.9	41.4	0.0		8.8	
Reasons for not using condoms (% of those aware of condoms)						
Unfamiliar	18.8	27.3	17.8		21.2	
Not sexually active	18.8	3.0	8.9		3.0	
Partner objects	6.3	0.0	4.4		0.0	
Want children	2.5	0.0	4.4		0.0	
Trust partner	23.8	18.2	66.7		69.7	
Can't get	0.0	0.0	0.0		0.0	
Expense	0.0	0.0	0.0		0.0	
Don't like	13.8	27.3	2.2		12.1	
Not safe	2.5	9.1	2.2		3.0	
Dangerous	10.0	0.0	0.0		0.0	
Break	3.8	0.0	0.0		0.0	
Would never want to use (unprompted)	40.4	30.4	32.6		34.1	
Difficult to ask partner	63.6	44.7	50.0		50.0	
Unaware or unfamiliar	21.6	30.9	15.1		13.5	

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