

HIV/AIDS PREVENTION:
**Knowledge, Attitudes, Sense of Efficacy, and Worries
about Becoming Infected Among a Group of Jewish
Adolescents and Young Adults in the
Greater New York Metropolitan Area**

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The likelihood of sexual activity among Jewish adolescents and young adults, coupled with their knowledge deficits about AIDS, perceived social pressures to engage in high-risk behavior, and their discomfort with some risk-reduction behaviors strongly suggests the need for continued HIV/AIDS prevention and education efforts. These efforts should be targeted to those who have never attended an HIV/AIDS prevention workshop, younger adolescents, and males.

In 1988, UJA-Federation of New York, working in conjunction with the Jewish Board of Family and Children's Services, F.E.G.S. Long Island Division, and Westchester Jewish Community Services, developed the first HIV/AIDS prevention/education programs specifically targeted to the Jewish community of New York. These programs were established in response to emerging evidence that the Jewish community was at risk and was in fact already being significantly affected by this epidemic. At that time it was estimated that approximately 15,000 Jewish people were HIV-positive in the Greater New York Metropolitan area (Rosenberg & Trugerman, 1993). These estimates were supported by data from the New York Jewish Population Study, which revealed that in 1991 approximately 7,300 Jewish households were using HIV/AIDS services (Horowitz, 1993).

The initial formulation of the program was based on the assumption that providing prevention/education workshops would help slow the spread of HIV by reducing the extent to which members of the Jewish community put themselves at unnecessary risk. A second goal was to increase the likelihood that anyone affected by the disease would be treated with compassion. Finally, these programs were developed to reach the more religious segments of the Jewish community that anecdotal feedback suggested were not using the prevention programs targeted to the general population.

Over the course of the last nine years, feedback from our trainers as well as emerging literature suggested that adolescents and college-aged young adults were at particular risk to contract HIV/AIDS. Not only were they likely to be sexually active (Guttmacher

Institute, 1994) but their tendency to see themselves as invulnerable made them less likely to exercise preventive measures. Additionally, many adolescents were dealing with issues of self-esteem, substance use, and, at times, intense peer pressure, all of which tended to increase their vulnerability. Concern had also been raised about restrictions on school-based prevention services, limitations in the information that is conveyed about HIV/AIDS, and lack of access to service providers (New York City HIV Prevention Planning Group, 1997). Finally, the recent messages in the media implying that people with HIV/AIDS can now be cured because of advances in treatment may also be encouraging people to let down their guard with respect to HIV.

Although the heightened risk to adolescents has been well documented (Richardson, 1997), there is a paucity of studies that examine the phenomenon of HIV/AIDS among Jewish adolescents and young adults. As a result, planners have had to rely on extrapolations from studies of the general community to draw conclusions about the risk of contracting HIV/AIDS to Jewish adolescents. Such extrapolations have run the risk of being misleading because studies of the general population seldom include many Jewish subjects (Gold, 1997).

At this time, we do know that Jewish teens are worried about issues related to being sexually active. Sales (1997) found that 40 percent of a sample of Jewish teens in grades 7 through 12, from all of the branches of Judaism, identified being sexually active as a major concern. Except for this study, however, there were virtually no data regarding how the attitudes and behaviors of Jewish adolescents were similar to or different from other population groups. As a result, planners, and service providers have had to rely on anecdotal information to guide the design, funding, and implementation of interventions.

In addition to the lack of information specific to Jewish adolescents, the New York community had another reason for initiating the current study. Our experience, similar to

that of many prevention providers, led us to conclude that knowledge alone did not necessarily lead to behavior change (Fisher & Fisher, 1992). Over time, a model evolved that assumed that prevention/education efforts would be most effective when they focused on information (knowing the facts about transmission and prevention), motivation (increasing the desire to want to reduce risk), and efficacy (building confidence that one can take specific actions to reduce risks). Although informal feedback has revealed that this approach is in fact appropriately targeted, we lacked empirical data to support this assertion.

In summary, the primary reason for the current study was to generate information about Jewish adolescents and college-aged young adults that would help determine (1) to what extent HIV/AIDS programs were in fact needed in the Greater New York Jewish community, (2) whether specific subgroups should be targeted, and (3) to what extent our current prevention model addresses the needs of New York's Jewish adolescent and young adult community.

METHODOLOGY

The primary goal of this study was to develop a better understanding of the needs of Jewish adolescents and college-aged young adults who attended HIV/AIDS prevention workshops in Jewish institutional settings. Specifically we hoped to: (a) determine pre-workshop baselines regarding knowledge of how the virus is transmitted and preventive behaviors, (b) attitudes about being sexually active and practicing risk-reduction behaviors, (c) perceptions of social norms, (d) sense of efficacy of preventive behaviors, and (e) worries about becoming infected. We also aimed to assess how age, gender, and participation in previous HIV/AIDS preventive workshops influenced items a through e above.

Sample

This study does not claim to reflect the attitudes of all Jewish teens, but instead represent the attitudes of those Jewish teens who

attended HIV/AIDS prevention programs sponsored by Jewish organizations. In most settings, attendance was required. As a result, the sample was not pre-selected for students interested in the topic.

The sample was drawn from participants in 19 HIV/AIDS prevention programs sponsored by UJA-Federation and provided by the Jewish Board of Family and Children's Services throughout the five boroughs of New York City and by F.E.G.S Long Island Division in Nassau and Suffolk counties on Long Island. The 19 workshops were held between September 1995 and December 1996, and a total of 443 participants completed the questionnaire (Table 1).

The median age of the sample was 16. Approximately three-quarters of the participants had previously attended at least one HIV/AIDS prevention workshop, and 20 percent had attended five or more. Approximately one-third were attending the work-

shop at a Jewish-sponsored camp. The males in the sample tended to be older and were less likely to have previously attended an HIV/AIDS prevention workshop.

Description of HIV/AIDS Prevention Programs

The HIV/AIDS prevention/education programs funded by UJA-Federation of New York included as their primary targets the Jewish community and the clients served by Jewish communal agencies. The programs offered were free of charge and available to interested groups from synagogues, Jewish Community Centers, youth groups, and other Jewish organizations. Although the participants in these programs ranged in age from 10 years to adulthood, this study included only those workshops targeted to Jewish adolescents and young adults.

A goal of the program was to increase the Jewish community's sensitivity around is-

Table 1. Characteristics of Sample

	<u>n</u>	<u>%</u>
All Respondents	443	100
Gender		
Female	247	57
Male	189	43
Age		
13-15	166	39
16-18	164	38
19 and over	107	24
Number of Previous HIV/AIDS Workshops		
0	114	27
1-2	142	33
3-5	87	20
More than 5	88	20
Host Organization Type		
Camp	144	33
College	76	17
Day School	72	16
Hebrew School	26	6
Jewish Community Center	94	21
Synagogue	28	6
Other	3	1

sues related to HIV/AIDS. Jewish values are incorporated into every presentation, giving the workshops cultural significance. The pre-existing linkages in the UJA-Federation network provided access to groups that may not have been receiving this education elsewhere. Trainers worked with each group to develop a workshop that fit their needs, concerns, and traditions regarding risk reduction and abstinence. Programs included both single-session and multi-session workshops, staff trainings, peer education groups, parent-teen communication trainings, conference presentations, and advocacy programs.

Method

Each participant was asked to complete an anonymous 37-item Likert-type questionnaire at the beginning of the first workshop session. The questionnaire elicited responses in five areas.

1. *knowledge* of how the virus is transmitted, course of illness, and testing
2. *attitudes* regarding sexually activity, practicing risk-reduction behaviors (e.g., condom use), and being tested for HIV infection
3. *perceived social norms* (peer attitudes) regarding being sexually active and practicing risk-reduction behaviors
4. *sense of efficacy*, defined as how easy/difficult it would be for them to negotiate prevention with partners, take risk-education measures, and avoid high-risk situations
5. *worries about becoming infected*, defined as the degree to which respondents expressed that they were worried that they or their friends might become infected with HIV/AIDS

Statistical Analysis

Descriptive results were based on frequency counts of each of the questions included in the questionnaire. The mitigating effects of gender, age, and number of previous workshops attended were determined via chi square analyses.

FINDINGS

Knowledge

Examination of Table 2 reveals that significant knowledge gaps persist among the Jewish teens we studied. For example, 42 percent did not know when testing is best done, 38 percent did not know that petroleum jelly or oil could damage latex, 24 percent believed that saliva transmits the virus, and 49 percent did not know the average time between infection and symptoms. Additionally, certain myths (e.g., mosquitoes transmit the virus) persist for some (26%).

Attending prevention workshops seemed to have a direct positive effect on HIV/AIDS preventive knowledge. The more workshops attended, the more knowledge. For example, only 40 percent of participants with no prior workshop experience knew when HIV/AIDS testing is best done, as compared with the more than 75 percent of those who had attended at least five prior workshops. Age was less clearly related to knowledge. This finding suggests that the direct positive relationship between number of previous workshops attended and knowledge is not just an artifact of adolescents learning more in the course of getting older and instead suggests that an active intervention is needed.

Attitudes

In this study of Jewish adolescents, approximately two-thirds of the participants agreed with the statement that it was OK for people their age to be having sexual intercourse. Older respondents ($X^2 = 114.247$, $p < .0001$) and male respondents ($X^2 = 10.13$, $p < .01$) were significantly more likely to agree with the statement (Figure 1).

The vast majority (92%) of adolescents and young adults who participated in this study felt that one should always use a condom during intercourse. However, male respondents were significantly less likely to strongly agree with the statement ($X^2 = 21.95$, $p < .0001$). Additionally, respondents who had never attended a workshop were significantly less

Table 2. Percent Responding Incorrectly to Knowledge Questions

<u>Knowledge Question</u>	<u>% Responding Incorrectly</u>
HIV/AIDS testing is best done 6 months after exposure.	42
The AIDS-causing virus is <i>not</i> transmitted by mosquitoes, similar to malaria.	26
The average time between infection with HIV and the onset of (AIDS) illness is over 8 years.	49
Vaseline petroleum jelly and oil damage latex.	38
A person who has unprotected intercourse with someone with HIV may not get infected.	33
A person can get infected with HIV by performing oral sex on a man who has HIV.	14
A person can get infected with HIV by performing oral sex on a woman who has HIV.	19
Blood transmits HIV.	4
Breast milk transmits HIV.	51
Saliva does not transmit HIV.	24
Semen transmits HIV.	9
Sweat does not transmit HIV.	6
Tears do not transmit HIV.	4
Urine does not transmit HIV.	14
Vaginal fluid transmits HIV.	12

likely to agree with the statement that one should always wear a condom during intercourse ($X^2 = 12.70, p < .05$). (However, the total number of previous workshops attended beyond one or two did not appear to affect this attitude.)

Nearly 95 percent of respondents strongly agreed or agreed with the statement, "If I

thought I had been exposed to the HIV virus, I would want to be tested." For the most part (74%), respondents stated that if they wanted to be tested they would know where to go. Respondents who had attended prior workshops were significantly more likely to know where to go to be tested ($X^2 = 16.77, p < .001$).

Figure 1. Answers to: "I think it's OK for people my age to be having sexual intercourse."

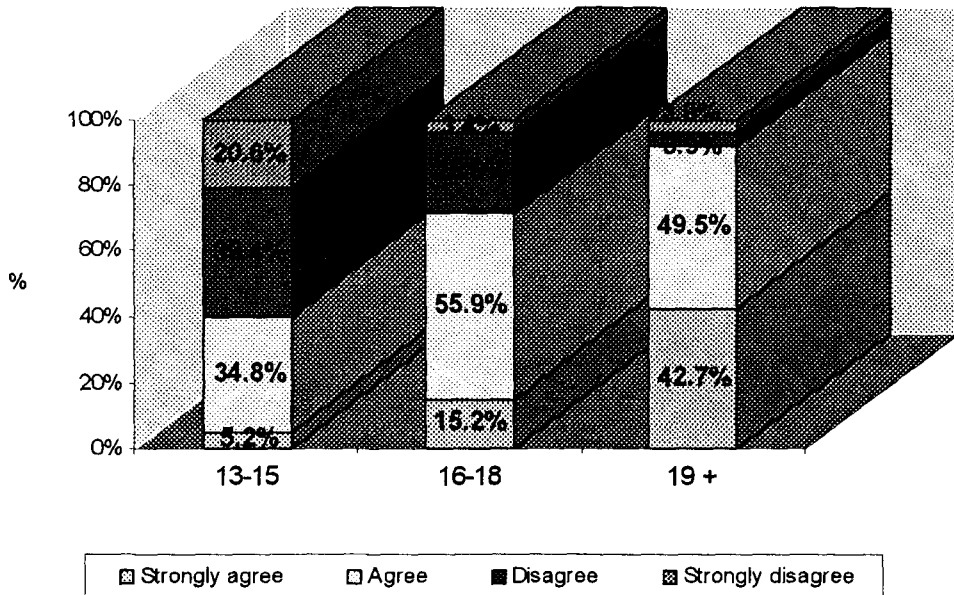


Table 3. Efficacy Questions: Percent Answering Difficult or Very Difficult

<u>Percent responding that it would be difficult or very difficult to:</u>	<u>Percent</u>
Bring up AIDS with a steady lover (someone you have an ongoing relationship with).	31
Bring up AIDS during a casual sexual encounter (one-night stand or casual boyfriend/girlfriend).	61
Tell your partner you would like a condom to be used when you have sexual intercourse.	12
Refuse to have sexual intercourse if your partner will not let a condom be used.	24
Refuse to drink alcohol with a group of friends who ask you to join in.	28
Refuse to do drugs with a group of friends who ask you to join in.	16
Stick to a decision to abstain from having sexual intercourse.	42
Buy condoms at a nearby store.	33
Make sure you had condoms handy whenever you might have sex.	20

Perceived Social Norms

Respondents were more likely to agree or strongly agree with the statement, "My friends think it is OK for people my age to be having sexual intercourse" (77%), than to agree or strongly agree with the statement, "I think it's OK" (65%). Older respondents were significantly more likely to agree with statements that their friends thought it was OK to be having sexual intercourse ($X^2 = 109.51$, $p < .0001$).

The vast majority of respondents (87%) agreed or strongly agreed with the statement, "My friends think you should always use a condom during intercourse." Female respondents were significantly more likely to agree with the statement ($X^2 = 15.4$, $p < .01$), and interestingly, the oldest respondents were most likely to disagree ($X^2 = 12.77$, $p < .05$).

Efficacy

Examination of Table 3 reveals that 31 percent of workshop participants responded that it would be difficult or very difficult to bring up the topic of HIV/AIDS with a steady lover, whereas 61 percent noted that bringing up HIV/AIDS would be difficult or very difficult during a more casual sexual encounter. While a relatively small number (12%) noted that it would be difficult or very difficult to tell a partner they would like a condom used during intercourse, 24 percent reported it would difficult or very difficult to refuse

intercourse if a partner would not let a condom be used. More than 40 percent thought it would be difficult to stick to a decision to abstain from intercourse, and 28 percent thought it would be difficult to refuse to drink alcohol when friends asked them to join in.

Our findings revealed a direct relationship between age and sense of efficacy. Older Jewish adolescents thought it would be easier to practice preventive behaviors than their younger counterparts. For example, whereas only 15 percent of 13- to 15-year-olds responded that it would be very easy to bring up the topic of HIV/AIDS with a steady partner, that percent increased to 34 percent among 16- to 18-year-olds and to 44 percent among those over 18. Significant age differences were evident for every efficacy question noted in Table 3, except for the question that asked how difficult it would be to abstain from intercourse.

Male subjects were significantly more likely to say it would be difficult to refuse intercourse if the partner would not let a condom be used ($X^2 = 12.97$, $p < .01$). They were also more likely to feel it would be difficult to stick to a decision to abstain from intercourse ($X^2 = 8.50$, $p < .04$) and to refuse to drink alcohol ($X^2 = 8.08$, $p < .05$). Female subjects were more apt to state that it would be difficult for them to purchase condoms from a nearby store ($X^2 = 13.14$, $p < .01$).

Respondents who had participated in prior workshops reported significantly greater effi-

cacious feelings than respondents who had never attended an HIV/AIDS prevention workshop. Respondents with prior workshop experience were more likely to say it would be easy or very easy to bring up the topic of HIV/AIDS with a steady lover ($X^2 = 9.24, p < .03$), suggest condom use during intercourse ($X^2 = 27.60, p < .0001$), and refuse to have intercourse without a condom ($X^2 = 17.90, p < .0001$). Beyond attending one workshop, the number of prior workshops attended did not appear to effect the sense of efficacy. That is, significant differences were not found between respondents who had attended one or two versus several workshops.

Worries About Becoming Infected

Approximately half of the respondents were at least somewhat worried that they might become infected with HIV/AIDS, and 15 percent were very worried. Seventy percent were at least somewhat worried about their friends becoming infected, and 22 percent were very worried. Female subjects ($X^2 = 14.00, p < .01$) and older subjects ($X^2 = 13.36, p < .04$) were significantly more worried about their friends becoming infected.

DISCUSSION

Need for Continued Prevention Efforts

The study findings support the conclusion that HIV/AIDS prevention/education programs specifically designed for Jewish teens and young adults are fulfilling an important community need. Although we did not ask respondents directly about their sexual behavior, our attitudinal data strongly suggest that a significant proportion of this target population is likely to be sexually active and that many may be engaging in intercourse as young as age thirteen. Although the adolescents in our sample clearly indicated that they understood the importance of risk-reducing behaviors, they also indicated that in certain circumstances (e.g., bringing up HIV/AIDS with casual partners), it might be difficult for them to practice these behaviors. We also

know that knowledge gaps persist and that at least half of the Jewish young adults who participated in our programs were worried that they would become infected with HIV. The likelihood of sexual activity when considered in conjunction with (1) knowledge deficits, (2) perceived social pressures, and (3) expressed discomfort with selected preventive behaviors strongly suggests the need for continued prevention efforts.

Targeting Interventions

In the ideal world, resources would be available to provide HIV/AIDS prevention to all Jewish adolescents and young adults. Unfortunately, resources are limited, and as a result, interventions need to be targeted to where they are most needed. Our study points to three populations who may require special attention: people who have never attended an HIV/AIDS prevention workshop, younger adolescents, and males.

Attending one or two HIV/AIDS prevention workshops is clearly associated with increased knowledge, enhanced comfort with effecting risk-reduction behaviors, and increased likelihood of believing that a condom should always be worn during intercourse. However, with the exception of increasing knowledge, the additive positive effects of subsequent workshops were not evident. Sense of efficacy in particular did not change after one or two workshops. This finding seems contrary to the conventional wisdom that the more workshops someone attends, the better.

The absence of significant effects beyond one or two workshops should be interpreted with caution. We know little about the nature of the previous workshops attended by our sample, whether for example the programs used single or multi-session formats. Additionally, until recently many prevention programs focused almost exclusively on knowledge (Fisher & Fisher, 1992; Silin, 1992), a domain that was in fact directly affected by attending additional workshops. The explicit focus on efficacy and motivation has been a more recent innovation in HIV/AIDS preven-

tion efforts, the effects of which may not as yet be visible. Also non-significant effects beyond one or two workshops may represent a statistical artifact reflecting the limited opportunity for variance. That is, once someone has attended one or two workshops, their attitudes and sense of efficacy may have changed to the point where additional change would be difficult to detect.

What we can say unequivocally is that attending an HIV/AIDS prevention workshop is associated with greater knowledge, a more positive attitude toward prevention, and a greater sense of efficacy regarding risk-reduction behaviors. Given that a significant number of Jewish adolescents may not have attended an AIDS prevention workshop (26 percent of our sample had not), we recommend that policymakers attempt to ensure that target populations have access to at least one HIV/AIDS prevention workshop. This would suggest continued outreach to venues that do not have access to or are not interested in the AIDS prevention programs directed to the general community—often settings outside the public education system. Additionally, the number of Jewish adolescents who will not receive prevention services in the public schools is likely to increase as government-funded HIV/AIDS prevention increasingly focuses on self-identified high-risk groups.

The second group we identified as being at a potentially heightened risk are younger adolescents. The youngest Jewish teens (13- to 15-years-old) were not as knowledgeable as their older counterparts and were significantly less comfortable with preventive behavior. At the same time 40 percent indicated that they thought it was OK to be engaged in sexual intercourse at their age. These data coincide with the national trends indicating that a large proportion of people infected with HIV/AIDS contracted the virus during adolescence (Silin, 1992).

This finding is important in that introducing prevention efforts for younger adolescents often meets with the greatest community resistance. Some have argued that HIV/AIDS prevention education encourages ado-

lescents to become sexually active. Yet, substantial evidence is emerging that indicates that HIV/AIDS prevention programs do not hasten the onset of sexual activity (Kirby, et. a., 1994; Richardson, 1997).

The third group that may require special attention is males. Adolescent boys were more likely to note that they (1) would find it difficult sticking to a decision to abstain from sexual activity, (2) felt less peer pressure to use condoms, and (3) were less likely to think that they should always wear a condom during intercourse. It is also interesting to note that there were substantially fewer males in our sample than females. Given that sessions were generally mandatory, the under-representation of males may reflect the gender distribution of participants in institutional Jewish programs. This raises the question of how best to reach young Jewish males or for that matter any Jewish adolescent who is not connected with a Jewish institutional setting.

Appropriateness of the Current Model of HIV/AIDS Education

As noted above, over time the agencies involved in this study made a conscious effort to build a comprehensive model of HIV/AIDS education encompassing knowledge provision, skills building, and motivation. We have not yet examined the programmatic impact of this approach; however, the data indicate that knowledge acquisition may be affected by factors different from those that affect attitudes and efficacy. For example, knowledge was directly related to the number of previous workshops. In contrast, age was related most directly and strongly to sense of efficacy. Although we do not know how these factors ultimately interact to affect behavior, they do seem to be independent constructs, each of which may need attention in prevention programs.

Limitations of the Study

It is important to note the limitations of the current study. First and foremost, we cannot speak to the behavior of the Jewish adolescents and young adults we studied and can

only speculate about behavior based on the knowledge, attitudinal, and efficacy data we did collect. The authors purposefully chose not to ask directly about sexual behavior in this study because group administration conditions limited confidentiality (i.e., people could look over each other's shoulders), and as a result, direct questions about behavior were deemed to be too sensitive. Additionally, we felt that direct behavioral inquiries on a questionnaire might decrease the likelihood that host sites would allow prevention programs to be offered. Unfortunately, estimates of actual risk are therefore derivative based on attitudes, stated sense of efficacy, and worries about exposure.

This sample comprised Jewish teens and young adults who had some connection to a Jewish institution (e.g., attending a Jewish camp, synagogue youth group, day school, etc.). It is unknown how these individuals are similar to or different from Jewish teens who are not connected to our communal institutions. As a result, one should be cautious generalizing the findings of this study to all Jewish adolescents and young adults.

We also do not know the extent to which subpopulations at higher risk were represented in this sample. For example, it is quite likely that some of the participants were young men who were having sex with other men and/or injection drug users.

Finally, there is a strong potential social desirability bias inherent in this type of research. For several items on the questionnaire, it was clear what the "right" answer was; for example, agreeing with the statement, "I believe you should always use condoms during intercourse." Thus, we suspect risk factors may be understated due to respondents' attempts to appear "good."

CONCLUSION

This study represents an important first step in gaining a clearer understanding of Jewish adolescents and young adults and issues related to HIV/AIDS. Clearly additional research is needed. One such study, which the authors plan to undertake, is an

efficacy study of the current approach, whereby participants' knowledge, attitudes, sense of efficacy, and worries about becoming infected are tested at baseline and again after some follow-up period. It is one thing to know that programs are needed and another altogether to know that they are effective.

Increasingly, funding for HIV/AIDS prevention/education in the general community is being targeted to populations at significant risk: self-identified gay men, injection drug users, and ethnic minorities. In a world of limited resources, the implication of this policy is that less prevention will be available for individuals who are not members of these groups or who choose not to self-identify as such. Many of the Jewish adolescents and young adults described in this study would presumably fit in that category. We contend that the data presented herein argue that allowing prevention efforts to this segment of the Jewish community to lapse would be a mistake. We believe that unsafe behaviors among individuals outside the self-identified high-risk groups constitute a sufficient risk to justify continued support for HIV/AIDS prevention/education programming to the general Jewish community.

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