

The effects on high-risk women in urban clinics of HIV intervention groups

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Abstract: This study examines the results of an operation for behavioural changes that is available at an urban primary health clinic in women at high risk for HIV infection. One hundred ninety-seven women participated in a randomly allocated risk reduction group (HIV/AIDS) or comparison group (HIV/AIDS-AIDS) group. Five group sessions focused on risk formation, skills training in the use of condoms, sexual assertiveness, problem resolution and risk-cause self-management, and peer support in efforts to change were attended by women in the HIV/AIDS intervention group. Women attended conferences on health subjects unrelated to AIDS in a comparison group. During the three-month follow-up, the sexual communication and negotiating abilities of the HIV/AIDS group were increased. Unprotected sexual intercourse had drastically dropped, and the usage of condoms had grown from 26% to 56%. There was no difference for women in the comparative group. Socially disadvantaged women can help reduce their risk of HIV infection. In primary health clinics that serve high-risk and low-income patients, risk reduction behaviour changes interventions should be frequently delivered.

Keywords: HIV, AIDS, Urban clinics, Health condition, Behavioural changes.

Introduction:

Women in the inner city who have several sexual partners or have high-risk partners are increasingly prone to human HIV [1]. Although women have only been diagnosed with around 10 percent of all US cases of acquired immunodeficiency syndrome (AIDS), women are the largest group of women in the past several years and AIDS is already one of the six major cause of mortality between females between 18 and 45 in the U.S. Increases in HIV prevalence have been reported recently among women in urban sexually transmitted diseases, primary care clinics and high-risk pregnancy programmes, particularly in urban areas with drug abuse, "traditional" sexually transmitted diseases, undesirable pregnancy and other social disadvantages [2]. The worrying frequency of widely spread hetero-sexual HIV infection in developed nations with pattern II epidemiology, with multiple or high-risk partners, is already well documented. Primary strategies for preventing new HIV infections in our most vulnerable urban populations are urgently needed to be identified, evaluated and implemented. A number of authors requested the 'creation and integration in the primary health care system of HIV/AIDS preventive activities,' while several authors described broad ways to education for AIDS that could be relevant to urban minority women. However, we know that no controlled trials have been conducted systematically to evaluate the impact of prevention programmes on women living in cities with high risks of HIV and at primary health clinics. Recent research has demonstrated that training in group risk reduction skills, which incorporate risk education, sexual activity and communication skills training, risk reduction problems and similar health advice techniques, can induce changes in gay men's and teenagers' sexual risk behaviour. If these interventions can be tailored to reduce risk in the urban centre, women can be identified and delivered regularly in health clinics as a population confronted by many other social disadvantage issues and problems associated to successful HIV primary prevention patterns. The aim of this study was to assess an HIV prevention procedure for high-risk women of babysitting in urban areas experimentally [3].

Setting and Participant Characteristics:

In 1991 and 1992, this research was carried out at an all-encompassing primary health clinic in Milwaukee, Wisc. This clinic in the central city district serves mostly low-income, minority patients and is placed with high levels of poverty, sexually transmitted diseases, drug misuse.

Women 18 and 40 years of age who attended clinic appointments were informed of the study and then tested individually for the criteria of high-risk behaviour: multiple men, a sexually transmitted disease diagnosis or unprotected sex with any high-risk male partner during the previous 12 months (such as an injective drug use partner). The signed informed permission of women meeting any of this criterion (n = 197) was provided and entered in the study. Participants had a mean age of 29 years, a mean level of education was 11 years, 97% were unemployed and 75% of total household income was less than \$8000 a year. 87% African-American, 6% White, 4% Native American and 3% Hispanic was the racial/ethnic component of the sample. 47% of the women were treated for a sexually transmitted disease at some time. While 54 per cent of women report being long-term in partnerships, their relationships are generally risk-producing because all of these women meet the entry criterion.

Baseline Assessments:

In order to determine risk behaviour and other risk characteristics throughout the 3 months before the research enrollment, each woman was evaluated individually by a female assistant utilising a questionnaire, a role player and a sexual activity function. (Available, on request, copies of evaluation measure and intervention framework.) In order to ensure clarity and understandable information, the questionnaire was evaluated in advance with women of low reading; the research team helped women who found it difficult to read the material aloud, and enabled the participant to record their replies confidentially. The women utilised code numbers instead than names for actions to foster candour.

Based on previously proven questions and responses, the number of sexual partner she had in her previous three months, the frequency of unprotected and condom-protected intercourse, and whether she'd have a high risk partner (defined as men who have taken injection drugs, men who have been believed to have had) is reported. In past 3 months women described their drugs in the range of 1 (no usage) to 6 (alcohol, marijuana, cocaine, and injections) (use of the substance more than once daily). They also showed how many times they had sex when they were poisoned or high. In order to assess practical comprehension of the danger of HIV/AIDS, steps to lower risk, and errors in AIDS, a 40-point true/fake measure, previously standardised and validated for minority communities, was administered [4]. Women were asked to assess their personal risk of HIV infection in the range 1 (no risk at all) to 5 (extremely high risk). As the danger of HIV is associated with interpersonal relationships and mitigation of risks entails either avoiding risky sexual interactions or negotiating condoms, each woman also took part in an activity to play roles to assess her ability to communicate with others sexually [9]. There have been a set of four sequences. There were two declarations made by a coercive masculine's partner in each scene, describing a possibly risk-producing situation. The woman was asked how she would respond, after her narrative description and the introduction of coercive assertions; her responses were recorded on audiotapes. The four situations in which the role-played simulated interactions in which the woman would need to engage in discussions about condoms in order to avoid risk, to ask her partner to postpone sex as he has no condom, to oppose the pressure of her partner for a sex without a condom, or to refute her partner's protest that condoms are a lack of trust. In prior years, these problems were recognised by focus group participants as significant areas.

The recordings were transcribed for the role-playing exercise. Each participant received a transcript from a panel of four women experienced in AIDS prevention initiatives for women. It was not stated if the subject was in the intervention or comparison group or if the transcript was based on a baseline evaluation or a follow-up. Each participant's overall effectiveness of handling every event was ranked between 1 and 10 separately by the four expert raters. High efficiency has been characterised as a reaction that would prevent high-risk behaviour. (Audible role plays could not be obtained for ratings of 21 ladies because of a technical recording issue. 39 AIDS intervention data and 29 female comparison groups with recorded role-plays are offered.)

The Intervention and Comparison Groups:

After evaluation, either the HIV/AIDS intervention group or the comparison group were assigned randomly to participants. Four weekly group sessions of 90 minutes and one-month follow-up group, all carried out in the health centre, were attended by women assigned to the HIV/AIDS intervention. 8-10 women and 2 women group leaders participated in sessions. The leaders of the group followed specific outlines for the conduct of each session to ensure uniformity of material and processes.

Detailed information about HIV risk was provided to women in the intervention group, with a special focus on risk-related behaviours, common misconceptions about AIDS and steps that minimise the chance of HIV infection [5]. In order to adapt risk scenarios and the probability to meet an infected partner, the national and local HIV seroprevalence and epidemiology were summarised. The intervention focused on these areas because changing risk behaviour is also driven by cognitive and attitudinal, behavioural, and social aspects. The role played by the participants is how the AIDS and condom use issues would be discussed with a potential partner and how a man whose risk past was unknown to the woman or who did not want to have sex resists sexual pressures. Participants were incorporated in the programmes to desensitize them to condoms, condoms and phallic replica practice. There was also a strong focus to discover and analyse personal "causes" to the behaviour of high risks, such as drinking, consumption of drugs, loneliness or involvement in coercive or power-impact sex. Group approaches have been adopted to help participants build alternate strategies to deal with situations that have previously provoked high-risk sexual conduct.

While the intervention was conceptually based on cognitive and hazard reduction principles, the ladies took on roles that actively encouraged one other's efforts to improve. Participants, for example, frequently shared their personal experience of handling high-risk sexual pressure, accepted the norm that men can deny sex without using condoms and identified advantages related to change, including family and children protection from AIDS, feeling of personal gender control, and trust in sexual decision-making [6]. These features of peer

support appeared to be vital to promote behavioural change among women who were disadvantaged and whose early efforts could not be supported by their male partners and other stressors in their life.

A series of group sessions on AIDS-unrelated, but related themes for low-income women included family and child nutrition, healthy food preparation and techniques of supporting nutritious food choices among children were attended by women assigned for this comparative condition [8]. The comparison group was used in the study to control the effects of the participation in groups, participation in a medical procedure, reactivity and sensitisation effects of measures completed, and other non-specific effects of group engagement without reference to HIV/AIDS.

Follow-Up:

The following evaluations were individually conducted three months after completion of the intervention, which was the same as the ones used at the baseline. For every woman, data on sexual conduct and the use of substances, the risk of AIDS, the personal risk assessment, and comporment evaluations of the sexual communication skills have been acquired for the past three months for prevention and three-month follow-up (Table 1).

	AIDS Intervention Group (n=100)		Comparison Group (n = 87)		F or t	P <
	Preintervention	Follow-Up	Preintervention	Follow-Up		
Behaviour in Previous 3 month						
Mean no. of male sexual partners (SD)	2.2(5.1)	1.6(2.5)	1.6(1.4)	1.3(0.8)	1.9	NS
Mean vaginal intercourse frequency unprotected (SD)	14.1(17.1)	11.6(22.7)	13.1(18.2)	15.1(26.3)	4.41	0.05
Meaning No. Vaginal partners unprotected sex (SD)	1.3(1.0)	0.8(0.9)	1.2(1.0)	0.8(0.4)	2.72	NS
% of vaginal intercourse opportunities for the usage of condoms	25	57	26	31	13.32	0.001
% of Women who always use condoms	44	65	46	43	5.77	0.001
% of Male associates using condoms	44	65	41	47	3.57	0.001

Table 1: Changes from HIV/AIDS prevention to follow-up risk Comporment among women’s intervention and comparison groups

Result:

Of the 197 women who entered the research, 100 were randomised to the AIDS intervention randomly and 87 to the comparison group. The complete intervention was attended and a 3 month follow-up assessment was completed by 54 women assigned to the AIDS intervention (54 percent follow-up rate), 39 women in the comparison group participated in all three sessions and the follow-up assessment was concluded three months later (44 percent follow-up rate). Although the loss following the initial evaluation was relatively high, probably due to poor, transient population and the approx. semester interval between prevention and follow-up

evaluations, there were no substantial differences in population or risk characteristics in baseline between complete and non-full; the main reason for loss following follow-up was r

We conducted an analysed study on the basis of the principle of ‘meaning to treat,’ to examine the results of the intervention in a tight and conservative manner with maximum external generalisation. A multiple imputation procedure was used. Levy and Lemeschow recommended that all study participants were assigned to age, educational level categories and whether or not they have been involved.

High-risk sexual comporment and condom use effects of intervention:

Table 1 provides data on the sexual behaviour of individuals 3 months before and 3 months after the study admission. The findings on sexual behaviour, as some women had very high rates, were not regularly distributed while others had more moderate sexuality [7]. For this reason, normal sexual behaviour data (frequency variable) were initially linearly transformed into approximated normalcy ($\log_{10} x + 1$) as advised by Winer. Covariance analyses were then done with baselines that served to control any baseline group differences. t-tests were employed to assess the proportionality differences between the intervention and the group comparison on the baseline and three-month follow-up categorical variables.

The mean number of male sexual partners in baseline or in follow-up were not significantly distinguished. However, the level of risk of sexual behaviours and the patterns of use of a condom with these partners has been significantly different. In response, in the intervention group, women differed in the frequency of unprotected vaginal sex compared to women in the comparison group; women in the intervention group reduced their unprotected sex to a much greater extent than women in the comparison group. Condom use was the most consistent behavioural improvement after an intervention. In 3 months prior to research involvement, an average of just 26 percent of intercourse opportunities among female intervention groups was protected. The usage of condoms increased in three months following the intervention by an average of 56% of all intercourse occasions. There was a minimal equivalent change in women’s condom use as a comparison group. More women in the intervention group used condoms at some point in the three months following the intervention than they did before (66 percent before surgery versus 43 percent) and used condoms with a larger proportion of their male partners after surgery. In any indicators of condom use among women in the comparison group no significant changes have been discovered over time, and no change in the use of substances has been recorded for women in either condition.

Impact of risk knowledge intervention, sexual communication skills and personal risk estimation.

	AIDS Intervention Group				Comparison Group					
	Preintervention		Follow-Up		Preintervention		Follow-Up			
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	F	P<
risk conduct of AIDS Generated knowledge	29.1	5.2	31.2	4.7	28.5	5.1	29.4	6.8	3.46	0.05
Human Risk Assessment	2.2	1.3	2.1	1.1	1.8	1.1	1.8	0.6	3.66	0.05
Initiating condom discussion	19.3	9.4	24.5	6.4	20.5	7.7	21.8	7.9	2.55	NS
Postpone sex to obtain condoms	18.2	7.6	28.2	9.1	19.7	7.6	22.5	6.3	10.01	0.002
Refusing sex without a condom	21.1	8.7	26.5	10.2	17.2	10.2	20.7	9.1	3.02	0.06
Condoms refute a lack of confidence.	20.4	8.3	23.20	10.7	19.7	7.7	20.2	9.3	0.65	NS

Table 2: HIV/AIDS risk-related characteristics of the Intervention and Comparison Group Women analyse covariance for prevention-to-follow-up

Table 2 shows the cognitive and attitudinal features connected to AIDS for women and three-month follow-up findings for women in both groups. All analyses were carried out using a covariance analysis (ANCOVA) with pre-test scores as covariates to control for pre-existing differences between groups. Women who participated in the HIV/AIDS response tended to differ from AIDS risk behaviour group women in the knowledge of AIDS risk assessment and in rated risk accuracy; women of the intervention group became more risk-aware and considered themselves to be more HIV-aware than women of the comparison group.

Table 2 also offers scores on the sexual communication abilities of participants, which are divided by the panel of four experienced AIDS educators. ANCOVA's pooling AIDS instructors demonstrates that after 3 months following the comparison group, women were significantly different from the intervention group when they asked for a partner to delay sex because condoms were not accessible and were effectively resistant to sex without a condom. In both fields, there were changes in the intervention group of women, indicating better sexual negotiations and stronger communication skills than the comparison group of women.

Discussion:

The cognitive-controlling skills training at an urban primary health clinic provided group intervention in a five-session course led to improved behaviour among impoverished women at high risk for HIV infection. Increased unprotected sex and usage of condoms were the most noticeable changes, and in the 3 months after the intervention, the percentage of sexual actions protected from condoms more than doubled for women in intervention groups. It shows that women were in a better position to negotiate the use of condoms and to persuade their partners to use condoms. Interestingly, we found no evidence that the number of male partners (s) in terms of experimental conditions changed, with women reported fewer follow-up partners in both intervention groups and comparison groups. The AIDS sensitisation consequences of completing the measure or other causes could have caused this decrease. However, the usage of condoms only greatly increased by women in the intervention condition and their frequency of unprotected vaginal sex fell dramatically. Together with the passing of this low-income unemployed population, our lengthy follow-up resulted in a relatively significant loss of follow-up participation. However, losses were not associated with the experimental condition or starting risk factors of the participants, and our conservative analysis based on intent to treat proves that the results are valid despite their failure. Based on the reliability and validity of previous research, the sexual conduct evaluation methodologies applied in this study were chosen. Other studies confirm these behavioural self-reports, nevertheless, remarkably improved sexual communication skills objectively graded 3 months after the intervention. The validity of the findings is improved because various risk-related variables (knowledge, risk estimation, ratings and auto-reported sexual conduct) have all changed in the manner predicted exclusively for the participant intervention groups. Future studies using large samples will be required to confirm further intervention effects on the incidence and optimal HIV seroconversion rates of long-term sexually transmitted diseases. These results can only be detected in bigger field tests with significantly larger samples and statistical power. These findings reinforce the promise of these experiments.

Women were confronted with several impediments to behavioural change in this study, especially as they had to do with social disadvantages and competitive lives because of unemployment and sex with males at risk. Under these circumstances, it is unlikely that education about AIDS would be successful for promoting behaviour change without paying any regard to cognitive, attitudinal aspects, training on risk reduction skills, and strong peer support and issues resolving by other women. Despite considerable changes in behaviour among HIV/AIDS intervention women, condoms have not been worn on all intercourse occasions after intervention and studies are required to explore approaches to increase the degree of behavioural change in risk reduction. These results nonetheless highlight the potential benefits of routine access to groups of HIV/AIDS risk change in health and public health clinics that serve high-risk patients.

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