Women's Knowledge and Attitudes regarding HIV/STDs and Contraception in Portsmouth, Dominica: A Qualitative Study of Women and their Sexual Decision-making

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Introduction

The AIDS pandemic first touched the English-speaking Caribbean in the early eighties. In Jamaica, the first cases were reported in 1982 and in Trinidad and Tobago in 1983 (Anonymous, 1992). Seven percent of all the cases reported in 1992 to the Pan American Health Organization (PAHO) were from the countries of the Caribbean. Sero-prevalence studies in blood donors at this time yielded HIV prevalence of 0.06 % to 1.1 %. Women receiving prenatal care also demonstrated low sero-prevalence when screened (0.2 - 0.7 %). In 1996 the English-speaking Caribbean accounted for 4.6 % of the cumulative total of cases reported in the Americas to PAHO and 0.7 % of the cases reported worldwide to the World Health Organization (WHO) (HIV Insite, 1996). While the rate of spread of HIV/AIDS has been slower in the English-speaking Caribbean countries than in other developing regions of the world, the pandemic is well established and rates are increasing, particularly among women. Sexual behaviors throughout the region reflect patterns that place the population at risk for HIV (HIV Insite, 1996). These behaviors include, the early onset of sexual activity, cultural acceptability of multiple partners (particularly among males), and low levels of condom use. The current epidemiological profile of HIV/AIDS in the Caribbean is marked by high-risk situations favorable to a rapid spread of HIV infection. The epidemiological evidence in the region signals a rapid shift of new infections to younger ages - particularly toward people between 15 and 24 years of age.

HIV and Women in the Caribbean

Very little published literature is available on HIV and women in the English-speaking Caribbean. Although some general trends may be noted from data on the region of Latin America and the Caribbean, it is difficult to assess the true character of the epidemic since the distribution and magnitude varies from sub-region to sub-region and from country to country. Clearly, infection of women and their children with HIV is on the rise worldwide. Overall, secular trends suggest that the AIDS incidence in women is increasing at about the same rate as in men within the region of the Americas (Kimball et al., 1991). In those countries reporting the age of AIDS patients, calculations suggest that 28 % of females afflicted with AIDS are less than 25 years old, compared to only 18 % of afflicted males. Increasing numbers of pediatric AIDS cases are also being reported, of which a substantial proportion is attributed to perinatal transmission.

These data suggest that AIDS cases among women are increasing throughout Latin America and the Caribbean, and the predominant mode of transmission is through sexual contact (Kimball et al., 1991). Outside of some parts of the Caribbean and Central America, most women, even in high-risk groups, remain uninfected. In Dominica, especially, where the incidence of HIV is low, this lack of infection represents an opportunity for effective prevention and control.

Using data supplied to the Caribbean Epidemiology Center (CAREC), a study by PAHO used mathematical models to anticipate the future impact of the AIDS epidemic and the effects of intervention strategies (Newton et al., 1994). This data showed that the annual incidence of AIDS cases has risen steadily each year, with a case-fatality ratio of 64 %. Although, the earliest reported cases were among homosexual men, the percentage of cases identified as resulting from heterosexual transmission has been steadily rising from 12 % of cases in 1985 to 78 % in 1992. Data confirm that the majority of cases occur in young adults aged 20-44 years - which includes the population of women of reproductive age - and the potential for their children to become infected.

This PAHO study projected that a significant proportion of the working and child-rearing population will be affected in the future course of this epidemic (Newton et al., 1994). The economic impact will be significant both

in terms of caring for AIDS patients and lost productivity. Also, the cost of caring for orphans left by parents succumbing to AIDS will be dramatic in economic and psychological terms.

Trends in HIV Prevalence in Dominica

The Commonwealth of Dominica is one of the Windward Islands in the eastern Caribbean with an area of 290 square miles - making it the largest of the English-speaking, eastern Caribbean nations (Caribbean Islands, 1998). About 20 % of the country's 75,500 inhabitants reside in the capital, Roseau. The second largest city is Portsmouth, where about four % of the population lives. Most people are of African descent; 92% are Christian and of this group, 80% are Roman Catholic.

The Ministry of Health and Social Security provides public health services or ensures access to personal health services for the population of Dominica (Dominica, 1998). Each of the seven health districts is served by one major Type III health center, four to seven less complex Type I health clinics, and a multidisciplinary health team. The health clinics deliver services integrated into the community such as health education, diabetes and hypertension monitoring, and referrals for more serious problems. The main hospital in Roseau serves as the referral facility and offers comprehensive inpatient services. Current medical concerns include hypertension, diabetes, alcohol-related problems, cerebrovascular diseases, and heart failure (Caribbean Islands, 1998). In 1991, the leading causes of death for young adults were unintentional injuries and cancer.

While the terrain has previously hindered development on the island, Dominica is currently seeking new opportunities to increase tourism. This increased tourism will certainly improve the economy, but will also increase crime, drugs, and infectious diseases that come with increased international mobility.

The dominant mode of HIV transmission in Dominica is through heterosexual contact, with the ratio of male:female AIDS cases decreasing from 3.6:1 in 1985, to 2.1:1 in 1992, to 1.3:1 in 1997 (Roseau, 1997). The first case of AIDS in Dominica occurred in 1987. To date, the number of AIDS cases has increased to 102 with 161 sero-positive cases. Of these AIDS cases, 79 have resulted in death (case fatality rate of 70%).

No large-scale sero-prevalence studies have been conducted in CAREC member countries (Newton et al., 1994). HIV sero-prevalence levels in blood donors and prenatal clinic attendees are used to provide some indication of levels in the general population. Although these levels vary widely both among and within countries, in most cases they are less than one %. HIV screening has been done in three such studies in Dominica (Fortune, 1998). From October 1996 to February 1997, 125 pregnant women were anonymously screened for HIV. One positive result was found (0.8 %). From December 1997 to March 1998, 316 pregnant women were screened; no positive results were discovered. During the same time 357 samples from non-pregnant women and men were tested, revealing three positive results (0.84 %).

CAREC and other public health professionals in Dominica have done additional unpublished studies. In a national HIV/AIDS Knowledge, Attitudes, Beliefs, and Practices (KABP) study in 1994, women displayed high knowledge of sexually transmitted diseases (STDs) including HIV/AIDS, high awareness of the risks of multi-partner relationships, and the effectiveness of condom use to prevent disease. Yet, dislike of condoms and the strong influence of the Roman Catholic church hindered them from integrating appropriate levels of caution into their sexual behavior (Caribbean Epidemiology Center, 1994).

A 1992 assessment of the knowledge of and attitudes towards HIV/AIDS infection among Dominican teenagers in third and fourth forms, demonstrated that the knowledge of HIV transmission was high (Sorhaindo, 1992). The sampled teenagers believed they should be taught about AIDS in schools, and recognized that AIDS is a deadly disease. Girls said the fear of AIDS would prevent them from having sexual intercourse, but boys were unconcerned. Half of the sexually active respondents had more than one partner, and 60% did not consistently use condoms.

This research explores the gap between knowledge and attitudes of HIV/AIDS and contraception and behavior change in Dominica, examining a variety of perspectives on the roles that women play in sexual decision-making. The overall purpose of the research was to guide the development of services for HIV, STDs, and contraception for Dominican women aged 15-44 years. Thus, this study relates knowledge to behavior change so that women don't just know about HIV, but are willing and able to actually do something about it.

Methodology

This study intended to build on the information gathered from these previous studies, and was conceived as a qualitative study to gain insight into the beliefs and attitudes of the participants. The KABP in 1994 attempted to profile the Dominican population according to various sub-groups in order to understand their knowledge, attitudes, beliefs, and practices as they relate to AIDS and other common sexually transmitted diseases. The research generated from these target audiences was intended for use in guiding communication and behavior intervention strategies. Now, seven years after its establishment, and four years after its initial KABP study, the AIDS Central Office in Dominica requested this study on women's knowledge and attitudes regarding HIV/STDs and contraception. They particularly wanted to investigate how effectively their programs have educated women, and specifically why women choose contraceptive methods that do not protect them from disease transmission. Several questionnaires were adapted for use in this study. Questions from the CAREC (Caribbean Epidemiology Center, 1994)and Family Health International (FHI) (Ulin et al., 1993) projects were modified and reorganized from their focus-group settings to fit the format of an in-person interview, to center more specifically on attitudes and behaviors, and to address cultural concerns. An initial 45-item questionnaire was discussed with the entire Portsmouth health care team at their team meeting. Nurses, pharmacists, and community health aides commented on wording and relevance of questions and a final 26-item instrument was designed. The Primary Health Care Minister approved this questionnaire.

This qualitative research method allows for a more personalized understanding of the issues. Face-to-face interviews using open-ended questions permit subjects to direct their responses. Answers may be clarified and a wider variety and range of responses may thus be obtained (Bourque et al., 1992). Although questions were selected from similar studies and organized according to pre-selected themes based on the findings of those studies, the open-ended format allowed subjects to express their thoughts in their own words and did not limit the types of responses they could give.

Interviews were conducted throughout the Portsmouth Health District from May 18 - June 24, 1998. The Portsmouth Health District includes the city of Portsmouth and seven outpost clinics. Sites included outpost clinics in Portsmouth, Dublanc, Anse de Mae, Vielle Case, Dos D'Ane, Clifton, Penville, and Thibaud. Each village in the district is divided into blocks, and each clinic maintains a list of residents by block number. A goal of 100 subjects was set at the initiation of the study, since this number of interviews seemed viable to arrange and interview in the four weeks allotted for interviews. Nurses at each outpost clinic and at the Portsmouth Health Center were instructed to randomly select from each block a certain number of women aged 18-46, depending on the village population and its proportionate representation within the health district. In certain villages, all women contacted came to the clinic to participate in the study; in villages where some subjects contacted did not come to the clinic, eligible women who came to the clinic for other reasons were asked if they would participate in the study.

Individual interviews were conducted with women aged 18-46 years. The district nurses in order to inform respondents about the study and gain their agreement to participate, conducted a pre-interview. All subjects signed an informed consent sheet after receiving a briefing by the researcher as to the nature of the study. Interviews were structured, informal, and conducted by the researcher in a private room in the clinic. Interviews lasted approximately twenty minutes. Notes were taken on the questionnaire form at the time of the interview. Participants in this study received a token edible incentive on completion of the interview. All surveys were manually reviewed and coded. Data was hand tabulated and entered into an Excel spreadsheet. Descriptive quotes were highlighted which supported the information on the structured questionnaire.

Limitations

Limitations of this study include minor language and cultural difficulties. English is spoken in Dominica, but the accent and vernacular were sometimes difficult for this researcher to understand and interpret. Also, the phrasing of certain questions were difficult for participants to understand and had to be clarified. Previous studies were not received until the last week of the current study. Had these studies been received at the beginning, other questions focusing on beliefs and practices could have been incorporated into the questionnaire. While much of the sample was randomly selected, some sites were over- or under-represented depending on the ability of facility nurses to recruit participants. When there were not enough respondents, any woman who came to the clinic was asked if she would participate in the study. Though these women also represent a distribution of village blocks, the final sample was not entirely randomly selected or equally distributed among the blocks or villages. Because the study had to be conducted during the clinic operating hours, many women who worked during the day were excluded. The women in this study are primarily mothers who stay at home, as they were the ones available to come to the clinic. They are not necessarily representative of the general population because of their occupation and lifestyle, and because they are all connected to the health center and the nurse in someway and may be better informed about health in general and reproductive health specifically. One nurse indicated that she did not ask certain women to participate because they were illiterate and would be difficult to interview.

Results

Demographics of Study Participants

The final sample consisted of 90 women representing the entire Portsmouth Health District (see Table 1). The entire age range of women was represented (see Table 2), although not equally distributed.

About half of the respondents completed primary school. The remainder had completed some or all of secondary school. Five percent had completed at least some university training.

Thirty-eight percent of the women interviewed received compensation for their employment. Jobs included housekeeping, food services, sales clerks, secretary, health clinic custodian, teachers, and credit union employees. Three percent were unemployed. The remaining 59 % of women worked as mothers in the home.

Two-thirds of the respondents were single. Of these, 88 % were involved in a steady relationship with a man, either living together or separately. The remaining one-third of the women were married.

Inadequate Sex Education

Half of the respondents received some formal sex education in school. Five respondents reported that the family life education courses occurred in the secondary school, and they did not receive this education if they did not attend secondary school. Other sources of information include reading books, pamphlets, and talking to mothers or sisters. Seventeen out of the 25 women aged 36-46 years did not receive any type of education about sex. As one woman explained, "When I finally got a boyfriend, that's the time I learned about sex. My mother never sat down with me."

The majority of women in all age groups (72 out of 90) did not talk to a doctor or nurse about reproductive health issues. They may have come to the clinic during pregnancy, but otherwise only come to the health center when they have a problem. Fifteen women stated that because they did not take family planning, they did not often talk to a doctor.

Knowledge of HIV/AIDS and STD Transmission

HIV

It is common knowledge that HIV is a sexually transmitted disease. Almost all of the women (88 out of 90) were aware of the risk of unprotected sexual contact with an infected person, and recognized that the more partners one has, the greater is the risk of disease transmission. Two women had never heard of HIV. Participants were aware of the role that infected blood plays in the transmission of AIDS and had some knowledge of the mode of transmission through contaminated needles.

More than one-third of the respondents (36 out of 90) cited blood transfusions as a mode of transmission. Four respondents indicated that this was a rare occurrence and did not fear receiving a transfusion, but other respondents seemed to feel that this was a real danger and would not wish to receive a blood transfusion. This response calls into question the public's perception of the safety of the blood supply in Dominica, although the blood is tested and is safe (Fortune, 1998).

Vertical transmission from an HIV-infected mother to an unborn infant was rarely mentioned. Respondents cited mother-to-child transmission but did not specify the precise mechanism, and none of the respondents specified breastfeeding post-natally as a potential mode of transmission.

Only two respondents mentioned transmission from drug abusers using contaminated needles. As this is not a primary mode of transmission in Dominica, this lack of knowledge is not surprising.

STDs

More than half of the respondents were knowledgeable about STDs. Twenty-one women had heard of the particular diseases but did not know how they were transmitted. Ten women had never heard of these diseases or held inaccurate views on how they were transmitted and treated. In response to the question, "how do people, in general, get diseases like gonorrhea, chlamydia, and syphilis?" one woman replied, "By sitting on things that are contaminated with germs." Another said, you "sit on a hot stone. Claps you can cure by sitting on a hot stone and take the hot sand from the fireside, pour it into cold water and drink it."

While respondents did not often discuss reproductive health issues with their doctor or nurse, most of the respondents went to these health professionals for information if they had particular questions. Other sources of information include reading books, listening to radio or television programs, or contacting the AIDS office or Planned Parenthood in Roseau. Women expressed interest in learning more about the signs and symptoms of HIV/AIDS and how to treat people who have it.

Perceived Consequences of AIDS/STD

Women expressed keen awareness of the severity of AIDS and reported their families would be devastated and ashamed if they contracted the disease. Fifteen women had not thought of the consequences of contracting the disease - though they recognize that it leads to death and suffering.

Seven women suggested they would be rejected out of fear of AIDS, but others felt that their families would support them. The family reaction depended on how they thought the woman got HIV and how well educated they were on HIV transmission. They expressed some understanding of how HIV is transmitted and how their family members would be safe as long as precautions were taken. One woman responded that she thought, "my family would be devastated and disappointed in me because they would look at me as a careless and reckless person." Another stated, "they would let me down and would not want to be around me. They would not want to touch nothing of my own."

Four respondents, however, expressed a distorted view of what precautions are needed for living with a person with HIV. One woman stated, "They wouldn't want to care for me because they are afraid of people with sickness, but as long as they don't use same plates, cups then it's okay." Another woman's perception was that she "Cannot

sleep on same bed or eat off the same plate, especially if I have children. I have to be by myself in a little room." Other women expressed concern for what would happen to their children if they died of AIDS. As one woman lamented, " They would breakdown. I don't know what would happen to my children. It would be terrible." Six women suggested that their families would be affected socially, economically, and emotionally. They were concerned with the stigma of AIDS and their family's reputation in the community. Also, if they were employed, then their families would lose their earning power. As one woman explained, "It leaves a kind of stigma even though people know it's not contagious. They shy away. The stigma is on the patient and gets transferred to family. They figure the person must have been loose in someway."

Only 20 of the women had considered the consequences of STDs, since treatment is available and they are curable. Other respondents (27 out of 90) would keep that information from their families and would treat the disease in private. The remainder of the women (43 out of 90) replied that they did not know or had not thought about how their families would be affected if they had an STD.

Sense of personal vulnerability

Most of the women fear AIDS (76 out of 90) because it leads to suffering and death, but the majority of women (53 out of 90) did not consider themselves to be at risk for contracting HIV. While they fear getting AIDS themselves, they did not fear people with AIDS, although there is some misinformation about the risks of casual contact. As one woman replied to the question, "Are you afraid of AIDS?" "No. I wouldn't want to get it. But I would still talk to a person with AIDS. I wouldn't isolate that person, but I wouldn't sit next to them on the bus." Four of the women did not fear AIDS, but still expressed concern about the disease.

Fifty-six of the respondents feel that because they are monogamous they are protected from transmission, although 25 women stated that you could never be 100 % certain of what your partner was doing. In Dominica, in general, there is a common acceptance among most people that men tended to be far more promiscuous than women. However, the majority of women trusted that their partner was faithful and they were in a mutually monogamous relationship. Two-thirds of the women (60 out of 90) acknowledged that condoms were protective against disease transmission, but women who recognized that their partners have other sexual partners did not consistently choose to use condoms. There was some misinformation, however, about the protective nature of other contraceptives. When asked how she could protect herself against HIV/STDs, one woman stated that using any form of family planning was protective.

Although the respondents all claimed to be monogamous, and they thought most women had only one partner, they acknowledged that number of sexual partners depended on the person. However, women with multiple partners had far fewer partners than men with multiple partners. It is commonly accepted in Dominica that most men have many partners. Five women acknowledged that their partners had other women "on the outside". Most other women considered their partners to be among the monogamous few. When asked, "In general, how many partners do you think men tend to have at any one time?" one woman responded, "All they see they want so you don't know how many they have." Another stated, "Oh men have quite a lot, especially if they are chauffeurs. Every district they pass they have a girlfriend."

Knowledge of contraceptive choices

Half of the respondents had two or fewer children, but many of these women, particularly in the 18-25 year age range, reported the desire for more children. One-third had three to five children, and 12 women had six or more children. Only 16 out of 90 women planned their pregnancies and six reported having more children than they desired. Ten reported miscarriages or infant and child deaths.

Twenty women revealed they did not use family planning, either because of problems with attempted methods, personal fear or mistrust of methods, or because they had religious prohibitions against using it. Oral contraceptives were the most recognized method of family planning, with injectables, condoms, and IUDs also frequently mentioned. Other methods mentioned included diaphragms, spermicide, tubal ligation, and rhythm

methods. It is important to note that many of these family planning methods are not easily available outside of Roseau, the capital, despite the awareness of the method.

Forty-six of the respondents recognized that condoms provided protection against HIV transmission, although 16 recommended abstinence. Thirteen held inaccurate views that other forms of family planning protected against disease, and 10 did not know of any method of protection.

Respondents viewed hormonal contraceptives as generally providing the most effective pregnancy prevention, although condoms were also recommended for preventing pregnancy. Eight women stated that any method was effective if followed properly.

Sexual decisions and women's rights

Few gender distinctions were made in household decision-making. Sixty women felt that both partners made decisions through discussions. Seven women reported making all decisions, and 13 reported that their husbands made all decisions. One woman responded, "I myself make my own decisions because I'm not waiting on nobody." While another respondent admitted, "We decide them and talk about it, unless he has already made up his mind. He'll do it anyway." The same number of respondents felt that both partners made the decision to engage in sexual intercourse. Twenty-three women stated that the men made the decision. Most women felt they could refuse for any reason and their partners agreed and were understanding, although 25 women indicated that their partners became "vexed" (irritated) or persistent, with five claiming that their partners became violent. Four women did not refuse sex for fear of their partner "going about" if they were not satisfied at home. Two women felt it is their marital obligation to keep the man satisfied.

When asked, "What reasons might there be for you to refuse to make love with a man? How does he react?" women had varying responses. One said, "If I don't have the feeling I might refuse, but to please him I have to do it. You force feeling. Sometimes it is my duty. He can go out and find another stepney*.
Women recognized that condoms protect against HIV transmission and pregnancy. Although, they thought that in general most men and women were willing to use condoms, only 24 women used this method themselves. Reasons for not using condoms included preferring "flesh to flesh", lack of pleasure, discomfort, general dislike, and fear of bursting or sticking inside. Of the 24 women who revealed they used condoms, 20 felt they would refuse to have sex with a man who refused to use a condom. The remaining women said that they would have to agree, even if he refused.

When asked, "Are men willing to use condoms if you ask them to? What do you do if they say no?" one woman stated her obligation to acquiesce, "My husband don't like to use it ... the condom is the one doing the thing ... I just have to agree." Another woman emphasized her independence, "Not many. Male always think it's not the same. I would be very happy to refuse. You say no, I say no." An expectant mother with seven children had the following comment, " I asked. He refused. I said okay. He doesn't want me to use family planning. He doesn't believe in that. But I used to use it without him knowing."

Adolescent sexual behavior

Women were very concerned with the young age at which adolescents engaged in sexual behavior and felt that teens started having sex around age 11 to 13, with some starting even earlier. They commented that teenagers were at risk for contracting diseases because they had multiple partners and did not really get to know their partners. There was also a concern with the perceived excess of teenage pregnancies.

When asked, "As far as you know, are young people in their teens in danger of contracting HIV or other sexually transmitted diseases? Why?" one woman responded, "Yeah, most of them are, because I've met young people and speak according to their way of living. They think they are young. No one tells them about life. They are carefree and careless." Another stated, " Sure, because they are not getting information on how to protect themselves and they just go and have sex."

Women felt that sex education should begin at home with the parents, although in-school sex education programs should be taught. Nurses and doctors should also educate young people about sex.

Most women (69 out of 90) would advise sexually active teenagers to use condoms for both pregnancy and disease prevention. However, 27 percent of the women (24 out of 90) advised abstinence, as they felt that teenagers were starting to engage in sex too early.

Discussion

The above findings both confirm and contrast the previous studies done on the knowledge, attitudes, and behaviors of Dominican women. The 1994 KABP study indicated that there was a high level of knowledge of sexually transmitted diseases including HIV/AIDS (Caribbean Epidemiology Center, 1994). However, the current study shows that while many women do know about STDs, there are enough misconceptions and ignorance about these diseases and their consequences, particularly about how STDs can increase the risk of HIV transmission, that education programs in this area are necessary.

The 1994 study also emphasized the religious influences that permeate Dominican society and its views and practices regarding sexual behavior (Caribbean Epidemiology Center, 1994). That study suggested that religious prohibitions contributed to the lack of use of condoms. Although the current study did not focus on particular religious aspects of the culture, religious beliefs were only infrequently mentioned as reasons for various decisions, particularly condom use. Women recognize that condoms protect against HIV transmission and pregnancy. Although they think that, in general, most men and women are willing to use condoms, very few of them consistently or ever use this method themselves, even those that acknowledged that their partners had others "on the outside". Reasons for not using condoms focused on discomfort and general dislike of the practice rather than any moral prohibitions.

An important similarity between these two studies is the inadequate and inconsistent use of condoms during sex. Though the perception of risk is real and the possible consequences are generally accepted, the population has yet to fully integrate behavior practices with knowledge, in a manner that demonstrates full understanding of the gravity of future increases in HIV transmission and AIDS in Dominica.

The 1992 assessment of the knowledge and attitudes towards HIV/AIDS among Dominican adolescents demonstrated that the knowledge of HIV transmission was high, but condom use was inconsistent despite the fact that 50 % of the sexually active respondents have more than one sexual partner. Whereas 71 % of females said fear of the AIDS epidemic would prevent them from having sexual intercourse, only 17 % of males said this would prevent them. From the responses, women perceive that adolescents in Dominica receive inconsistent and inadequate education on sexual health issues and the consequences of disease transmission. They also do not seem to have the skills to negotiate delayed onset of sexual behavior, assess their partners' sexual history or make responsible and protective choices regarding their sexual activity. Despite the fact that 71 % of girls in 1992 said they would delay intercourse due to fear of AIDS, the current perception is that girls engage in sexual activity at a very early age, sometimes in an effort to please older men. Girls, especially, would benefit from programs that build self-esteem and encourage communication and assertiveness.

Most participants considered their partners to be faithful. None of the subjects mentioned any concerns with their partner's previous sexual experience before entering into their current relationship. Considering the long incubancy period of HIV and other asymptomatic STDs, and the increased risk of HIV transmission with a concurrent STD, this lack of understanding puts women at great risk. These results indicate that the potential risk to women is very great, as they do not generally believe they are at risk for HIV transmission.

Implications

In 1991 the AIDS Central Office was established at the Roseau Health Center to plan strategies and coordinate activities aimed at reducing the incidence of HIV transmission. Since that time, significant increases in the knowledge, attitudes, behavior, and practices regarding prevention of HIV/AIDS has occurred in Dominica and in the Caribbean region (HIV Insite, 1996). In spite of these trends, knowledge of the relationship between HIV and AIDS and asymptomatic transmission remains limited in the region as a whole. Knowledge of sexually transmitted diseases and their relationship to HIV transmission is limited, too.

The strategies used by the AIDS office include individual education by district nurses and public health education through media and education of community groups. This year a cartoon pamphlet about AIDS prevention was distributed at the Carnival, and posters on AIDS prevention are displayed in all the clinics. Youth officers run leadership-training sessions for adolescents to build self-esteem and encourage responsible behavior.

More needs to be done to promote condom use by both men and women. Although condoms are efficacious, that is they reduce HIV transmission risk on each occasion in which they are used correctly (Stein, 1990), they are not an effective program in Dominica. The condom program is ineffective because the general population is not accepting the method or compliance with it.

Educating women about their risks, ways to protect themselves, and how to voice their needs and concerns is an important strategy in the effort to curtail STD and HIV infections, as well as prevent pregnancy (Unknown, 1997). AIDS prevention messages should stress the importance of disease prevention as a means of ensuring the family's future. Since many Dominican women feel that they are able to discuss important matters with their partners, they need to be encouraged to insist on practices that will keep them disease free and prevent undesired pregnancies.

Recommendations

The challenge for prevention is to develop programs that relate knowledge to behavior change so that women don't just know about HIV, but are willing and able to actually do something about it. The following programs are suggestions for incorporation into existing efforts to educate Dominican citizens about their sexual health, based on the recommendations and experiences of Ulin in Haiti. These program areas follow the USAID strategic plan to use behavior change interventions, social marketing, and control of STDs in a comprehensive approach that involves multiple efforts at the individual, community, and organizational levels (Global Bureau, 1998).

Information, Education, and Communications Programs (Ward, 1989)

1. A targeted education effort using community outreach and social network approaches should reinforce current HIV/AIDS education by placing greater emphasis on all modes of transmission, by dispelling myths concerning casual contact, and by increasing awareness of the danger of transmission to infants of HIV sero-positive mothers.
2. Particular attention should be given to educating women about sexually transmitted diseases. Emphasis should be made that STDs also increase the efficiency of HIV transmission by increasing infectivity of HIV and susceptibility to HIV. Increased knowledge of the consequences of untreated STDs should also be a goal.
3. Men and women should develop communication strategies that focus on both women's and men's rights in a relationship, particularly their rights and responsibility to protect their health and to insist on condom use, or deny sex to a partner who refuses to use condoms when requested.
4. HIV/AIDS prevention programs should develop strategies, which address the specific needs of adolescents for education and counseling to reduce their risk of acquiring HIV.
5. Health educators should collaborate with parents, teachers and students to develop school-based programs that support healthy sexual relationships. These programs might include encouragement of abstinence or delaying of onset of sexual activity, but it would be socially irresponsible and behaviorally irrelevant to

focus only on these methods, considering the 10.8 % rate of teen pregnancy (Poe, 1998) and high level of sexual activity.

6. Expand the current communications campaign of AIDS education and awareness to make the population aware of the factors that put people at risk for AIDS. This campaign should encourage reduction in number of partners and condom use in both stable and casual relationships.

Social Marketing

1. Condom programs should emphasize the use of condoms in stable as well as casual relationships.
2. Condom programs need to be addressed in a more engaging manner and should emphasize that the risk of contracting disease is greater than the decrease in sexual pleasure. The focus of these programs should be on the behavior of sexually active men and women.

Institutional Level

1. Make family planning a health care priority along with HIV/AIDS and sexually transmitted diseases (Sukram, 1994). The focus of such a program should be on providing comprehensive reproductive health services that educate men and women on how contraceptive choice can affect the risk of acquiring an STD, while concurrently offering the best possible choices for prevention of unwanted pregnancies (Fox et al., 1995).

Conclusions

It is clear that the establishment of the AIDS Central Office greatly improved knowledge regarding HIV/AIDS in Dominica for health care providers and their clients. With an annual incidence of 18.6 AIDS cases/100,000, (Roseau, 1997) Dominica falls somewhere in the middle globally and within the CAREC membership. Since most women, even in high-risk groups, remain uninfected, an opportunity for effective prevention and control still exists. Changing behaviors and cultural norms will be exceedingly slow and difficult, but the more emphasis that is placed on an integrated approach to target education efforts, train providers in information diffusion approaches, and promote a general communications campaign, the more women will be empowered to control their sexual health. Hopefully, the presentation of this research will contribute to the discussion, and action will be taken to prevent HIV transmission in Dominica.

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FOOTNOTE
* A stepney is a spare tire. "The tire can't stay flat. They'll just find another place to pump it up."