Barriers to Female Condom Use in India

A master's project submitted in partial fulfillment of the requirements for the degree of

MASTERS OF NURSING

WASHINGTON STATE UNIVERSITY - TRI-CITIES
College of Nursing
August 2009
To the Faculty of Washington State University:

The members of the Committee appointed to examine the master's project of JENNIFER MARIE MCCULLUGH find it satisfactory and recommend that it be accepted.

Chair

[Signatures]

[Signatures]
Barriers to Female Condom Use in India

Abstract

By Jennifer Marie McCullugh, RN
Washington State University
August 2009

Chair: Lorna Schumann

Submitting to AIDS Care: Psychological and Socio-medical Aspects of AIDS/HIV

Human immunodeficiency virus (HIV) and acquired immunodeficiency virus (AIDS) in India have together become a daunting epidemic with numbers of those being infected increasing into the millions. The elevating levels of infection rates have lead to growing concern and national demand for preventative measures. Unfortunately, low literacy levels have made providing education on prevention of HIV/AIDS to individuals in India very difficult as effective ways to do so are not apparent. Also, being of the female gender poses its own issues. Although India has a constitution that prohibits exploitation and discrimination by gender, it has failed to protect the rights of Indian women. This paper reviews the relationship between the female gender and barriers to condom use, as well as the impact of illiteracy on educating such individuals. Findings show that there is a positive correlation between low literacy levels and increased rates of HIV/AIDS and that female contraction of the disease is dramatically on the rise. In order to decrease levels of HIV/AIDS infection in
India, further studies are needed to determine appropriate methods to educate at the current literacy level.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSTRACT</td>
<td>III</td>
</tr>
<tr>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>THEORETICAL FRAMEWORK</td>
<td>2</td>
</tr>
<tr>
<td>LITERATURE REVIEW</td>
<td>4</td>
</tr>
<tr>
<td>DISCUSSION</td>
<td>8</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>12</td>
</tr>
</tbody>
</table>
Barriers to condom use and Indian women

While it has been estimated that there are approximately 5.7 million HIV-infected individuals living in India (CDC, 2009), the actual number is unknown due to lack of comprehensive testing. However, of that approximately 5.7 million, 40% are presumed to be female (Chattopadhyay & McKaig, 2004). Approximately 80% of sexual transmission of HIV is through female sex workers which make up the largest group of HIV infected individuals. However, there is an escalation in the rate of infected pregnant women which signifies that the infection is spreading into the greater Indian population. The increase in pregnant women contracting HIV is alarming due to the potential of transmission from mother to child (Ananth & Koopman, 2003). The most likely route of transmission of HIV to women of childbearing age is through monogamous sexual activity with their spouse (Krishnan et al., 2007). Due to the fact that Indian women generally take a subordinate role, they often feel “powerless to decide when sex will occur and whether a condom will be used. Being a patriarchal society, males in India tend to express a chauvinistic attitude both in familial and commercial sexual encounters (Selvan, Ross, Kapadia, Mathai, & Hira, 2001). The existing norm that is biased against women in the Indian society and their economic dependence on men, hinders the Indian female’s ability to negotiate safer sex practices within and outside of marriage” (Bharat & Aggleton, 1999). Initiation of condom use often arouses suspicion of unfaithfulness on behalf of one of the partners’ involved (Krishnan et al., 2007). HIV/AIDS knowledge amongst Indian women is also limited as
they often do not understand or are unaware of protective methods to prevent the disease. This knowledge limitation also restricts the ability of Indian women to successfully initiate condom use and increases their risk of contracting the disease. The increasing number of HIV-infected individuals in India has led to multiple programs being developed to promote condom use and HIV prevention. However, little research is being done on appropriate ways of educating Indian women from different backgrounds (including commercial sex workers, married women in monogamous relationships and women of childbearing age). The multiple languages spoken, lack of privacy while trying to purchase condoms and social stigma associated with condom use create additional barriers (Chattopadhyay & McKaig, 2004). Developing educational programs specifically for Indian women concerning promotion of condom use with their partners/customers and testing the effects may dramatically affect the barriers to communication and thus decrease the spread of HIV/AIDS in this population.

There is strong evidence that the lower status of Indian women results in decreased literacy level, poor economic status, and economic dependence, hindering their ability to negotiate safer sex, both within and outside of marriage (Selvan et al., 2001). Keeping this in mind, the intent of this paper is to explore the relationships between the female gender and barriers to condom use, as well as the impact of illiteracy on educating Indian females.
AIDS Risk Reduction Model

In viewing the AIDS/HIV epidemic as it pertains to Indian women, it is relevant to consider the AIDS Risk Reduction Model (ARRM) in understanding and dealing with this complex issue. This theory provides a framework for explanation and prediction of efforts made by individuals in relationship to the transmission of HIV and AIDS. ARRM is a three stage model that also incorporates variables from other behavioral change theories including the Health Belief Model (self-efficacy).

Developed in 1990, the three stages of ARRM and its hypothesized factors include; stage one, “recognizing one’s behavior as high risk.” For example, knowledge of sexual activities associated with HIV transmission, believing that one is personally susceptible to contracting HIV, and believing that having AIDS is undesirable. Stage two, “making a commitment to reduce high-risk sexual contacts and increasing low-risk activities.” For example understanding costs, benefits and enjoyment factors (will the changes affect the enjoyment of sex), response efficacy (will the changes successfully reduce risks of HIV infection), and self-efficacy beliefs (group norms and social support are believed to influence an individual’s understanding of cost and benefit). And finally, stage three, “the taking action stage.” The third stage is the information seeking, obtaining remedies and enacting solutions phase. Factors in this stage are dependent on the individual and may happen concurrently or may be skipped all together. They include; social networks and problem solving choices, prior experiences with problems and solutions, the individual’s level of self-esteem, ability to acquire help, ability to
communicate verbally with their sexual partner, and the sexual partner’s beliefs and behaviors (Communication Initiative Network, 2009).

**Literature Review**

**Methods**

A comprehensive review of literature was performed using a broad spectrum search strategy involving multiple electronic databases and search engines. These included Ovid, Pub Med, Medline, the Center for Disease Control (CDC) and Google for studies published 1989-2009. Keywords used included, "condoms," "barriers," "Indian females," "HIV," "AIDS," and "prevention." These words were used in many different combinations to complete the search. A total of nineteen articles were retrieved and ten were chosen on the basis that they had specific information pertaining to the subject of Indian women’s knowledge of HIV/AIDS and their use of contraception.

**Relationship between female gender and condom use**

Multiple studies examined the relationship between the female gender and barriers to condom use. Pallikadawath, Sanneh, McWhirter, and Stones (2005) examined rural Indian women’s knowledge of AIDS and found that a "women’s age, education, occupation, standard of living, and exposure to television were all related." The study was conducted in Maharashtra and Tamil Nadu, both southwestern border-states where HIV prevalence is the highest. Approximately 75% of the participating
females were Hindu, 20% Muslim and 5% Christian. Analyses of multiple logistic regressions were undertaken modeling Indian women’s knowledge of AIDS. The study found that awareness of AIDS in women ages 35-49 was 35% lower than those of the 15-24 age group, undoubtedly due to differences in level of education. Females reporting membership to a “scheduled tribe” were 65-77% less likely to have heard of AIDS than those affiliated with a “scheduled caste,” determining that the element of religion had no association with AIDS awareness. AIDS awareness was also two to three times greater in women who regularly watched television and significantly higher in those who had been visited by family planning workers. The study found that “in both states, those who were non-literate, poor, agricultural workers, and those affiliated with ‘scheduled tribes’ were identified as lacking AIDS awareness.”

Ananth and Koopman (2003) examined 210 adult Indian women of childbearing age from Delhi, Mumbai, Bangalore, and Kollam. Approximately 79% were married and 45% had received a college degree. Forty-four percent of these women reported an occupation of homemaker. These women were evaluated on their knowledge, beliefs and behaviors as they pertained to HIV/AIDS. Over 75% of women in the study reported rare or no use of condoms and 11% of these reported not using condoms because their male partner did not like to do so. The study found a positive relationship between normative efficacy (the degree of power that women perceive among other women) and condom use. Meaning that the more empowered a woman feels, the more likely she would be in encouraging her partner to use a condom.
Krishnan et al. (2007) evaluated 30 infected individuals already living with HIV and found that participants practiced safer sex once learning of their HIV diagnosis; however, it is estimated that most individuals infected with HIV who are living in India are unaware they have the disease. Married women who had successfully initiated condom use in previous sexual encounters found it hard to continue to do so due to dependence on the male to buy the condoms. Sex workers in this study often did not initiate condom use due to fear of losing the client (income), and married women felt overwhelmed in condom initiation due to fears of being labeled as unfaithful by their spouse. A study by Munro et al. (2008) showed a reverse association between condom use and higher HIV prevalence. It was assumed that the reverse association was related to the fact that people with high-risk behavior become infected and then begin using condoms.

An ethnographic study conducted over a two-year period by Evans and Lamber (2008) of sex workers in Kolkata, India, evaluated the STD/HIV Intervention Program (SHIP), a behavior-change intervention program involving three different elements including education on HIV/AIDS and condoms, as well as condom promotion. Visual flip charts were used to educate. Prior to commencement of the project, 61 interviews were conducted to evaluate results of the education. It was reported by many that decision making around use of condoms was heavily influenced by the need for income, fear of violence from customers, fear of losing regular customers, and lack of support by madams and pimps. However, some sex workers reported gaining a new
level of confidence and ability to develop ways to gain control in sexual encounters during the program. Some even reported trying to adopt assertive, managerial skills to establish control. Results from this study seemed to support arguments that health behaviors by sex workers are strongly influenced by structural forces, mainly poverty.

Halli et al. (2006) evaluated 1512 sex workers ages 15-49 in Karnataka, India for knowledge of HIV/AIDS and condom use, as well as success in promoting change collectively toward safer sex behaviors. Of these women, 80% of whom were illiterate, a higher degree of collectivization was associated with increased knowledge and elevated condom use. However, in a study conducted by Chattopadhyay and McKaig (2004) the authors argue that sex workers are disempowered and socioeconomically marginalized not allowing them to insist on condom use by the client, due to lack of governmental structural support.

Selvan et al. (2001) evaluated three senior high secondary schools in Mumbai, India almost all of whom were from upper middle class families and of which 48% were female. It was discovered that females appeared to be more resistant to sexual behavior than their male counterparts and that safer sex and AIDS knowledge were higher for females than males of this age group. Students of highly educated parents tended not to engage in sexual activities as much as those with uneducated parents. However, risky behaviors such as alcohol consumption and drug use were significantly associated with engaging in sexual activities regardless of parental education or class.
Discussion

As of 2007, the World Health Organization’s position statement on condoms and HIV prevention was that “condoms, when used correctly and consistently, are highly effective in preventing HIV and, that condoms have an 80% or greater protective effect on HIV/AIDS.” According to the CDC, India has been battling the HIV/AIDS epidemic since the first case was identified in Chennai, Tamil Nadu in 1986. Since then, the number of HIV-infected persons has increased to an estimated 5.7 million, second only to South Africa. It is estimated that approximately 40% of those infected are female. “The overall adult prevalence rate is estimated at 0.9%. However, 111 of the 6000 districts in India have prevalence rates greater than one percent. There is substantial variation in HIV prevalence among and within states and districts. Unfortunately, despite India’s efforts to control the HIV/AIDS epidemic, there are still inadequate resources for testing. Testing centers are generally found in rural areas, rarely found in urban areas and are often unavailable as they are not regularly staffed (Ananth & Koopman, 2003). The epidemic in India is considered to be a concentrated epidemic with high-risk groups including persons with sexually transmitted infections, female sex workers, truck drivers, and IV drug users. An increasing number of individuals who are perceived as low risk are becoming infected, especially women and youth” (CDC, 2009). The rapid spread of HIV and AIDS to low risk individuals is alarming due to the fact that one billion people live in India and even relatively minor increases in transmission could affect huge numbers of individuals (WHO, 2007).
Many factors contribute to the increasing rise of HIV/AIDS cases in India. Mainly, the subordinate role Indian women play in their society. For many women, lack of education, poverty, lack of resources, and living in areas with decreased opportunities are major barriers to improving health and knowledge. Furthermore, even when information is made readily available, there are large differences in literacy levels between the subgroups of Indian women. In the study by Pallikadavath et al., (2005) of rural women previously mentioned, two different states were studied and concluded that the non-literate, poor, agricultural workers and those associated with ‘scheduled tribes’ were identified as lacking AIDS awareness. In 2004, the Indian AIDS policy admitted that HIV/AIDS awareness amongst rural people was, as low as 30% (Chattopadhyay & McKaig, 2004). Due to lack of data from India, current numbers are unavailable. Therefore “in rural areas where access to mass media and education are limited there is a particular need for community engagement to counteract the marginalization of vulnerable groups so as to foster the development of an ‘empowered’ participating community (Pallikadavath et al., 2005).”

The majority of female sex workers in India are also illiterate and poor leading to similar difficulties as those of rural women. The fear of loss of income leads to decreased levels of condom use. Halli et al. (2006) state “it has been estimated that mathematical modeling in prevention programs directed at sex workers alone could eventually drive the HIV epidemic in India to extinction.” However, for HIV prevention to be effective on a large scale, it is important that female sex workers achieve a high
and consistent level of condom use. In studies mentioned above by Halli et al. (2006) and Evans and Lamber (2008), revelations were made that by providing female sex workers with such things as literacy training, health care, and peer education; levels of self esteem and empowerment improved, thus resulting in increased capacity to negotiate safer sex.

According to the AIDS Risk Reduction Model and the Health Belief Model, efforts must be made by the individual to decrease risk of transmitting the HIV/AIDS virus. There must be successful completion of the first stage in order to progress to the next. Initially, one must first be able to recognize and label their behavior as high risk. For example, acknowledging that one’s sexual behavior is associated with HIV/AIDS transmission. Secondly, one must make a commitment to reducing high-risk sexual behavior by increasing low-risk or no-risk behavior. For example, acknowledging that the changes made initially will significantly reduce the risk of HIV/AIDS transmission. Finally, one must take action. For example, the perceived benefits of adopting health measures such as using a condom. This theory stresses the tremendous need for empowerment of the Indian female, as well as a need for structural change. As discovered in the study by Evans and Lamber (2008), behavioral changes was largely influenced by “non-health related” risks such as losing a customer for a sex worker or being labeled as unfaithful by one’s husband. Unfortunately in these situations, non-condom use is appropriate and is a survival strategy with a goal to avoid violent confrontation.
In conclusion, the HIV/AIDS epidemic in India is steadily on the rise. Forty percent of those infected with HIV/AIDS are made up of female sex workers, pregnant women and women in supposed monogamous relationships whom single partner sex with their husbands is the only source of exposure. A “one size fits all” approach to educating Indian females will not be effective due to the many sub-groups involved (Pallikadavath et al., 2005). Integrating a structurally-oriented approach may be most suitable for promoting safe sexual practices in the sex work industry. Also, social networks for sex workers to allow them to fight for rights and control over their own lives in a collective manner, which they cannot do when isolated, may also be effective (Halli et al., 2006). Furthermore, as in Thailand, sex workers may need to be organized into establishments and brought under government control (Chattopadhyay & McKaig, 2004). Among women of child bearing age, normative efficacy was found to be beneficial in increasing feelings of empowerment and pursuit of health seeking behavior (Ananth & Koopman, 2003). Once a sense of empowerment is achieved, Indian women may need to “take the ball out of the man’s court” and choose female controlled forms of HIV preventions such as microbicides and the female condom. Community based programs have proven to be effective in educating youth as research has shown that young adults who engage in risky sexual behavior tend to begin to do so as adolescents (Selvan et al., 2001).
References


